

P-ISSN 2734-9748 • E-ISSN 2815-6471

VMOST Journal of Social Sciences and Humanities

DECEMBER 2022 • VOLUME 64 NUMBER 3



Vietnam Ministry of Science and Technology

The VMOST Journal of Social Sciences and Humanities (VMOST JOSSH) is the official tri-annual scientific title in English of Vietnam Ministry of Science and Technology. The VMOST JOSSH aims to become an international journal that meets the standards of the world's leading databases of scientific journals such as Scopus, Web of Science. The VMOST JOSSH mainly publishes original peer-reviewed articles and reviews in interdisciplinary and multidisciplinary fields of social sciences and humanities with the focus on:

- Vietnamese Studies
- Economics and Business
- History and Archaeology
- Educational Sciences
- Sociology, Anthropology, and Ethnology
- Linguistics and Literature
- Psychology
- Philosophy and Religion
- Jurisprudence
- Political Sciences

CLASSIFICATION SCHEME

Social Sciences

1. **Psychology**
 - 1.1. Developmental Psychology
 - 1.2. Counseling and Clinical Psychology
 - 1.3. Educational Psychology
 - 1.4. Other Psychology
2. **Economics and Business**
 - 2.1. Economics
 - 2.2. Business and Management
 - 2.3. Other Economics and Business
3. **Educational Sciences**
 - 3.1. Education Systems
 - 3.2. Curriculum and Pedagogy
 - 3.3. Specialist Studies in Education
 - 3.4. Other Education
4. **Sociology, Anthropology, and Ethnology**
 - 4.1. Sociology
 - 4.2. Anthropology
 - 4.3. Ethnology
 - 4.4. Other Sociology, Anthropology, and Ethnology
5. **Political Sciences**
 - 5.1. Political Science
 - 5.2. International Relations
 - 5.3. Other Political Science
6. **Jurisprudence**
7. **Other Social Sciences**

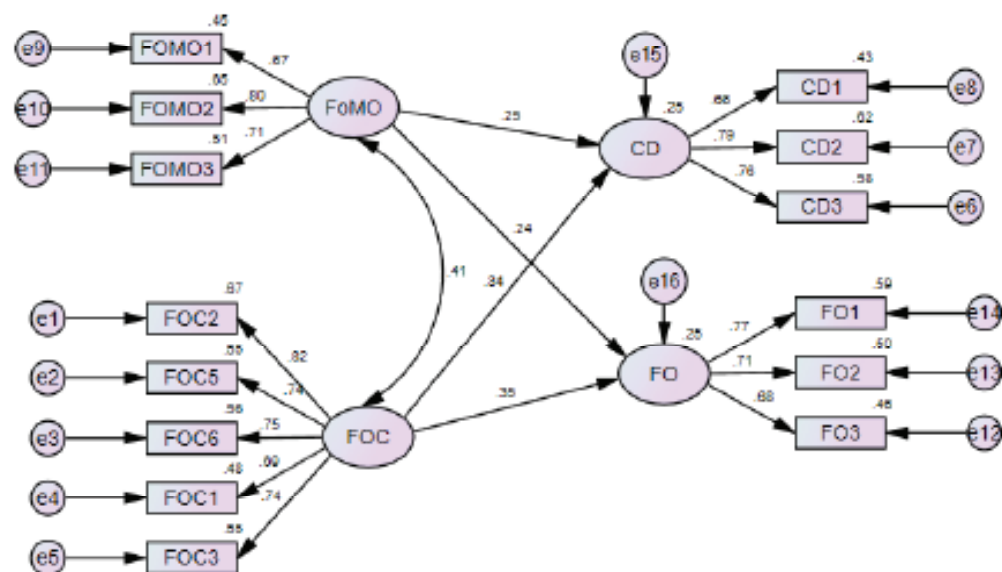
Humanities

8. **History and Archaeology**
 - 8.1. History
 - 8.2. Archaeology
 - 8.3. Other History and Archaeology
9. **Linguistics and Literature**
 - 9.1. Linguistics
 - 9.2. Literary Studies
 - 9.3. Cultural Studies
10. **Vietnamese Studies**
11. **Philosophy and Religion**
12. **Other Humanities**

CONTENTS

DECEMBER 2022 • VOLUME 64 NUMBER 3

33



PSYCHOLOGY

- 3** Mental health and psychosocial support needs among Vietnamese families during the first wave of the COVID-19 pandemic in Hanoi: A mixed methods study.
Hoang Minh Dang, Van Vu Hong, Phuong Nguyen Lan, Dao Kieu Anh, Ha Ho Thu

ECONOMICS AND BUSINESS

- 18** Trade creation and trade diversion effects of ACFTA on seafood exports.
Thi Dieu Linh Huynh, Thi Kim Oanh Hoang

SOCIOLOGY, ANTHROPOLOGY, AND ETHNOLOGY

- 27** Factors affecting phubbing of students in the context of COVID-19.
Anh Duc Do, Thi Diu Nguyen
- 37** Perceptions of farmers on risk management strategies in Son La province, Vietnam.
Van Bac Ho

JURISPRUDENCE

- 46** Moral rights and their position in the digital world.
Van Anh Le

- 55** The analysis of counterfeits and their impact on countries' development
Tram Nguyen, Tang Li

OTHER SOCIAL SCIENCES

- 65** Reducing health inequalities in Vietnam: Implications for health in all policy.
Nguyen Anh Dang, Thi Phuong Thao Nguyen

HISTORY AND ARCHAEOLOGY

- 71** FUNAN (Phu Nam) from a new perspective.
Minh Giang Vu

CONTENTS

DECEMBER 2022 • VOLUME 64 NUMBER 3

122

TRUYỆN XUÂN HƯƠNG



• *Truyện Nàng Xuân Hương* nguyên văn là *Xuân Hương truyện* không có tác giả cụ thể, hay còn gọi là tác phẩm khuyết danh.

• Là một trong số tiểu thuyết cổ đại Hàn Quốc (ra đời khoảng thế kỉ XVII)

• Đầu thời kỳ Chosun xuất hiện dưới hình thức diễn xướng sân khấu “Pansori”.

• *Xuân Hương ca* được coi là bài hát nổi tiếng nhất về tình yêu.

• *Khi Xuân Hương ca* được nhiều người đón nhận và thêm bớt thi dần phát triển thành tiểu thuyết.



Xuân Hương (ChunHyang) là con gái của Xuân Mai (Walmac) một kỹ nữ đã bỏ nghề ở huyện Nam Nguyên (Namwon). Xuân Hương (ChunHyang) là người con gái tài sắc vẹn toàn.

Một ngày xuân nàng đi chơi du thi gặp công tử Lý Mộng Long (Lee MongRyong) con trai quan tri huyện Nam Nguyên.

Một hôm chàng Mộng Long đi đón tết thì gặp nàng Xuân Hương chơi du vào ngày Tết Đoan Ngọ bèn say đắm vẻ đẹp của nàng. Hai người yêu nhau, ước ao ngày được ở bên nhau và sau này sẽ kết duyên vợ chồng.

• Và đến nay còn được chuyển thể thành phim truyền hình và điện ảnh cũng như kịch.



Không bao lâu sau, cha Lý Mộng Long được thăng quan, gia đình chàng phải trở về kinh đô (Hanyang). Lúc đó chàng Lý mới nói với mẹ về chuyện Xuân Hương nhưng không được sự đồng ý của gia đình nên hai người tạm chia tay nhau. Mộng Long trước khi theo cha về kinh thành có hẹn rằng nhất định sẽ quay trở lại tìm nàng.

86 From the policy of “Ngu binh u nông” in the monarchy period to the military farm model during the 1956-1960 period in North Vietnam.

Thi Vuong Pham

96 The repatriation of Japanese in Vietnam from 1954 to 1960.

Thi Hong Luong

VIETNAMESE STUDIES

105 Vietnamese studies

training programs in Vietnam in the context of international integration: Reality and development orientation.

Thi Thu Hoai Nguyen

115 Differences in knowledge expression in teaching Vietnamese literature for international students.

Thi Thanh Tam Le

Mental health and psychosocial support needs among Vietnamese families during the first wave of the COVID-19 pandemic in Hanoi: A mixed methods study

Hoang Minh Dang*, Van Vu Hong, Phuong Nguyen Lan, Dao Kieu Anh, Ha Ho Thu

Center for Research, Information and Services in Psychology, University of Education,

Vietnam National University - Hanoi, 144 Xuan Thuy Street, Dich Vong Hau Ward, Cau Giay District, Hanoi, Vietnam

Received 26 April 2022; revised 8 July 2022; accepted 20 July 2022

Abstract:

To contain the development of COVID-19, Vietnam issued social distancing and lockdown policies in 2020 and 2021, which affected the lives of parents and children in several aspects including mental health. This study aims to explore the impact of the first wave of COVID-19 in Vietnam (April-May 2020) on the mental health of parents and children and their perceived social support during the pandemic. This study used a cross-sectional mixed-method approach. The sample included 78 parents of children aged between 2 and 17 years and 32 children aged between 12 and 17 years (N=110). The results showed that 5.1% of children reported being in the high and very high range on the Strength and Difficulties Questionnaire (SDQ). Most reported problems were lack of prosocial behaviours, lack of peers, and emotional problems. Among parents, 7.7% reported having mental health distress. The results also revealed that the perceived social support of both parents and children were low in all subscales and total scores. Qualitative themes regarding perceived social support and barriers were identified. Recommendations regarding mental health and psychosocial support during the pandemic were discussed.

Keywords: children, COVID-19, mental health, parents, perceived social support, Vietnam.

Classification number: 1.2

1. Introduction

1.1. COVID-19 and its impacts on parents and children worldwide

Since December 2019, COVID-19 has infected more than 503 million people and caused more than 6.2 million deaths worldwide [1]. To restrain the development of COVID-19,

in 2020 and 2021, several countries, including Vietnam, issued social distancing rules and lock down causing schools, businesses, etc., to close. The closure of these facilities affected many lives, especially those of parents and children in several aspects, which can in turn impacted their mental well-being.

In terms of economics, parents struggled with

*Corresponding author: Email: minhhdh@vnu.edu.vn

financial insecurity due to work adjustments. About 50% of parents all over the world had to switch to working remotely due to social distancing rules [2]. In the U.S, around one fourth of parents participating in a survey went through changes in employment status including reduced hours, reduced pay, furlough, and loss of employment with low- and middle-class families being the most affected [2, 3]. Around 70% of the participants listed economy and work as a major sources of stress, compared to 46% in 2019 [4].

Besides economic stress, parents also had to deal with changes in family routines. A large number of parents reported school closure as a major problem for them as they had to juggle with more responsibilities such as establishing and maintaining structures and routines for their children, planning outdoor activities, handling child care or arranging child care, etc. [2, 4]. These factors may have increased the stress of parents during COVID-19. It was reported that adults with children had a higher stress levels than adults without children. Handling childcare and distance learning were listed as the largest sources of stress for parents [4]. In addition, parents also reported stress from finding access to healthcare services as many children lost access to healthcare services provided by the school [2, 4].

The pandemic has affected the well-being of parents, children, and adolescents. Recent studies showed that children and adolescents reported greater amounts of emotional and behavioural problems compared to pre-

pandemic levels [3, 5, 6]. One factor that contributes to increased stress levels of children and adolescents is parental stress. Previous studies have found that parental stress can affect children's mental health as parents who are exposed to chronic stress are at risk of parental burnout, which is strongly related to neglect and violence towards children [7]. Therefore, increased parental stress during the pandemic can significantly affect children's mental health. In addition, children and adolescents dealt with the loss of interpersonal connections with their peers due to school closure and lockdown. It was found that children and adolescents reported that they missed having face-to-face interactions as they were restricted from going out and meeting their friends [5, 6]. For instance, children and adolescents were unable to participate in indoor and outdoor social events such as choir, playing basketball, attending birthday parties, etc. They also reported that using social media to connect with their friends was insufficient for their interpersonal needs. Besides, children and adolescents also faced disruptions in their daily routines. A study in India found that a large number of children showed disruptions in their sleeping patterns and increased electronic device usage [6]. These mentioned factors can affect their mental health [5, 6].

1.2. Impact of COVID-19 on the mental health of parents and children in Vietnam

In August 2020, a rapid assessment on the social and economic impacts of COVID-19 on children and families in Vietnam was published, which was based on a cross-

sectional quantitative study conducted by interviews with 148 mothers, fathers, and caregivers of children aged 2-18 years [8]. The result showed increased stress, anxiety, and depression among Vietnamese children that was indicated through the interviews. Particularly, the anxiety was related to the fear of being infected by the disease and became more serious with children living in areas with numerous cases of COVID-19 followed by children living with family members in collective quarantine centres. The report also mentioned that primary school-aged children and older children had a greater tendency of facing mental challenges than kindergarten children due to a more thorough awareness of the pandemic.

Another study about psychological impacts related to COVID-19 in Vietnam mentioned how it affected parents and their children [9]. During the pandemic outbreak, children and their family could be affected by school closing. Parents, especially mothers, tended to be more stressed because of the increase of time they had to spend to take care of their children while they still had to go to work.

To our knowledge, the extent of studies on the impacts of COVID-19 on the mental health of parents and children in Vietnam has not been equivalent to the urgency of the issue. A comprehensive study about psychological difficulties caused by COVID-19 for parents and children in Vietnam is necessary. The objectives of this study are to explore the impacts of the first wave of the COVID-19 in Vietnam (4/2020-5/2020) on parents and

children's mental health, and their perception of the availability and accessibility of mental health and psychosocial support services during the pandemic.

2. Methods

2.1. Participants and procedures

This study was designed as a cross-sectional mixed-methods survey administered after the first lockdown (4/2020-5/2020) due to the spread of COVID-19 in Vietnam. The mixed-methods research design was selected to gain a broader spectrum of information to better understand complex research questions. The sample included 78 parents of children from 2-17 years old and 32 children from 12-17 years old. The children's age ranged from 2 to 17 years old (mean=8.68; SD=5.03; 44% female and 28% male). The parents' mean age was 36.23 years (SD=6.02; 82.1% female and 11.5% male).

Participants were selected from six kindergarten classes, five elementary schools, three secondary schools, and three high schools in Hanoi, Vietnam, using a convenient sampling method.

This study was approved by the Ethical Committee for Psychological Research by the authors' university. The schools' principals invited parents to join in the study. There were no specific requirements in the sample selection. Informed consent was obtained before participants answered all the questions and interviews. It took about 45 min to complete the survey. Only one parent per household was

required to participate in the study. Parents with more than one child were asked to fill in the questionnaire for the targeted child only. Children of secondary and high school age (from 11 to 18) were asked to fully participate in the process.

2.2. Measures

The study incorporated both qualitative and quantitative data collection using one-to-one semi-structured interviews and questionnaires.

2.2.1. Qualitative measures:

The semi-structured interview was extracted from the WHO-UNHCR toolkit on mental health and psychosocial needs and resource assessments in humanitarian settings [10]. The toolkit recommends to start with a selection among 12 tools made to tailor assessments to each unique humanitarian context and conflict phase. In this study, tool 11 (perception by community members with in-depth knowledge of the community) and tool 12 (perceptions by severely affected people) were selected to understand children's and family's mental health and psychosocial support needs during the COVID-19 pandemic. The interview consisted of five main questions: (1) "Could you list the problems you are currently experiencing because of the COVID-19 pandemic? i.e. problems in your relations with other people, problems with your feelings; problems with the way you think; problems with your behaviour?" (2) "Could you list the problems that your child is currently experiencing because of the COVID-19 pandemic, i.e., problems in relations with other people, problems with feelings; problems with the way of thinking; problems

with behaviour?"; (3) "How does the [specific problems] affect your life and how have you tried to deal with this problem? (4) "Have you received support from others in dealing with this problem? From whom, what kind of support and how does it work?"; and (5) "Evaluate the accessibility and efficiency of listed support from social organizations/agencies and communities: Information of the nature of COVID-19, information regarding psychosocial support and social welfare services, information regarding self-care and positive coping to pandemic, training for parenting skills and supporting children in distress, training to identify mental health problems of children, supportive child-friendly spaces, activities to support children social and emotional learning, early childhood development activities; psychological first aid, individual counselling, family counselling, activities to connect with other social support resources, referral services".

2.2.2. Quantitative measures:

SDQ: The SDQ [11] assesses emotional and behavioural disorders among children aged 3-17. Parents and teachers can complete the SDQ and a self-report version is available for children aged 11-17. The SDQ consists of 25 items relating to social, emotional, and behavioural functioning across five subscales: Conduct problems, inattention-hyperactivity, emotional symptoms, peer problems, and prosocial behaviour. The SDQ was adapted for Vietnamese children [12]. In this study, the SDQ was self-reported by children aged 12-17 years old (25 children) and reported by the parents of children from 3-17 years old. This study used a four-band categorization that is defined based

on a large sample from the UK: “closer to average”, “slightly raised”, “high” and “very high”. For the prosocial subscale, the categories are: “closer to average”, “slightly lower”, “low” and “very low”. For the parents that completed the SDQ, the cut-off points are 0-13 (closer to average), 14-16 (slightly raised), 17-19 (high), and 20-40 (very high). For self-reported SDQ, the cut-off points are 0-14 (closer to average), 15-17 (slightly raised), 18-19 (high), and 20-40 (very high) [13].

Multidimensional Scale of Perceived Social Support (MSPSS): The MSPSS [14] measures the perceived adequacy of social support from three sources: Family, friends, and significant others. Twelve-item ratings are made on a seven-point Likert-type scale ranging from very strongly disagree (1) to very strongly agree (7). The cut-off points of the MSPSS are 2.9 and 5, with any scores below or equal to 2.9 considered as ‘low’ support, scores from 3 to 5 considered as ‘medium’ support, and scores above 5 considered as ‘high’ support. The MSPSS has proven to be psychometrically sound in diverse samples, including Vietnam, to have good internal reliability and test-retest reliability, and robust factorial validity [15].

The Self-Report Questionnaire (SRQ-20) is a 20-item self-report measure of mental health that can be administered via interview or via paper/pencil questionnaire [16]. Items are marked dichotomously (Yes=1, No=0) over a 30-day recall period to obtain a maximum score of 20. The SRQ-20 measures several symptoms of depression including headache, poor appetite, sleep disturbance, depressed mood, unhappiness, helplessness, and psychomotor retardation. Each

question is given a score of 0 or 1 depending on the “no” or “yes” response, respectively. The scores are added to generate an overall SRQ-20 scale, where higher scores indicate higher levels of mental health problems. The cut-off of the SRQ-20 is 7/8, with participants scoring less than 8 being considered as normal, and participants scoring 8 and above considered as having mental distress. This tool is reliable, valid, and adaptable for screening mental disorders in the developing world and Vietnam [17, 18].

2.3. Data analyses

Quantitative data was analysed using SPSS 16.0 software. For qualitative data, prominent themes were identified through a thematic analysis process with the aid of Qualitative Data Analysis (QDA) Miner software.

3. Results

3.1. Quantitative data analysis

Children’s mental health: The descriptive results for the parent-reported SDQ are presented in Table 1. The total score of the parent-reported SDQ was 8.09 (SD=5.09). The results of cut-off proportions of the SDQ scales revealed that around 5.1% of the participated children reported by their parents were in the high and very high range. The most frequent difficulties that parents reported for their children were lack of prosocial behaviour with 42.3% of the children being above average (16.7% reported a slightly low level of prosocial behaviour; 9% reported a low level, and 16.7% reported a very low level). The second area that the students have high levels of difficulty were peer problems with 33% being above average (20.5% displayed

slightly raised level of symptoms; 6.4% displayed high level of symptoms, and 6.4% showed very high level of symptoms).

Table 1. Descriptive results of the SDQ scale - parents' reports.

Subscale	N	Mean	Std. Deviation	Percentage of participants			
				Closer to average	Slightly raised	High	Very high
Conduct problems	78	1.18	1.25	88.5	5.1	6.4	0.00
Hyperactivity	78	3.01	2.17	87.2	9.0	2.6	1.3
Emotional problems	78	1.90	1.93	78.2	9.0	11.5	1.3
Peer problems	78	2.00	1.49	66.7	20.5	6.4	6.4
Prosocial	78	7.62	2.05	57.7	16.7	9	16.7
Total score	78	8.09	5.09	83.3	11.5	1.3	3.8

The descriptive results for the child-reported SDQ are presented in Table 2. The total score of the child-reported SDQ was 9.12 (SD=3.99). Peer problems was the most reported area with 28% of the children identifying as above average. Hyperactivity and emotional problems followed with a reported 22% being above average.

Table 2. Descriptive results of the SDQ scale - children's self-reports.

Subscale	N	Mean	Std. Deviation	Percentage of participants			
				Closer to average	Slightly raised	High	Very high
Conduct problems	25	1.36	1.15	96	0	4	0
Hyperactivity	25	3.44	1.71	88	12	0	0
Emotional problems	25	2.60	1.58	88	12	0	0
Peer problems	25	1.72	1.28	72	20	8	0
Prosocial	25	7.64	1.68	80	8	8	4
Total score	25	9.12	3.99	92	8	0	0

A one-way ANOVA was conducted to explore differences between gender in the parent-reported SDQ, but no statistically significant differences were found.

One-way ANOVA was also used to compare the parent-reported SDQ between family structure groups. There were significant differences for family structures in the hyperactive subscale ($F(1, 69), p=0.047$) and pro-social subscale ($F(1, 69)=4.97, p=0.03$), but no other subscales total score. Children living in one-parent families ($M=6.00, SD=2.83$) reported significantly higher hyperactivity scores than children living in two-parent families ($M=2.90, SD=2.13$). Children living in one-parent households ($M=4.50, SD=3.54$) scored lower in prosocial than children living in two-parent households ($M=7.75, SD=2.00$).

Additionally, one-way ANOVA exploring the educational level difference of children from the SDQ revealed a significant difference in the total score ($F(3, 74)=2.759, p=0.048$). However, a Bonferroni post-hoc comparison showed no significant difference among groups. Significant difference in educational levels of children was also found in the hyperactivity subscale ($F(3, 74)=4.283, p=0.08$). A Bonferroni post-hoc analysis showed that children in kindergarten ($M=3.89, SD=2.25$) scored significantly higher than secondary students ($M=2.22, SD=1.99$).

There was a significant difference found in living area in the emotion subscale ($F(1, 57)=5.078, p=0.028$) but not in other subscales or the total score. Children living in the suburbs ($M=2.57, SD=2.36$) scored significantly higher than the children living in the urban areas of Hanoi ($M=1.39, SD=1.64$).

Parents' mental health: The descriptive results for the SRQ-20 scale are presented in Table 3. The total score of the SRQ-20 was 2.62 (SD=3.23). The results of the cut-off proportions of the SRQ indicated that 91% of the participants ($N=71$) were in the normal range, while 7.7% ($N=6$) had mental distress. In terms of somatic complaints,

the most commonly reported symptoms are feeling easily tired (33.3%), having headaches (26.9%), and sleeping badly (21.8%). The most reported symptoms regarding negative effects are feeling unhappy (28.2%) and feeling nervous, tense, or worried (28.2%).

Table 3. Descriptive results for the SRQ-20.

SRQ items	Percentage of participants	
	No	Yes
Somatic complaints (M=1.47, SD=1.77)		
Do you often have headaches?	73.1	26.9
Is your appetite poor?	80.8	19.2
Do you sleep badly?	78.2	21.8
Do your hands shake?	94.9	5.1
Is your digestion poor?	85.9	14.1
Do you feel tired all the time?	89.7	10.3
Do you have uncomfortable feelings in your stomach?	82.1	17.9
Are you easily tired?	66.7	33.3
Negative effects (M=1.14, SD= 1.70)		
Do you have trouble thinking clearly?	87.2	11.5
Do you feel unhappy?	71.8	28.2
Do you cry more than usual?	100	0.00
Do you find it difficult to enjoy your daily activities?	89.7	10.3
Do you find it difficult to make decisions?	88.5	11.5
Is your daily work suffering?	85.9	12.8
Have you lost interest in things?	93.6	6.4
Do you feel nervous tense or worried?	71.8	28.2
Are you easily frightened?	94.9	5.1
Hopelessness (M=0.06, SD=0.34)		
Are you unable to play a useful part in life?	96.2	2.6
Do you feel that you are a worth less person?	96.2	2.6
Has the thought of ending your life been in your mind?	98.7	1.3
Total score (M=2.62, SD=3.23)		

A variance analysis was conducted to compare the scores of different demographic groups. The results showed that there were no significant differences in somatic complaints, negative effects, or hopelessness nor in the total scores in terms of gender, living area, occupation, income level, marital status, educational level, and number of children ($p>0.05$).

Children's perceived psychosocial support: The descriptive results from the MSPSS scale reported by the children are presented in Table 4. Using the cut-off points, the study found that the means of the total scores and subscales were in the low range. An analysis of variance indicated that there was no significant difference in family, friends, significant other nor the total scores in terms of gender, living area, and educational level ($p>0.05$).

Table 4. Descriptive results of the MSPSS scale - Children's self-report.

Sources of support	N	Mean	Std. Deviation
Family	29	1.87	0.82
Friend	30	2.17	1.01
Significant other	23	2.26	0.90
Total score	28	1.99	0.80

Parents' perceived psychosocial support: A one-way ANOVA was used to explore the differences in MSPSS subscales and total score regarding the number of children in the family. The descriptive results showed that the parents' perceived support was low in all subscales and in the total score (Table 5). There was a significant difference in MSPSS total score in terms of number of children in the family ($F(2, 69)=5.204, p=0.008$). A Bonferroni post-hoc analysis showed that parents with one child ($M=2.72, SD=0.99$) scored significantly higher than parents with two children ($M=1.94, SD=0.61$) and parents with three children ($M=1.65, SD=0.56$). There was no significant difference between parents with two children and parents with three children ($p>0.05$). In addition, there

was also a significant difference in MSPSS family in terms of number of children ($F(2, 69)=8.839$, $p=0.00$). A Bonferroni post-hoc analysis indicated that parents with one child ($M=3.05$, $SD=1.61$) scored significantly higher than parents with two children ($M=0.57$, $SD=0.76$) and parents with three children ($M=1.54$, $SD=0.74$).

Table 5. Descriptive on parents' MSPSS scale.

Sources of support	N	Mean	Std. deviation
MHPSS significant other	76	1.83	0.82
MHPSS family	77	2.17	1.01
MHPSS friends	77	2.26	0.90
MHPSS total score	77	1.99	0.81

Predictors of children's mental health: To examine whether parents' mental health and parent's perceived MSPSS can predict children's mental health, a multiple regression analysis was conducted. The results revealed that parents' mental health and perceived psychosocial support did not significantly predict children's mental health ($p>0.05$).

3.2. Qualitative data analysis

Qualitative data was analysed using a thematic coding system. Information about psychosocial issues of parents and children (both reported by parents and children) and MHPSS resources information were collected, and main themes were identified throughout the responses of participants.

Changes in life during the first lockdown: Major changes occurred around the daily routine of both interviewed parents and children. As a parent reported in the interview: "It was such a hassle that I had to sanitize every time I went out to buy groceries [since] I was taking care of my children. [I tried] to buy a week's worth of groceries at once".

According to parents, children were also having a hard time adjusting to these changes. "Things changed 100% for him since he had to stay at home for 3 months. For 3 months, he didn't leave the house because we were very serious about

following regulations about social distancing. During that time, he was stressed and anxious. He felt discouraged and he lost the motivation to study".

Parents spent more time staying at home due to lockdown and they had to be able to adapt to these changes. Most parents reported that they had to shift from working in an office to online working, entirely or partly, while all school-age children had to stay out of school and join online classes. The issues caused by this disruption in lifestyle for parents and children will be discussed further in the next part.

Parents' psychosocial issues: Many parent participants mentioned financial issues as their main concern when they were asked about their problems during the pandemic. Decreased income was mentioned most frequently with related challenges like wage reduction, cutting down on working hours, low profit in business and service industry, as well as layoffs, which led to stress and worry in parents. "Back then I had to stay at home. We were hit hard. I was teaching at a private school, so I didn't have any support from the government nor the school. It was difficult for us. All the burden was put on my husband." "We had to close the store. We were struggling financially. We had lease a store and we had to make a 6-month deposit. Then the pandemic happened unexpectedly, and we had to close the store".

Emotional problems were most referred to by parents as "worried" and "bored". There were two main sources of parents' emotional problems: the COVID-19 pandemic itself and children's academic performance. Many parents reported they were worried about the possibility of catching the disease for their family and themselves. For example, some parents' responses included: "... the number of affected cases were increasing, we felt worried and didn't know what to do". "I was worried that I would spread the disease to family members, considering that I had been communicating with many people at work".

Parents also worried that their children's academic performance would decline, and that

their children couldn't keep up with classes since they thought that the quality of online classes was not equal to that of in-person classes. For instance, some responses mentioned:

"... my kid's performance was way worse than previous semesters (because) they took a few months off ... if they don't get support from teachers after they come back to school, it won't be ok".

"Because they didn't go to school but joined online classes, the knowledge was not enough and complete. Since it was online classes, the way that knowledge taught to students was not good. After the lockdown, (my children's) grades were dropping".

Another problem that parents had to face was restricted lifestyle as a result of the lockdown. They had to stay at home more often and they couldn't go outside or join activities, which created a sense of confinement and boredom.

Moreover, this disruption in lifestyle made parents, especially mothers, struggle to adapt to the new routine and thus additional burden was placed on them. Mothers had to spend more time taking care of their children since they stayed at home instead of going to school in the daytime.

"Before, I went to work from morning until late afternoon. I only saw my kids from 5 pm until they went to bed which was around 9-10 pm. The schedule was repeated. There would be little conflict. Now, we see each other 24 hours a day, which could be a little bit [too much]".

".... I want our normal life back when my children can go to school. When they stay at home, I'll have to pay more attention and I'll have to spend more time with them. When I go to work, I'm not tied down. I don't have to be worried about doing my job while taking care of my children, their studying, their meals...".

For working mothers, they were struggling to balance work and childcare. Some parents faced some challenges while adjusting to working from home: ".... when I had online meetings, my children ran around my room. I couldn't concentrate. I had to lock the door and asked them not to get in so that I could work".

Parents also reported that they faced interpersonal conflict in the family as a result of the restricted lifestyle where social interaction was limited to family members only. They felt irritated more frequently with their children's behaviour and they had problems with controlling their emotions as well as spousal conflicts. As one parent said: "It's fine when we go to work all day. Now, when we have to stay at home because of the pandemic, there are conflicts between us. For instance, I used to prepare one to two meals a day. Now, I have to take care of the family all day long. It causes problems in our relationship, [not only between the spouses] also between parents and children. They behave badly and they don't study on their own." More detailed record of parents' psychosocial issues with their frequency is shown in Table 6 below.

Table 6. Themes on parents' psychosocial issues.

Psychosocial issues	Representative problems	Frequency
Emotional problems	Worried, bored, angry, emotional regulation problems	67
Thought problems	Forgetfulness, lack of concentration, overthinking, negative thoughts	17
Behaviour problems	Getting irritated easily, punishing children verbally and physically, unexpected rage	11
Stressed about financial issues	Decreased income, layoff	38
Illness anxiety	Worried about the whole pandemic situation, being scared of catching the disease, being scared of going outside	20
Worried about children's academic performance	Worried about children's grades being low, questioning the effectiveness of online learning.	5
Disruption in lifestyle	Issues caused by staying at home for too long: Problems with online working work-life boundary, sense of confinement, excessive chores, low work productivity	59
Lack of interpersonal interaction	Lack of person-to-person interaction	20
Interpersonal difficulties	Conflicts with spouses, children, grandparents	14

Children's psychosocial issues: The study was designed to collect information about what kind of problems children faced during the pandemic from both parents' and children's perspectives. More detailed records of children's psychosocial issues with their frequency are shown in Tables 7 and 8 below.

Table 7. Theme on children's psychosocial issues reported by parents.

Psychosocial issues	Representative problems	Frequency
Emotional problems	Feeling bored and cranky by staying out of school for too long	34
Lack of interaction with peers	Not being able to see friends	18
Inactive lifestyle	Increasing screen time; lack of physical activities	28
Academic pressure	Low academic performance; questioning the effectiveness of online classes	18
Time management	Difficulty in balancing play time and study time	1
Decline in concentration	Decline in concentration when studying	8
Behaviour problems	Talking back to parents; complaining and whining more often; unreasonable irritation; acting out	22

Table 8. Theme on children's psychosocial issues reported by children.

Psychosocial issues	Representative problems	Frequency
Disruption in lifestyle	A sense of confinement and boredom due to staying out of school for too long and not being able to go outside	19
Emotion control issue	Difficulty in emotional control	2
Illness anxiety	Worried about the whole pandemic situation	3
Lack of interaction with peers	Not being able to see friends	11
Interpersonal difficulties	Sibling conflicts	5
Academic pressure	Difficulties with online studying; being worried about schoolwork, not being able to follow classes	14
Decline in concentration and memory	Decline in concentration when studying	4

There was a consistency in parent and children reports that showed a high frequency of children's psychosocial issues related to disruption in lifestyle including a sense of confinement and boredom due to staying out of school for a long time and lack of interaction with peers. Academic pressure was also a shared concern among children and parents who participated in the interview since the effectiveness of online classes was called into question.

On the other hand, a relatively high number of parent participants raised a concern about the inactive lifestyle of children, for example, there was an excessive usage of the internet and devices and a lack of physical activities like acting out. Meanwhile, the child participants did not mention these as problems. A number of behaviours were also brought up and considered as a problem by parents like acting out, talking back to parents, and unreasonable irritation.

Support resources for psychosocial issues: Most parents and children reported that the main support resources to deal with their problems during the pandemic was support from their family, friends, and neighbours. There were just a few participants mentioning support from their workplace, their school, and their local authorities. There was an evident inadequacy of formal support from organizations.

Coping strategies for psychosocial issues: Increasing online interpersonal interaction was most frequently mentioned as a coping strategy for both parents and children. Spending time with their children and using daily activities to distract oneself were also discussed by participants. Particularly, some parents considered preventive measures against COVID-19 as a way to reassure themselves and make them feel more secure. More detailed information about coping strategies used by participants during the pandemic is given in Table 9 below.

Table 9. Theme on coping strategies.

Coping strategies	Frequency
Following preventive measures against COVID-19	10
Increasing online interpersonal interaction	17
Spending more time with their children	9
Making a detailed daily schedule	5
Using daily activities as a way to distract oneself (cooking, reading books, watching TV...)	9
Self-care practices	6
Volunteering	1

Positive perspective: Besides discussions about participants' issues during the pandemic, some parents showed a positive perspective of the matter. One parent reported that "there is no need to feel worried at all because the government is doing a good job with the pandemic situation". Some parents considered staying at home during lockdown as an opportunity to spend more time with their children, which wasn't usually the case when they were in their normal daily routine, and also a chance to reconnect among family members. "... I felt lucky that my family got to stay at home together for many days... We went to work every day. Kids went to school all day. Then they went to extra classes and they went back to their room [when they got home]. There was little communication. Now, during this lockdown, we were closer, we shared housework, and we cooked together. I found it a very nice experience".

Mental health and psychosocial support (MHPSS) during COVID-19: MHPSS was used for COVID-19 information and self-care practices information during the pandemic. According to responders, among all MHPSS support resources discussed in the interview, COVID-19 Information Support Resources and Self-Care Practices Information Support Resources were the two most accessible resources. Common resources for those types of information came from the media and auto-SMS service from the Ministry of Health in Vietnam.

The media resource included public information from the internet, TV, newspaper, radio, and local official announcements. The information was mostly about the COVID-19 situation, affected areas, and statistical information. The auto-SMS service provided by the Ministry of Health in Vietnam was a promotional campaign to the 5K preventive measure against COVID-19 of the government, i.e., wearing face masks, using hand sanitizer, keeping a 2-meter distance from other people, no group gatherings, and submitting health declaration forms regularly.

Preventive measures were mentioned the most as a practice of self-care. There were no records of other types of self-care practices. However, there were some challenges in accessing accurate and evidence-based information. One of the major sources of news for parents regarding several matters such as self-care, health care, parenting, etc., is the internet. Some parents indicated that since there were too many sources on the internet, and there were no official sources, it was hard to verify the legitimacy of the sources. "One of the difficulties for me is that when I go online, I am not sure if this piece of information is accurate or true". "For example, the internet is one of the support sources. However, I haven't been able to find any official websites from the governments about self-care, how to take care of children with mental health issues, and other matters. Therefore, people often look for information from unofficial websites, and information is often not verified..."

In addition, some parents also expressed concerns regarding the applicability and the fit of the information they found with their own situations. For example, "... Sometimes the information is not completely applicable to me, so I only use it as a reference." "Sometimes I only read this kind of information for reference since there is information everywhere. I also have to choose which one seems to be suitable for me, since sometimes this kind of information is only partially effective for me and my children. I know

that for some children, these kinds of approaches can even create a reverse effect”.

MHPSS for children during the pandemic: We asked about MHPSS for children in relevant aspects like child emotion recognition, child development, child safe space, and parenting skills. There was very little mention of accessing those types of support for children. Most participants reported they didn't receive any support related to this matter. A few parents working as educators reported that they got support from school not as parents but as teachers.

Mental health support during the pandemic: For MHPSS specifically related to mental health, we collected information about basic psychological services including psychological first-aid, personal counselling, group counselling and therapy for more serious problems. There was rarely a mention of an official psychological support in time of pandemic.

Referral to other types of support during the pandemic. Most participants reported that they received no support in terms of being referred to different types of support when in need. There were a few participants that mentioned local administrators as a resource for this type of support.

Suggestions for MHPSS: Participants made some suggestions during the interview, which were to organize more activities for children including physical activities, group activities, online activities, and parent-children activities at school. In addition, suggestions were also made to provide psychological support for children, provide psychological support for people affected by COVID-19 and their family, increase support from school, and reliable mainstream sources of information.

Advantages and challenges of participants working in the educational field: There was an unexpected high rate of parent participants who worked as educators compared to other occupations. Those working in the educational

field reported some advantages in accessing MHPSS resources and coping with psychosocial issues of their children.

These parent-educators had experience organizing activities for children during the pandemic so that their children would not feel frustrated staying at home for so long. They had access to school counselling services to learn more about children's mental health and school counsellors for advice related to children's psychological issues. Some also had access to official documents released by government departments about the pandemic situation as well as preventive measures against COVID-19. There were also workshops about child psychology that were organized for teachers at schools. As one teacher participant reported: “I have the advantage that I work at school, there are many conferences and seminars to discuss about child psychology and how to educate children... so that we can teach our children better”.

On the other hand, educators were also the ones that faced substantial changes in work when all classes had to switch to online teaching. One teacher noted: “I felt pressured since there were more things to do when it comes to online teaching. It took a lot more time to prepare lessons. I still had to take care of my kids. The pressure on me was really high”.

Moreover, teachers had to learn many new skills to operate online classes. For example, one teacher participant mentioned: “... learn how to use the software and how to interact online with students. We only learnt how to operate conventional classes when we were trained at college...”.

The prominence of internet and devices usage: Participants reported high frequent usage of the internet and devices like computers, TV, and smartphones as an emerging coping strategy for issues that occurred during the pandemic. For example, the use of SNS platforms like Facebook and Zalo (a popular SNS platform in Vietnam) to

contact friends and family as a result of lacking person-to-person interaction; online classes, which means more computer time for children and parents who were teachers; screen-related entertainment activities like playing video games, using smartphones, and watching TV; and looking up pandemic-related information in the internet were reasons to use the internet and devices more frequently.

4. Discussion

Participants in the study included parents and children from different age ranges that lived in Hanoi. Participants were recruited from both urban and suburban areas of the city. There were no other specific requirements for participants. The study was designed to obtain information about psychosocial issues that parents and children were facing, as well as the availability and effectiveness of MHPSS service during the first COVID-19 lockdown in Hanoi. To our knowledge, there have been studies about the impact of COVID-19 on mental health in Vietnam, but this is the first study that focuses on children and parents that provides a comprehensive assessment of MHPSS services during the pandemic.

In general, the study's quantitative results found that 7.7% of participating parents had mental distress because of the pandemic. The most commonly reported symptoms of distress among parents were somatic complaints (headaches, poor sleep, and feeling tired easily) and negative effects like feeling unhappy, nervous, tense, or worried. Around 16.3% of children in this study were reported to have mental health problems. The most reported difficulties among children were the lack of prosocial behaviours, hyperactivity, as well as peer and emotional problems. The results also showed that children in kindergarten scored significantly higher on the SDQ overall scores and on hyperactivity scale compared to

children in higher education levels. In addition, children living in the suburbs also displayed more emotional symptoms than children living in the urban areas of Hanoi. Our results align with the results of other studies around the world investigating parental mental health during COVID-19 and that the pandemic impacted the mental health of parents and children. A study conducted in the US indicated that 27% of parents reported deteriorating mental health and 14% reported worsening mental health for their child [19]. The results of Wu, et al. showed rates of depression and anxiety in parents to be 6.1% and 4.0% [20]. In addition, Patrick et al. also indicated that parents with younger children tend to report more mental health problems in their children than parents with older children, which aligns with our findings [19]. In terms of perceived social support, we found that the perceived social support of both parents and children were low. Parents with one child felt significantly more overall support and support from family than parents with two or three children. Low perceived social support was also reflected in our qualitative findings.

Our qualitative analysis found that the most common psychosocial issues that both parents and children reported were related to disruption in daily life, alongside a sense of confinement and boredom due to staying at home for long periods of time, and a lack of interpersonal interaction. Serious mental disorders were hardly brought up. One explanation for this could be that this study was conducted at the early pandemic stage, and the most serious damages caused by COVID-19 might not have had enough time to develop.

A systematic review and meta-analysis of studies about the impact of COVID-19 on children and adolescents' lifestyle behaviours in 2022 reported some problems in this population, which included unbalanced diet, sedentary lifestyle, mental health impacts, social isolation, addiction to screens, lack of schooling and health

care, as well as adverse effect on children's psychological well-being. Those disruptions in lifestyle were directly related to the pandemic [21].

Participants who were working mothers appeared to be more affected by the pandemic since they had to bear the responsibility of childcare while working at the same time. This finding was also mentioned in a study conducted by X.T.T. Le, et al. [9] in 2020 to evaluate psychological impact of COVID-19 on Vietnamese people.

The prominence of internet and device usage was demonstrated by participants as a transition to online classes and remote work and as a coping strategy during the lockdown, for instance, by increasing online interpersonal interaction. Participants also mentioned social networks and online news as their main information sources for MHPSS. This could warrant more online support resources and activities in the future for parents and children like online therapy or online support groups, which is consistent with what participants suggested in the interview.

According to the responses of the participants, there were clearly shortages of other types of MHPSS services including MHPSS services for children and MHPSS services specifically for psychological support. The most accessible MHPSS service during COVID-19 that participants mentioned were COVID-19 information resources. Even when discussing other types of support, participants considered COVID-19 information as well as preventive measures against the disease as an effective resource.

The insufficiency in MHPSS service provisions was demonstrated by the fact that participants were not familiar with MHPSS services besides COVID-19 information support. The most widely available MHPSS resources for participants were the ones that were self-related, like looking up

online information, and did not involve external support networks or organizations. Moreover, participants also expressed a confusion between primary and specialized support. A number of participants believed that psychological support was only intended for individuals with mental health problems. Raising awareness of MHPSS during times of disaster, like a pandemic, is a necessary future suggestion.

5. Limitations

Because this is a cross-sectional study, one limitation is that the study was not able to capture the long-term effects of the pandemic on the mental health. In addition, the sample size is small and not representative of a large population as the study was conducted only in Hanoi. Therefore, some of our results cannot be generalised.

6. Conclusions

Further studies intending to explore the long-term effects of the pandemic on the mental health of parents and children are needed. In addition, future studies should also explore ways to improve parents' and children's perceived MHPSS. There was an unintended high number of parents who worked in the educational field that participated in the study. We identified some advantages and challenges that were characteristic for this occupation. This could be a suggestion for future research to explore the psychosocial impacts of COVID-19 and MHPSS services for individuals working in the educational field.

CRediT author statement

Hoang Minh Dang: Conceptualisation, Methodology, Validation, Writing, Reviewing and Editing; Van Vu Hong: Data curation, Visualisation, Writing; Phuong Nguyen Lan: Data collection, Conceptualisation, Methodology; Dao Kieu Anh: Validation, Writing and Editing; Ha Ho Thu: Data analysis, Visualisation, Writing.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] Worldometer (2021), "COVID-19 coronavirus pandemic", <https://www.worldometers.info/coronavirus/>, accessed 14 June 2021.
- [2] C.Y.C. Chen, E. Byrne, T. Vélez (2021), "Impact of the 2020 pandemic of COVID-19 on families with school-aged children in the United States: Roles of income level and race", *J. Fam. Issues.*, **43**(3), DOI: 10.1177/0192513X21994153.
- [3] L.M. Glynn, E.P. Davis, J.L. Luby, et al. (2021), "A predictable home environment may protect child mental health during the COVID-19 pandemic", *Neurobiology of Stress*, **14**, DOI: 10.1016/j.ynstr.2020.100291.
- [4] American Psychological Association (2021), "Stress in America™ 2020", <https://www.apa.org/news/press/releases/stress/2020/report>, accessed 14 June 2021.
- [5] R.H. Alinsky, T. Ha, S. Ockey (2021), "Adolescents' perceived socioemotional impact of COVID-19 and implications for mental health: Results from a U.S.-based mixed-methods study", *Journal of Adolescent Health*, **68**(1), DOI: 10.1016/j.jadohealth.2020.09.039.
- [6] B.K. Sama, P. Kaur, P.S. Thind, et al. (2021), "Implications of COVID-19-induced nationwide lockdown on children's behaviour in Punjab", *Child. Care. Health Dev.*, **47**, DOI: 10.1111/cch.12816.
- [7] M. Mikolajczak, J.J. Gross, F. Stinglhamber, et al. (2019), "Is parental burnout distinct from job burnout and depressive symptoms?", *Association for Psychological Science*, **8**(4), DOI: 10.1177/2167702620917447.
- [8] The United Nations International Children's Emergency Fund (2020), "Rapid assessment on the social and economic impacts of COVID-19 on children and families in Vietnam", <https://www.unicef.org/vietnam/sites/unicef.org/vietnam/files/2020-08/Covid%2019%20unicef%20ENG.pdf>, accessed 14 June 2021.
- [9] X.T.T. Le, A. Dang, J. Toweh, et al. (2020), "Evaluating the psychological impacts related to COVID-19 of Vietnamese people under the first nationwide partial lockdown in Vietnam", *Front. Psychiatry*, **11**, DOI: 10.3389/fpsy.2020.00824.
- [10] World Health Organization & United Nations High Commissioner for Refugees (2012), "Assessing mental health and psychosocial needs and resources: Toolkit for humanitarian settings", <https://apps.who.int/iris/handle/10665/76796>, accessed 14 June 2021.
- [11] R. Goodman (2001), "Psychometric properties of the strengths and difficulties questionnaire", *J. Am. Acad. Child Adolesc. Psychiatry*, **40**, pp.1337-1345, DOI: 10.1097/00004583-200111000-00015.
- [12] H.M. Dang, H. Nguyen, B. Weiss (2017), "Incremental validity of the child behaviour checklist (CBCL) and the strengths and difficulties questionnaire (SDQ) in Vietnam", *Asian J. Psychiatr.*, **29**, pp.96-100, DOI: 10.1016/j.ajp.2017.04.023.
- [13] Youthmind (2021), *English (UK)*, [http://sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz\(UK\)](http://sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz(UK)), accessed 14 June 2021.
- [14] G.D. Zimet, S.S. Powell, G.K. Farley, et al. (1988), "The multidimensional scale of perceived social support", *J. Pers. Assess.*, **52**, pp.30-41.
- [15] T.H.M. Vo, K. Nakamura, K. Seino, et al. (2020), "Fear of falling and cognitive impairment in elderly with different social support levels: Findings from a community survey in Central Vietnam", *BMC Geriatrics*, **20**, DOI: 10.1186/s12877-020-01533-8.
- [16] World Health Organization (1994), "A user's guide to the self reporting questionnaire (SRQ)", https://apps.who.int/iris/bitstream/handle/10665/61113/WHO_MNH_PSF_94.8.pdf?sequence=1&isAllowed=y, accessed 14 June 2021.
- [17] B.K. Giang, P. Allebeck, G. Kullgren, et al. (2006), "The Vietnamese version of the self reporting questionnaire 20 (SRQ-20) in detecting mental disorders in rural Vietnam: A validation study", *Int. J. Soc. Psychiatry*, **52**, pp.175-184, DOI: 10.1177/0020764006061251.
- [18] K.J. Stratton, S.H. Aggen, L.K. Richardson, et al. (2013), "Evaluation of the psychometric properties of the Self-reporting questionnaire (SRQ-20) in a sample of Vietnamese adults", *Compr. Psychiatry*, **54**, pp.398-405, DOI: 10.1016/j.comppsy.2012.10.011.
- [19] S.W. Patrick, L.E. Henkhaus, J.S. Zickafoose, et al. (2020), "Well-being of parents and children during the COVID-19 pandemic: A national survey", *Pediatrics*, **146**, DOI: 10.1542/peds.2020-016824.
- [20] M. Wu, W. Xu, Y. Yao, et al. (2020), "Mental health status of students' parents during COVID-19 pandemic and its influence factors", *Gen. Psychiatry*, **33**, DOI: 10.1136/gpsych-2020-100250.
- [21] S. Scapaticci, C.R. Neri, G.L. Marseglia, et al. (2022), "The impact of the COVID-19 pandemic on lifestyle behaviours in children and adolescents: An international overview", *Ital. J. Pediatr.*, DOI: 10.1186/s13052-022-01211-y.

Trade creation and trade diversion effects of ACFTA on seafood exports

Thi Dieu Linh Huynh*, Thi Kim Oanh Hoang

University of Economics, The University of Danang, 71 Ngu Hanh Son Street, My An Ward, Ngu Hanh Son District, Danang City, Vietnam

Received 1 June 2022; revised 17 August 2022; accepted 26 August 2022

Abstract:

The gravity model is an econometric model used as an effective tool to explain the volume and direction of bilateral trade between countries. It is widely used in international trade and thus, in this article, we use the gravity model to examine the trade creation and diversion effects of ASEAN-China Free Trade Agreement (ACFTA) for the seafood industry by estimating the gravity trade model for the time period between 2003 and 2020 and between 10 countries. Initially, the estimation applied panel data with ordinary least squares (OLS) estimation, but there was a problem with heteroscedasticity and autocorrelation using the OLS estimator. Therefore, we will re-estimate the model by using the fixed effects model (FEM) and random effects model (REM). We estimate twice, once with data including 2020 and once excluding 2020 to understand the impact of the COVID-19 pandemic on commercial trends. The estimated results show that trade creation influences seafood. It is possible that the COVID-19 pandemic has no impact on trade diversion and creation, or that the 2020 data is too short for us to assess this impact. In conclusion, this article has achieved certain success in explaining the causes affecting trade flow in processed goods due to differences between the general tariff rate and the preferential tariff rate for ASEAN - Chinese seafood, and the close distance between commercial partners and converting certificate of origin (C/O) of goods to export. Analysis using the gravity model shows a positive impact on Vietnam's seafood trade flow when joining ACFTA.

Keywords: ASEAN-China Free Trade Agreement, gravity model, seafood, trade creation, trade diversion.

Classification number: 2.2

1. Introduction

1.1. Why choose the Vietnam - China relationship?

Free trade agreements (FTAs) are rapidly increasing, leading to many bilateral and multilateral trade agreements being established. By participating in international and regional organizations, Vietnam will also gradually integrate into this trend as Vietnam is increasingly entering into FTAs.

According to the General Department of Vietnam Customs statistics during the first five months of 2022, China is Vietnam's largest trading partner with a total two-way trade flow of 71.58 billion USD, followed by

the US (52 billion USD), South Korea (38 billion USD), and Japan (19.2 billion USD).

It can be seen that China is Vietnam's largest and likeliest potential trading partner. Vietnamese companies want to improve their ability to access the Chinese market gradually and benefit more from FTAs with China, so they need to understand the opportunities and benefits as well as the challenges of these FTAs. Therefore, ACFTA should be of interest.

In addition, because the war on trade between the United States (US) and China, the US is considered to be in a trade deficit. The US government has therefore

*Corresponding author: Email: linhhtd@due.edu.vn

issued policies to protect domestic industry. One policy is to apply tariffs on goods imported from China to the US, while the US and China are two of Vietnam's top trading partner. Therefore, Vietnam cannot avoid being affected by the trade wars of these two countries. However, Vietnam can gain some advantages from the trade war between these two countries, for example, China cannot import from the US due to higher taxes but can increase exports of goods from Vietnam to China. Vietnam also has the opportunity to increase exports to the US as high taxes are imposed on Chinese goods.

1.2. Why choose the seafood industry?

Seafood is one of the leading export industries in Vietnam, making a significant contribution to gross domestic product. Seafood revenue is increasing and has become one of the key exports in Vietnam. As soon as the agreement comes into effect, the seafood tax rate will be zero percent.

According to the 2021 Vietnam import - export report from the Ministry of Industry and Trade, in 2021, the structure of export goods will continue to shift in a positive direction with seafood exports reaching USD 8.9 billion, an increase of 5.6%. One positive point is that the average export prices of seafood products all recorded an increase compared to the previous year. Agricultural and seafood exports grew in most market areas. Specifically, the leading export market is still the Asian market with a total turnover of 15.4 billion VND, an increase of 9.7% compared to 2020 of which the Chinese market reached 19.55 billion USD, an increase of 10.1%; ASEAN reached USD 2.89 billion, an increase of 5.0%; Japan reached 1.80 billion USD, a decrease of 0.5%, and South Korea reached 1.19 billion USD, an increase of 10.5%. Next is the Americas market with a turnover of 4.67 billion USD, which is an increase of 20.7% compared to 2020. The largest consumption market in the Americas

region is the US, which reached 3.92 billion USD, an increase of 20.7% over the same period.

Although the seafood industry is clearly determined to be the largest potential export of Vietnam in the near future, the seafood of Vietnam still faces many export difficulties overseas because of technical barriers, especially quality, food safety, and traceability.

1.3. Trade creation and trade diversion

The Customs Union Issue published in 1950 by Jacob Viner [1] defines trade diversion and trade creation. This is the first research done on the matter. J. Viner introduced the theories of "trade creation" and "trade diversion" which became necessary instruments for the analysis and realization of the effects of economic integration. J. Viner also explained that the shift from cheaper to more expensive producers in trade is trade diversion, while trade creation is increasing the volume of trade between countries when they agree to set up a custom union.

Any FTA is strongly associated with lower trade barriers between member countries. Therefore, not only can FTAs create new trade between members of the agreement (trade creation), but it can also divert trade from less expensive to more expensive producers of the same product (trade diversion).

Lower trade barriers between member nations are significantly related to any FTA. As a result, not only may the agreement generate new trade, but it can also redirect trade from lower-cost to higher-cost producers of the same commodity [1]. Trade creation occurs when trade barriers between FTA members are reduced, resulting in new trade. As L. Kendall, et al. (2007) [2] pointed out, because of lower tariffs between member nations, trade is diverted from a traditional exporter to a less efficient one. These two studies help us better understand and interpret international economic movements and assist us in clarifying what it means to

create and divert trades, as well as their implications.

More bilateral and multilateral FTA have been struck in the last decade. These trade agreements are anticipated to enhance products trade between member nations and have the potential to not only establish new trade between members of the agreement, but also to redirect trade from lower-cost to higher-cost producers of the same commodity [1]. As a result, some people have studied the impact of trade agreements on the creation and diversion of trade between member nations using the gravity model, which is a standard tool for evaluating the effect of FTAs. The gravity model has evolved into an essential and successful instrument for assessing two nations' trade flows. Gross domestic product (GDP) and distance are the two primary variables in the gravity model. Other factors, such as common language or population, are also included in the model depending on the authors' study goals.

2. Literature review

A.O. Krueger (1999) [3] has demonstrated the positive effect of North American Free Trade Agreement (NAFTA) on the trade flow of member countries. The coefficients of the distance, contiguity, and common language were highly significant and similar in most gravity equation estimates. This study showed that there was a positive increase in trade between the USA and Mexico after the NAFTA agreement was signed and in effect. NAFTA creates trade creation for member countries instead of trade diversion.

The research by F. Natale, et al. (2015) [4] examined the factors of international seafood trade using the gravity model for seafood and meat. GDP, per-capita income, primary production and apparent consumption, regional trade agreements (RTAs), and geographical distances between trading partners all explain the dependent variable of bilateral trade flows in commodities.

B. Yang, et al. (2020) [5] estimated gravity models for various product shapes to assess variables impacting China's seafood exports. The findings show that transportation costs and income level appear to be significantly more essential to perishable items, whereas the effects are minor for other products. Furthermore, most trade flows are influenced by rising income to varying degrees.

Research by B.H. Baltagi, et al. (2007) [6] examined the relationship of RTAs to trade flow by applying the gravity model. They suggested that the EU was found to have a trade creation impact in agricultural commodities trade, whereas the ASEAN Free Trade Area (AFTA) and NAFTA have trade creation effects in machinery commodities trade.

S. Lin, et al. (2010) [7] conducted research concerning agricultural trade creation and diversion. With the purpose of dealing with heteroskedasticity and zero trade observations, trade creation and diversion effects are estimated using a Poisson Pseudo Maximum-Likelihood (PPML) estimator with various fixed effects.

Further, the article written by A. Muhammad, et al. (2016) [8] argues that the greater trade creation effect in ACFTA stems from tax-favourable policy and the reduction of non-tariff trade barriers due to this agreement. Their study results show that the EU promotes trade between member countries rather than non-member countries. They used the gravity model to analyse the effect of FTAs on EU countries. The model uses the following variables: trade flows, real exchange rate, real GDP, and geographical distance. The colonial relationship, common language, and common border are also used in this model.

There exists a lot of research on trade creation and diversion. However, there is no specific research

focusing on seafood import and export of Vietnam. Therefore, this study will contribute to the existing literature.

3. Methodology

3.1. Methodology

The gravity model with panel data is used to examine the impact of ACFTA on trade diversion and trade creation in the seafood industry using quantitative methods.

Limitation of the gravity model is that basic gravity models do not account for trade creation or trade diversion. The following presents two problems related to the gravity model.

First, D. Trefler (1993) [9], J.W. Lee, et al. (1997) [10] discovered endogeneity problems related to FTAs, specifically, that there is a potential reverse causality between higher trade volumes and FTAs. It was argued that instead of the FTA increasing the level of trade of the two countries, the higher level of trade between two countries might lead to a higher probability for the establishment of a FTA.

Zero trade observation is involved with a double log model (the most used gravity model specification). The existence of zero-valued trade flows has the ability to appear in the volume of trade in a specific good, rather than the volume of overall trade between two countries. However, omitting or deleting zero value observations leads to serious problems by neglecting important information on low levels of trade [11]. This creates bias and deviation in the research results.

The gravity model data was run using STATA. Estimation of empirical results was accomplished with OLS, FEM, and REM estimators with ACFTA as the only agreement. There is an issue with the value of some observations being zero that causes problems when applying a logarithm. This observation is thus immediately eliminated.

With a few minor modifications, we employ the empirical model proposed by S. Lin and M. Reed (2010) [7]. Instead of the GDP variable utilized in their study, we employ the independent variable GDPPC.

The empirical model is described as follows:

$$\ln X_{ijt} = \beta_0 + \beta_1 \ln GDPPC_{it} + \beta_2 \ln GDPPC_{jt} + \beta_3 \ln POP_{it} + \beta_4 \ln POP_{jt} + \beta_5 \ln DIS_{ij} + \beta_6 Coml_{ij} + \beta_7 Coh_{ij} + \beta_8 Border_{ij} + \sum_m \gamma_m ACFTA_{ijt}^m + \sum_m \lambda_m ACFTA_{it}^m + \sum_m \omega_m ACFTA_{it}^m + \varepsilon_{vj}$$

where i represents an export country and j represents an import country.

The entire seafood export value from country i to country j at time t is called export flows (X_{ijt}), which is in units of thousands of dollars. The growth or reduction in trade is clear in the trade flows between the two nations as data on these trade flows represent the real status of the two countries' trading positions. When this year's X_{ij} is higher than the previous year, the two nations are anticipated to have a boost in their trade. This is the characteristic that most clearly demonstrates a country's trade patterns over time.

The distance between countries i and j is called DIS_{ij} . It refers to the distance between the exporting and importing countries, in units of kilometres and is derived from the CEPII Database. The cost of transportation for a country to export or import commodities is represented by the distance variable. This may also represent the similarity in demand owing to shared climatic and topographic factors, as well as cultural and consumption patterns. In terms of the link between X_{ij} and distance, some publications imply that this variable in the X_{ij} equation may be negative. Due to rising transportation costs, distance might restrict trade flows. The longer the distance between two points, the higher the transportation expense, and hence the smaller the trade flow. The cost of import and export rises as distance increases, as does the cost of items.

As a result, the distance will have a negative impact on trade flows into the host country.

POP_{it} is the population of the exporting country i at time t . The population of a country indicates both the labour supply and the quantity of demand. Trade flows and population have an uncertainty. According to several authors, countries with a large population would export less because they must first fulfil internal demand before selling overseas. In this instance, more people will prefer to import rather than export. When the majority of the population works in the field of seafood production, the coefficient of this variable might be positive in the equation X_{ij} ; with such a big number of employees, the level of production will be higher, and the amount of output for exports will be higher.

POP_{jt} is the population of the importing country j at time t . X_{ij} and POP_j have an uncertain relationship. For importing countries, the larger the population, the greater the demand for consumption. As a result, the population of the importer will have a beneficial impact on trade flows into the export country. A large population provides a chance for importing countries to produce rather than import.

A country's population expansion may affect trade flows in two ways: supply and demand. Population expansion may enhance labour resources, assuring the ability to create export commodities on the supply side. On the demand side, rising population equals more domestic consumer demand, which means more imports [12].

The strongest indicator of a country's level of life is its gross domestic product per capita ($GDPPC_{it}$ and $GDPPC_{jt}$), which are dollar-based measurements. Consumer purchasing power and affordability are reflected in this variable. It is also an indicator of a

country's degree of progress when it invests more in manufacturing technologies.

Dummy variables: A few dummy factors are included in this study including shared language, common border, colonial connections, and FTAs (ACFTA).

When country i is the country's colony j , country j is the country's colony, or two nations i and j are concurrently colonies of another country, they are said to have colonial connections. Trade flows have a favourable association with language, border, and colonial ties. If two nations speak the same language, their distance is near, the former belongs to the latter, and they have a strong capacity to share culture, likes, and wants. As a result, they will be able to import more items from each other than nations that are far apart or have distinct cultures.

The following, Table 1, shows the variables and their expected signs.

Table 1. Variables and their expected signs.

Variable	Definition	Expected signs
$GDPPC_i$	GDP per capital of country i	+
$GDPPC_j$	GDP per capital of country j	+
POP_i	Population of country i	+/-
POP_j	Population of country j	+/-
DIS_{ij}	Distance between i and j	-
$Coml_{ij}$	= 1 if i and j have a common language	+
$Coly_{ij}$	=1 if i and j have colonial relations	+
$Border_{ij}$	=1 if i and j have a common border	+
$ACFTA_{ij}$	=1 if i and j both are members of ACFTA	+
$ACFTA_j$	=1 if country j is a member of ACFTA but country i isn't	-
$ACFTA_i$	=1 if country i is a member of ACFTA but country j isn't	-

Source: Authors' estimation.

3.2. Data

The sample for this study included ten countries. In the ACFTA agreement, there are five major seafood import and export nations: Vietnam, Thailand, the Philippines, China, and Singapore. There are five nations that are not part of the ACFTA agreement, including the US and the Netherlands, who are both important seafood producers, and France, the United Kingdom, and Germany, which are all large seafood importers. We employ STATA with a sample period of three years before and fifteen years after the signing of the ACFTA from 2003 to 2020 (Table 2).

Table 2. Countries included in this research.

Number	Export country	Import country
1	Vietnam	Vietnam
2	Thailand	Thailand
3	Philippines	Philippines
4	China	China
5	Singapore	Singapore
6	USA	France
7	Netherland	United Kingdom
8		Germany

However, because the logarithmic transformation of the dependent variable or independent variable may equal zero, these observations may be reduced. These observations will be cancelled in this situation. Furthermore, duplicate observations occur, and these observations are also cancelled.

This study is limited by not being able to handle estimates of zero. Eliminating zero value may generate more bias in estimation. To the best of the authors' knowledge, this is the only way to process the data and run the model.

Data on seafood export and import is sourced from trade map (<https://trademap.org>) and is expressed in thousands of USD. Data on gross domestic product per capita (GDPPC), measured in millions of USD, and

population data, measured in persons, are sourced from the World Bank Development Indicators database (<https://www.worldbank.org>). The Centre d'Etudes Prospectives et d'Informations Internationales (http://www.cepii.fr/cepii/en/bdd_modele/bdd.asp) has data on shared language, common border, and colonial links. The following two files provide information regarding distance, common language, common boundary, and colonies: "GE O C EPI IX LS and DIST C EPI I.XLS". While the file "GE O C EPI IX LS" contains information on the general language, shared boundaries, and colonial relations. The file DIST C EPI I.XLS contains information about the geographical distance between countries. World Trade Organization (WTO) RTAs (<http://wtocenter.vn>) provides a database regarding ACFTA. Distances are measured in kilometres and originate from (<https://www.freemaptools.com>) providing data about the distance travelled from the exporting country's capital to the importing country's capital, in particular.

4. Results and discussion

Estimates and explanations are provided in this section. To begin, panel data is analysed using the OLS model. Second, the REM is utilised to estimate OLS since it has some substantial deviations. Then, the findings from the OLS, FEM, and REM models are compared.

The data for this study was gathered from five ACFTA member countries and five non-member countries between 2003 and 2020 using the REM model.

Table 3 shows the estimated results of the gravity equation. OLS regression is used after screening for multicollinearity using pairwise correlation and variance inflation factor (VIF) tests. When using the White's general and Wooldridge tests, however, the OLS estimator contained heteroscedasticity and autocorrelation errors. To address these OLS issues, we re-estimate using FEM and REM regressions.

Table 3. The results of the OLS, FEM, and REM estimation.

Dependent variable $\ln X_{ij}$			
Variable	OLS-1	FEM-1	REM-1
$\ln GDPPC_i$	-0.161*** (-2.66)	0.298*** (5.16)	0.236*** (4.33)
$\ln GDPPC_j$	0.343*** (5.83)	0.359*** (8.33)	0.378*** (9.01)
$\ln POP_i$	0.563*** (10.97)	0.295*** (5.66)	0.338*** (6.78)
$\ln POP_j$	0.449*** (6.13)	0.253*** (4.71)	0.258*** (4.85)
$\ln DIS_{ij}$	-0.345* (-1.81)	8.154 (1.27)	-0.680* (-1.82)
Coml	-0.606*** (-3.03)	.	-0.954** (-2.18)
Border	1.193*** (3.92)	.	1.707 (1.36)
Coly	0.377 (1.59)	.	0.642 (0.68)
$ACFTA_{ij}$	0.883*** (3.38)	0.681*** (4.69)	0.704*** (4.86)
$ACFTA_i$	0.885*** (3.65)	0.432*** (2.87)	0.508*** (3.46)
$ACFTA_j$	0.755*** (2.74)	0.834*** (4.65)	0.796*** (4.38)
_Cons	-7.790*** (-3.58)	-76.93 (-1.40)	-1.274 (-0.38)

Note: *, ** and *** denote 10, 5, and 1% levels of significance, respectively. Source: Authors' estimation.

Most of the variables are significant, with the exception of two: coly and border. Variables $GDPPC_i$, $GDPPC_j$, POP_i , POP_j , $coml$, $ACFTA_{ij}$, $ACFTA_i$, and $ACFTA_j$ have significant effects, but DIS_{ij} has negative impacts. Because the OLS estimator has heteroscedasticity and autocorrelation issues, we interpret the findings using REM regressions.

To interpret GLS findings, S. Lin, et al. (2010) [7] found that trade creation for imports (exports) occurs when $\gamma m > 0$ and $\lambda m > 0$ or $\gamma m > 0$ and $\omega m > 0$. When $\gamma m > 0$ and $\lambda m + \omega m < 0$ or $\gamma m > 0$ with $\lambda m < 0$ and $\omega m < 0$, trade diversion occurs.

From the results of the REM model, it can be seen that $\gamma m = 0.704 > 0$; $\lambda m = 0.508 > 0$; and $\omega m = 0.796 > 0$

means trade creation, specifically, trade creation between ASEAN and China.

During the data collection process, we noticed that the data tends to increase gradually over the years, but suddenly decreases in 2020. One of the main reasons for this decrease is the COVID-19 pandemic. Therefore, we decided to run the model again without 2020 data to see whether the COVID-19 pandemic affected the creation and diversion of trade.

Looking at Table 4 below, we can see that the same result occurs when the model is run without the 2020 COVID-19 pandemic period.

Table 4. The results of the OLS, FEM, and REM estimation without 2020 data.

Dependent variable $\ln X_{ij}$			
Variable	OLS-2	FEM-2	REM-2
$\ln GDPPC_i$	-0.186*** (-2.95)	0.329*** (5.42)	0.260*** (4.55)
$\ln GDPPC_j$	0.325*** (5.24)	0.385*** (8.28)	0.407*** (8.99)
$\ln POP_i$	0.544*** (9.89)	0.297*** (5.19)	0.346*** (6.34)
$\ln POP_j$	0.420*** (5.23)	0.245*** (4.14)	0.241*** (4.28)
$\ln DIS_{ij}$	-0.308 (-1.56)	4.329 (0.50)	-0.750** (-1.97)
Coml	-0.550*** (-2.62)	.	-0.867* (-1.67)
Border	1.187*** (3.74)	.	1.733 (1.35)
Coly	0.348 (1.40)	.	0.627 (0.65)
$ACFTA_{ij}$	0.917*** (3.44)	0.626*** (4.34)	0.654*** (4.53)
$ACFTA_i$	0.947*** (3.79)	0.419*** (2.79)	0.498*** (3.40)
$ACFTA_j$	0.786*** (2.77)	0.797*** (4.48)	0.734*** (4.21)
_Cons	-6.878*** (-2.96)	-44.38 (-0.59)	-1.157 (-0.33)

Note: *, ** and *** denote 10%, 5% and 1% levels of significance, respectively. Source: Authors' estimation.

Table 4 shows that model estimation excluding 2020 data does not significantly change the estimated results. The coefficients of the variables in Tables 3 and 4 have the same sign and almost equivalent magnitude ratios. This further confirms the sustainability of the research results. In all cases, the main variable to be studied in this paper - ACFTA's trade creation and trade diversion estimators-also gives similar results to previous estimates. Thus, it can be concluded that the estimated results of the gravity model in this study are robust.

Evaluating the COVID-19 impact by re-estimating the model without 2020 data is not a persuasive strategy because a 1-year period is too short to assess the actual impact of the pandemic on the potential trade of countries. But at least we can see and evaluate the short-term impact of the pandemic.

According to empirical findings, the GDPPC of the exporting country has a favourable impact on trade flows. This might imply that wealthy nations, with the resources to spend more on manufacturing technologies, can produce more valuable goods. As a reality, estimating a country's demands or resources is challenging due to the population issue. The rate of migration and labour export grows every day, resulting in a shift in labour resources from densely populated to sparsely populated nations causing population figures to misrepresent the true source of a country's labour. As a result, trade flows are influenced by the amount of income or population. Distance is a negative representation of transportation expenses. Transportation expenses are cited as a hindrance to export and import. However, distance is not a significant issue. Logistics operations have improved in recent years. Logistics expenses become more effective and inexpensive when logistics operators understand how to employ and integrate multimodal transport and consolidation. Furthermore, we must consider the fact that the ACFTA member nations are quite near physically thereby reducing geographical obstacles.

Next, trade flows exhibit negligible coefficients for the border and colony relations variables. The shared language elements have a favourable impact on trade. However, we believe in the context of globalization that linguistic differences are not a significant obstacle to trade because English is so widely spoken. The current educational level has substantially improved. There are many formal language training programs available now, and investments in education and specific languages have expanded allowing a greater number of people to learn a range of languages.

So, ACFTA has trade creation impacts due to differences between the general tariff rate and the preferential tariff rate for ASEAN and Chinese seafood, the close distance between commercial partners, and converting C/O of goods to export. Analysis using the gravity model shows a positive impact on Vietnam's seafood trade flow when joining ACFTA.

5. Conclusions

The ACFTA has a positive impact on trade flows. The correct policy consequence of this study is that ACFTA member nations should aim to employ tax incentives to promote trade flows between them, particularly in the seafood industry. Member nations' governments should take appropriate steps to boost trade volume with others. Furthermore, maintaining a high level of trade with existing partner countries is essential.

Based on the findings of this study's estimations, some conclusions may be formed. ACFTA membership has an impact on member nations' trade with a notably beneficial impact on the seafood industry. This shows that implementing ACFTA might result in increased intra-regional seafood trade among ACFTA countries, resulting in trade creation.

The use of favourable tariffs amongst ACFTA members has resulted in an increase in intra-regional trade. Furthermore, this study's findings suggest that trade development as a result of ACFTA adoption might present a considerable potential for reaching China's seafood market. The participation of Vietnam in ACFTA has a favourable influence on the seafood industry's exports. As a result, creating long-term advantages,

improving competitiveness, and continuing and strengthening this collaboration in the aim of generating additional benefits are all important. Vietnamese firms may deliver items with comparative advantages in both quality and price to compete with other countries in the area by enhancing product quality, packing, conserving goods, and making use of logistical combinations.

As previously mentioned, one of the causes for the aforementioned trade formation is the conversion of product origin to obtain tax benefits. Because of the increased trade flows between countries, this instance will produce a misconception of trade creation. The following is an example of goods origin conversion: seafood items and, notably, bananas from Laos that are shipped straight to China would face higher taxes than bananas from Vietnam. As a result, price padding occurs, raising the price of bananas in Laos. As a result, dealers frequently import bananas from Laos into Vietnam using C/O form D to benefit from the Common Effective Preferential Tariff (CEPT) agreement's 0% tax benefits. The ACFTA also has a positive impact on trade flows. The study's accurate policy conclusion is that ACFTA member countries should use tax incentives to encourage trade between them, notably in the seafood industry. Governments of member countries should take necessary actions to increase trade volume with others. Maintaining a high level of trade with current partner countries is also critical.

One of this study's flaws is that it ignores how changes in exchange rates affect cross-border trade flows. Hopefully, this material remains useful as a reference, and future research will be able to fill in the gaps in this study.

CRediT author statement

Thi Dieu Linh Huynh: Conceptualisation, Editing and Reviewing; Thi Kim Oanh Hoang: Writing and Editing.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] H.S. Piquet (1950), *"The Customs Union Issue. By Jacob Viner. (New York: Carnegie Endowment for International Peace. 1950. Pp. viii, 221. \$2.50.)"*, *American Political Science Review*, **44(4)**, DOI: 10.1017/S0003055400060755.
- [2] L. Kendall, J. Gaisford (2007), "Trade creation and trade diversion: Analyzing the impact of regional trade agreements", *Handbook on International Trade Policy*, **11**, Edward Elgar Publishing.
- [3] A.O. Krueger (1999), "Trade creation and trade diversion under NAFTA", *National Bureau of Economic Research Working Paper*, DOI: 10.3386/w7429.
- [4] F. Natale, A. Borrello, A. Motova (2015), "Analysis of the determinants of international seafood trade using a gravity model", *Marine Policy*, **60**, pp.98-106, DOI: 10.1016/j.marpol.2015.05.016.
- [5] B. Yang, J.L. Anderson, F. Asche (2020), "Determinants of China's seafood trade patterns", *Marine Resource Economics*, **35(2)**, pp.97-112, DOI: 10.1086/708617.
- [6] B.H. Baltagi, P. Egger, M. Pfaffermayr (2007), "Estimating models of complex FDI: Are there thirdcountry effects?", *Journal of Econometrics*, **140(1)**, pp.260-281, DOI: 10.1016/j.jeconom.2006.09.009.
- [7] S. Lin, M. Reed (2010), "Impact of free trade agreements on agricultural trade creation and trade diversion", *American Journal of Agricultural Economics*, **92(5)**, pp.1351-1363, DOI: 10.1093/ajae/aaq076.
- [8] A. Muhammad, A. Rashid (2016), "Trade creation and diversion effects of the European Union", *Pakistan Journal of Applied Economics*, **26(SI)**, pp.1-31.
- [9] D. Trefler (1993), "Trade liberalization and the theory of endogenous protection: An econometric study of U.S. import policy", *Journal of Political Economy*, **101(1)**, pp.138-160, DOI: 10.1086/261869.
- [10] J.W. Lee, P. Swagel (1997), "Trade barriers and trade flows across countries and industries", *Review of Economics and Statistics*, **79(3)**, pp.372-382, DOI: 10.1162/003465300556968.
- [11] M.J. Burger, F. Oort, G.J. Linders (2009), "On the specification of the gravity model of trade: Zeros, excess zeros and zero-inflated estimation", *Spatial Economic Analysis*, **4(2)**, pp.167-190, DOI: 10.1080/17421770902834327.
- [12] A. Deardorff (1998), "Determinants of bilateral trade: Does gravity work in a classical world?", *The Regionalization of The World Economy*, <https://www.nber.org/system/files/chapters/c7818/c7818.pdf>, accessed 10 January 2022.

Factors affecting phubbing of students in the context of COVID-19

Anh Duc Do*, Thi Diu Nguyen

National Economics University, 207 Giai Phong Street, Dong Tam Ward, Hai Ba Trung District, Hanoi, Vietnam

Received 15 March 2022; revised 2 June 2022; accepted 13 June 2022

Abstract:

This study proposes a structural model of the relationships among fear of COVID-19 (FOC), fear of missing out (FOMO), and phubbing by two factors, communication disturbance (CD) and phone obsession (FO), to explore how these factors affect each other. University students in Vietnam were randomly selected to participate in the study's questionnaire. In this research, exploratory factor analysis (EFA) was performed to test the validity of the constructs together with analysis of moment structure (AMOS). Confirmatory factor analysis (CFA) was used to test the significance of the proposed hypothesis model. Results of the relationships among FOC, FOMO, CD, and FO were revealed. Specifically, FOC and FOMO were found to have a positive impact on phubbing by two factors: CD and FO. Besides, FOC was found to be positively related to FOMO. The research reveals that FOC has the most impact on phubbing, followed by FOMO. From the research results, the study proposes some solutions to reduce phubbing for students and recommendations for their families.

Keywords: fear of COVID-19, fear of missing out, phubbing.

Classification number: 4.1

1. Introduction

In recent years, people have witnessed a great innovation of information technology and means of communication [1] with smartphones becoming indispensable in daily life [2]. Admittedly, smartphones have a lot of benefits. However, they can also cause users physical or mental harm [3]. A new term, “phubbing” has been introduced and it is defined as a behaviour in which people are so concentrated on their phone that they ignore other people in communicative situations [4]. Thus, phubbing results in several detrimental effects and there have been studies around the world on reasons for these activities. For instance, phubbing might originate from phone addiction [5] or instability in people's character [6].

According to research conducted by E. Karadağ, et al. (2015) [7] found that smartphone addiction impacts phubbing. Similarly, from a technological and psychological point of view, S. Chatterjee's research showed that smartphone addiction is a major factor affecting phubbing [8]. J. Fang, et al. (2020) [9] indicated that social media plays a mediating role in the relationship between the FOMO and phubbing in students. In context of the COVID-19 pandemic, there have been studies showing the relationship between the FOC and mobile phone addiction - one of the factors that causes phubbing. A.R. Kayis, et al. (2021) [10] investigated the relationship between COVID-19 fear and mental health by examining the mediating role of loneliness and smartphone addiction. The

*Corresponding author: Email: ducda@neu.edu.vn

results showed that FOC can affect mental health through loneliness and smartphone addiction, respectively. Based on the findings of the study, it can be seen that higher fears of COVID-19 cause higher levels of smartphone addiction. This was further proven in the study by I.S. Albursan, et al. (2021) [11] with results showing that anxiety about COVID-19 can lead to smartphone addiction with all its negative psychological and physical effects. Despite these studies, there is almost no research in Vietnam on the underlying causes of phubbing, and awareness of these problems in the country is low. Therefore, this study aims to measure the factors affecting phubbing in undergraduate students and provide several solutions to improve these situations. In addition, considering the FOC, this research becomes more relevant than those before in the COVID-19 context. With the two factors of CD and FO, this study clearly confirms a significant relationship between FOC, FOMO, and phubbing.

A quantitative method was used to meet the research goals of this study with ANOVA and t-test approaches applied to investigate the differences in phubbing between undergraduates groups according to gender, years of undergraduate education, and average phone usage time.

2. Literature review

Phubbing can be described as an individual looking at his or her mobile phone while conversing with others, handling the mobile phone, and/or exiting communication with other people. The term phubbing became known and widely used when it was included in an update of the famous Macquarie Dictionary in 2012. The update team combined the two words "phone" and "snubbing" to create "phubbing". According to J.A. Roberts, et al. (2016) [12], phubbing is defined

as a social behaviour related to smartphone use in which the user ignores his or her interlocutor to use their phones. In discussions, phubbing disrupts the sense of communication [13], leaves an impression of impoliteness and impatience, and creates poor quality conversation [14]. To date, several studies have been conducted on the factors that impact phubbing within a higher education institution. Some studies focused on the impact of smartphone addiction, SMS (message) addiction, social network addiction, internet addiction, and to some extent gaming addiction to phubbing. S. Davey, et al. (2018) [15] showed that internet addiction and smartphone addiction have an effect on phubbing. In addition to addictions, S. Davey, et al. (2018) [15] further investigated that FOMO and self-restraint also predict phubbing. The study by V. Chotpitayasunondh, et al. (2016) [5] revealed that internet addiction, FOMO, and self-control affected phubbing. Y. Al-Saggaf (2020) [16] examined the relationship between boredom, FOMO, and phubbing. According to this study, boredom also significantly predicts phubbing by mediating FOMO.

Limited studies have attempted phubbing in the context of the COVID-19 pandemic. The study of J. Zhao, et al. (2021) [17] has investigated the factors of peer phubbing on students in China. Research showed that the behaviour of phubbing is positively correlated with smartphone addiction. In other words, students who were phubbing were more likely to be addicted to smartphones. J. Zhao, et al. (2021) [17] explained that because schools were closed during the COVID-19 pandemic, interaction between students and friends becomes more important. A.R. Kayis, et al. (2021) [10] investigated the relationship between the FOC and mental health by examining the role of loneliness and smartphone addiction. The results showed that

FOC can affect mental health through loneliness and smartphone addiction, respectively. Based on the findings of the study, higher fears of COVID-19 caused higher levels of smartphone addiction. In another aspect, a 2019 study of the relationship between the phubbing, loneliness, self-esteem, and Facebook by A. Błachnio, et al. (2019) [18] examined phubbing by two factors: CD and FO. Research results showed a negative relationship between CD and life satisfaction. A.K. Butt, et al. (2021) [19] indicated that the FOMO predicted phubbing including CD and FO. Research by M.J. Blanca, et al. (2018) [20] also found that FOMO was positively associated with both factors of phubbing: CD and FO.

The FOC has a direct impact on smartphone addiction. Although smartphones have many positive benefits, smartphone use disorders are specifically associated with excessive social media use [21]. Cell phones help people find information related to COVID-19 and communicate with others while in quarantine [22]. Smartphones make life easier when used properly [23, 24], however, if you use in excess, smartphones can disrupt physical and mental health [25]. According to A.R. Kayis, et al. (2021) [10], one of the reasons that the FOC increased smartphone addiction and negatively affected lives is that almost all people had to spend time at home more often because of the pandemic. The research by C. Montag, et al. (2021) [26] observed positive associations between COVID-19 fear and smartphone addiction.

Smartphone addiction is also a determining factor in phubbing. According to some studies, phubbing is the sum total of all virtual addictions [7]. While phubbing can be limited if phone addiction is controlled [8], phubbing can be considered the norm [5]. Hence, this research proposes a model

with a new scale that examines phubbing by two factors: CD and FO. Hence, two hypotheses are proposed:

Hypothesis 1a (H1a): *There is a positive relationship between FOC and CD.*

Hypothesis 1b (H1b): *There is a positive relationship between FOC and FO.*

Social networks allow us to connect with social contacts both online and offline, and these connections are equally important. As a result, not being able to contact or keep up with people online can lead to feeling out of touch with reality [27]. The fear of being socially excluded plays an important role in experiencing FOMO [28]. The intense COVID-19 pandemic has completely changed academic and daily life in universities with fear of the spread of the pandemic forcing online teaching. Therefore, the study, work, and exchange of students in particular has moved to a digital platform, which also means that students feel it is even more necessary to maintain online communication as not to miss work or interact with friends.

V. Franchina, et al. (2018) [29] showed that the FOMO has an impact on phubbing. M.J. Blanca, et al. (2018) [20] researched phubbing with Spanish adults, and their study showed the relationship between FOMO and phubbing in that phubbing is divided into two elements and that FOMO was positively associated with both elements of phubbing. The research of A.K. Butt, et al. (2021) [19] on university students who abused their phones in Pakistan also came to the same conclusion as previous studies. In particular, FOMO has a relationship with phubbing, which includes CD and FO. FOMO has also been shown to have an indirect effect on ignoring others to use the phone through smartphone addiction in an earlier study [5]. FOMO has impacts on different objects and spaces, hence, this study hypothesizes as follows:

Hypothesis 2a (H2a): *FOMO is positively related to CD.*

Hypothesis 2b (H2b): *FOMO is positively related to FO.*

Studies have shown that the COVID-19 pandemic has posed serious threats to an individual's physical health and life such as increasing anxiety and stress [30]. Health anxiety is also one of the factors that cause FOC [31, 32]. Health anxiety refers to the tendency to misinterpret normal or benign physical symptoms and believe that a person has or is suffering from a serious illness in the absence of any actual illness [33]. Research by G. Mertens, et al. (2020) [31] has shown that health anxiety is associated with increased fear about the current COVID-19 pandemic. Particularly, in addition to concerns about their own health and safety, that of others, and related safety and prevention behaviours, respondents are also concerned about the impact of COVID-19 on the health care system, economy, society, job loss, and change in daily routine.

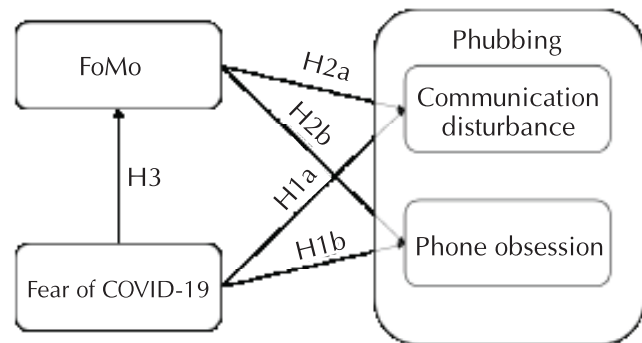
According to the studies of L. Lan, et al. (2020) [34] and B. Oosterhoff, et al. (2020) [35], during the COVID-19 pandemic, a higher level of health anxiety can increase the level of social distancing and time spent at home to prevent contact. COVID-19 precautions taken by national governments during the pandemic have also caused individuals to spend a lot of time alone because of self-isolation and limited social interaction. This promotion of social distancing, together with a decline in social activities and social capital during the pandemic, may increase the level of FOMO because of unmet social needs [36]. From the above study, this research hypothesizes the following:

Hypothesis 3 (H3): *There is a positive relationship between FOC and FOMO.*

The following Fig.1 summarises the theoretical framework for this research with the following factors: FOC, FOMO, and phubbing.

Fig. 1. Proposed research model.

3. Methodology



3.1. Research design

A questionnaire was formed based on the literature review and was modified based on the results of interviews with twenty undergraduate students. The questionnaire included 35 objects. Five-point Likert scales were used for evaluation with 1 = totally disagree, 2 = somewhat disagree, 3 = neither agree nor disagree (neutral), 4 = somewhat agree, and 5 = totally agree.

The data were gathered from November 2021 to February 2022. A non-probability sampling method was carried out in the formal survey stage, and a total of 403 responses were received from northern Vietnam. There were 95 biased observations that were eliminated leaving 308 observations valid for analysis in the future. All of observations were collected from an online survey via Google Forms. Table 1 shows the descriptive statistics of the participants' demographics.

Table 1. Descriptive statistics of participants' demographics.

Variables		Number	%
Gender	Female	221	71.7
	Male	87	28.3
Years of undergraduate education	Freshman	59	19.2
	Sophomore	67	21.7
	Junior	165	53.6
	Senior	17	5.5
Average phone usage time	<1 hour	4	1.3
	1-3 hours	47	15.3
	4-6 hours	133	43.2
	>6 hours	124	40.2

Source: Authors' estimation.

Table 1 shows the ratio of females and males as 71.7 and 28.3%, respectively. In terms of years of undergraduate education, the majority of undergraduates (53.6%) fell into the junior group, 21.7% fell into the sophomore group, 19.2% fall into the freshman group, and only 5.5% of the undergraduates were seniors. With targeted participants and research objectives, the majority of learners use phones on average 4 hours per day (83.4%), with 43.2 and 40.2% using the phone for 4-6 hours and over 6 hours, respectively. Meanwhile, the number of undergraduates using phones under 1 hour and from 1 to 3 hours a day only accounted for 1.3 and 15.3%, respectively.

Table 2. Summary of and t-test and ANOVA results.

Group	Dependent variables	Sig. of Levene's test	Sig. of t-test/Welch/F-test	N	Mean
Gender					
Female	FO	0.182	Sig. of t-test 0.009	221	2.353
Male				87	2.203
Years of undergraduate education					
Freshman	CD	0.325	Sig. of F-test 0.018	59	2.192
Sophomore				67	2.497
Junior				165	2.240
Senior				17	2.765
Average phone usage time					
<1 hour	FO	0.695	Sig. of F-test 0.000	4	2.250
1-3 hours				47	2.759
4-6 hours				133	3.125
>6 hours				124	3.368

Source: Authors' estimation.

3.2. Data analysis techniques

Firstly, t-test and ANOVA approaches were adopted to determine the differences in phubbing between undergraduates groups according to gender, years of undergraduate education, and average phone usage time. Then, SPSS were applied for determining sample features consisting of sex, age, sector, phone time, and communication time according to their demographic characteristics. Next, Cronbach's alpha reliability coefficient was used to analyse data reliability and scales such that we can remove variables with small correlation coefficients. Then, EFA was employed to eliminate variables with small parameters by checking factor loading and extractable variance. By using CFA, observed variables were tested for quality. Structural equation modelling (SEM) was employed to show relationships between latent variables and to check research hypotheses. By regression analysis, the research evaluates the impact of the following independent variables: FOC, FOMO to dependent variables: FO and CD.

4. Results

4.1. T-test and ANOVA

Table 2 presents a summary of t-test and ANOVA results to demonstrate the difference between undergraduates' phubbing among demographic variables.

The difference in phubbing of undergraduate groups is summarized hereafter. Regarding gender, there is a difference in phubbing between the sexes, shown by the sig. of the t-test being <0.05. More specifically, the mean value shows that female students are more likely to have a FO than male students.

Concerning years of undergraduate education, there is a difference in phubbing between these year groups as shown by the sig. of the F-test being <0.05. More specifically, the mean value of the year of undergraduate education shows that CD ability increases in the order of the following groups: freshman, junior, sophomore, and senior.

In terms of average phone usage time, there is a difference in phubbing among undergraduate groups with different times spent on the phone as shown by the sig. of the F-test being <0.05. More specifically, the mean values of the groups show that FO rate increases by the level of time spent on the phone.

4.2. Measurement assessment of the proposed research model

Firstly, to evaluate the reliability and validities of the measurements, the data were examined through EFA. Then, the statistics were included in the SEM model on Amos Graphic version 20. The SEM model contained four constructs, namely, FOC, FOMO, FO, and CD. To test measurements of this model, composite reliability and convergent and discriminant validity were carried out.

Table 3 shows several figures to measure convergent validity and reliability of the model and all of the quality standards were reached. In particular, factor loadings were greater than 0.7 [37], Cronbach's alpha values were above 0.7 [38] composite reliability values were higher than 0.7 [39], and average variance extracted (AVE) values were greater than 0.5 [40].

Discriminant validity is the degree to which items recognize constructs. Table 3 indicates that the square root of the average variance

extraction is greater than the inter-construct correlations [38]. Regarding the cross-loading standard, to assure the discriminant validity of the construct, the factor loadings of each item have to be greater than the rest of its cross-loadings [41]. Table 4 presents the square roots of AVEs, which are the diagonal elements in bold [42] and the off-diagonal elements are the bivariate correlations between two constructs. All the diagonal elements are larger than any other correlation coefficients, so discriminant validity criterion was achieved.

Table 3. Convergent validity and reliability.

Constructs	Items	Loadings	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
FOC	FOC1	0.743	0.864	0.866	0.565
	FOC2	0.862			
	FOC3	0.774			
	FOC5	0.800			
	FOC6	0.784			
FOMO	FOMO1	0.843	0.775	0.781	0.544
	FOMO2	0.834			
	FOMO3	0.774			
CD	CD1	0.792	0.777	0.777	0.539
	CD2	0.828			
	CD3	0.798			
FO	FO1	0.787	0.762	0.763	0.518
	FO2	0.749			
	FO3	0.845			

Source: Authors' estimation.

Table 4. Discriminant validity.

Scales	FOC	CD	FOMO	FO
FOC	0.751			
CD	0.422	0.738		
FOMO	0.413	0.369	0.735	
FO	0.422	0.629	0.352	0.720

Source: Authors' estimation.

In Table 5, the outcome of hypothesis testing by SEM and the fulfilment of this standard for all the subscales indicated the discriminant validity of the tested instrument. The values of sig. in all hypotheses are less than 0.05. Therefore, there is a linear correlation between independent variables and dependent variables.

Table 5. Hypotheses testing.

Relationship	Hypothesis	Std. Beta	Sig.	p values	Decision
FOC->CD	H1a	0.34	0.000	0.000	supported
FOC->FO	H1b	0.35	0.000	0.000	supported
FOMO->CD	H2a	0.25	0.000	0.001	supported
FOMO->FO	H2b	0.24	0.000	0.003	supported
FOC->FOMO	H3	0.41	0.000	0.000	supported

Source: Authors' estimation.

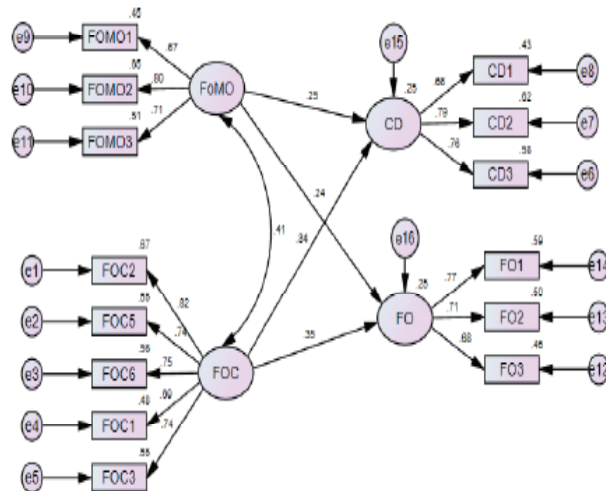


Fig. 2. Confirmatory factor analysis result.

4.3. Testing research hypotheses

Table 5 and Fig. 2 indicate the relationships between four variables in the model. In particular, phubbing presented by FO and CD shares a significant relationship with FOC and FOMO ($p < 0.05$). In addition, this result illustrates the correlation between 2 independent variables, which are FOC and FOMO. Therefore, all hypotheses

in the research model were fully supported. Among these hypotheses, the relationships between FOC and FOMO had the most effective correlation ($\beta = 0.41$, $p = 0.000$). The second and third strongest relationships were FOC having an impact on FO and CD, respectively, ($\beta = 0.35$, $p = 0.000$; $\beta = 0.34$, $p = 0.000$). FOMO was also a significant factor that affected FO and CD ($\beta = 0.24$, $p = 0.001$; $\beta = 0.25$, $p = 0.003$, respectively). The standardized regression equations are $Y(FO) = 0.35 FOC + 0.24 FOMO + \varepsilon$ and $Y(CD) = 0.34 FOC + 0.25 FOMO + \varepsilon'$.

For the hypothesized structural model, the RMSEA is 0.065, demonstrating a “moderate fit” because 0.065 is less than 0.08 [43]. All other fit indices were above the recommended threshold values (CFI=0.945>0.09, GFI=0.928>0.90; TLI=0.929>0.90) [42], illustrating that the tested model is a sound structural model. Table 5 and Fig. 2 above represent the hypothesis test results.

5. Discussion

Our analysis results have confirmed three of the proposed hypotheses in the theoretical framework regarding determinants of phubbing from the perspective of FOC and FOMO. Regarding Hypothesis 1, the result indicates that FOC is positively related to phubbing by both factors: CD and FO. This finding corroborates A.J. van Deursen's (2020) [22] finding that smartphones providing internet access can be useful equipment for obtaining information related to COVID-19 and communicating with others in quarantine. Besides, the increasing trend of smartphones will form the basis of phubbing [7].

Next, the obtained results demonstrate that FOMO had a significant influence on phubbing. This finding provides a comprehensive assessment of how FOMO affects phubbing. In fact, FOMO promotes an individual's phone and social media usage because it makes them feel secure that they

are not missing any events or opportunities [28]. In addition, individuals with higher levels of FOMO are more likely to abuse their phones under any circumstances to address their anxiety. While this helps the person keep up with the happenings online, at the same time it also directly affects their actual social interactions, leading them to phubbing. Our findings are also in agreement with the results of other studies in phubbing [20] in that the relationships of FOMO and phubbing have two factors: CD and FO, which are strongly consistent with the proposed hypotheses.

The last hypothesis of this study, which states that higher FOC corresponds to more FOMO, has been validated and supported. This is also in line with previous research. Indeed, the work of S. Casale, et al. (2020) [36] demonstrated that the promotion of social distancing along with the decline in social activities and social capital during the pandemic may increase the level of FOMO because of unmet social needs.

The t-test and ANOVA results indicate that there is a difference between the groups of students. More specifically, the FO is more prevalent in females than in males. The mean value of the groups shows that FO rate increases by the level of time spent on the phone. CD ability increases in the order of the following groups: freshman, junior, sophomore, and senior.

The finding of this research shares logic with the previous studies. However, provided with FOC, this research becomes more relevant than those studies before the COVID-19 context. The two factors of CD and FO make this study clearly confirm a significant relationship between FOC, FOMO, and phubbing.

6. Conclusions

In conclusion, this study provided a theoretical model to understand the relationships between FOC, FOMO, and phubbing. Using the SEM method, this study adds empirical support to the

literature by testing three hypotheses related to the FOC and FOMO on phubbing. The results of this study identified several advantages that are helpful for reducing phubbing in school. Furthermore, the results also suggest that decreasing the link between FOC and FOMO is highly recommended to reduce phubbing in students. Through the research results, this study proposes a number of recommendations for students and their families to reduce phubbing. It is recommended for students to engage in more outdoor activities to promote good mental health, reduce time spent on smartphones, and add balance to life. Besides, students should receive instruction and training on how to use the internet and smartphones in the correct way. In communication, students and anyone in general should put their phones down during conversation, which is more polite and does not disturb communication. Regarding families, firstly, family should guide their children on how to use the phone properly including usage time, the purpose of using the phone, etc. Secondly, the family should be role models for children by limiting phone use at home and confiding with children more.

This study has contributed to theoretical and practical implications, however, the model could be developed for further improvement in the future in regard to life satisfaction. Namely, a different construct could be introduced and tested as it may have a strong impact on promotional activities and expectations. In addition, future studies with larger samples could be conducted to allow for comparisons between behaviours by region. Besides, the survey sample collected is not equal in quantity between universities and is limited to the university in the capital of Vietnam. Finally, the study could be further expanded when considering these factors in the future.

CRediT author statement

Anh Duc Do: Conceptualisation, Methodology, Reviewing and Editing; Thi Diu Nguyen: Conceptualisation, Writing.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] E. Gummesson (2004), "From one-to-one to many-to-many marketing", *Service Excellence in Management: Interdisciplinary Contributions*, Proceedings from the QUIS 9 Symposium, Karlstad University Karlstad, Sweden, pp.16-25.
- [2] A. Oulasvirta, T. Rattenbury, L. Ma, et al. (2012), "Habits make smartphone use more pervasive", *Personal and Ubiquitous Computing*, **16**(1), pp.105-114, DOI: 10.1007/s00779-011-0412-2.
- [3] N.S. Baron, E.M. Campbell (2012), "Gender and mobile phones in cross-national context", *Language Sciences*, **34**(1), pp.13-27, DOI: 10.1016/j.langsci.2011.06.018.
- [4] A. Haigh (2015), "Stop phubbing", <https://www.stopphubbing.com>, accessed 11 November 2021.
- [5] V. Chotpitayasunondh, K.M. Douglas (2016), "How 'phubbing' becomes the norm: The antecedents and consequences of snubbing via smartphone", *Computers in Human Behavior*, **63**, pp.9-18, DOI: 10.1016/j.chb.2016.05.018.
- [6] O. Cikrikci, M.D. Griffiths, E. Erzen (2019), "Testing the mediating role of phubbing in the relationship between the big five personality traits and satisfaction with life", *International Journal of Mental Health and Addiction*, **20**, pp.44-56, DOI: 10.1007/s11469-019-00115-z.
- [7] E. Karadag, S.B. Tosuntas, E. Erzen, et al. (2015), "Determinants of phubbing, which is the sum of many virtual addictions: A structural equation model", *Journal of Behavioral Addictions*, **4**(2), pp.60-74, DOI: 10.1556/2006.4.2015.005.
- [8] S. Chatterjee (2020), "Antecedents of phubbing: From technological and psychological perspectives", *Journal of Systems and Information Technology*, **22**(2), pp.161-162, DOI: 10.1108/JST-05-2019-0089.
- [9] J. Fang, X. Wang, Z. Wen, et al. (2020), "Fear of missing out and problematic social media use as mediators between emotional support from social media and phubbing behaviour", *Addictive Behaviours*, **107**, pp.1-7, DOI: 10.1016/j.addbeh.2020.106430.
- [10] A.R. Kayis, B. Satıcı, M.E. Deniz, et al. (2021), "Fear of COVID-19, loneliness, smartphone addiction, and mental wellbeing among the Turkish general population: A serial mediation model", *Behavior and Information Technology*, **41**(11), pp.1-13, DOI: 10.1080/0144929X.2021.1933181.
- [11] I.S. Albursan, M.F.A. Qudah, H.I. Hammad, et al. (2021), "Anxiety about COVID-19 infection, and its relation to smartphone addiction and demographic variables in middle eastern countries", *International Journal of Environmental Research and Public Health*, **18**(21), pp.1-14, DOI: 10.3390/ijerph182111016.
- [12] J.A. Roberts, M.E. David (2016), "My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners", *Computers in Human Behaviour*, **54**, pp.134-141, DOI: 10.1016/j.chb.2015.07.058.
- [13] T. Kadylak, T. Makki, J. Francis, et al. (2018), "Disrupted copresence: Older adults' views on mobile phone use during face-to-face interactions", *Mobile Media and Communication*, **6**(3), pp.331-349, DOI: 10.1177/2050157918758129.
- [14] M.M.V. Abeele, M.L. Antheunis, A.P. Schouten (2016), "The effect of mobile messaging during a conversation on impression formation and interaction quality", *Computers in Human Behavior*, **62**, pp.562-569, DOI: 10.1016/j.chb.2016.04.005.
- [15] S. Davey, A. Davey, S.K. Raghav, et al. (2018), "Predictors and consequences of 'phubbing' among adolescents and youth in India: An impact evaluation study", *Journal of Family and Community Medicine*, **25**(1), pp.35-42, DOI: 10.4103/jfcm.JFCM_71_17.
- [16] Y. Al-Saggaf (2020), "Phubbing, fear of missing out and boredom", *Journal of Technology in Behavioral Science*, **6**, pp.1-6, DOI: 10.1007/s41347-020-00148-5.
- [17] J. Zhao, B. Ye, L. Yu (2021), "Peer phubbing and Chinese college students' smartphone addiction during COVID-19 pandemic: The mediating role of boredom proneness and the moderating role of refusal self-efficacy", *Psychology Research and Behavior Management*, **14**, pp.1725-1736, DOI: 10.2147/PRBM.S335407.
- [18] A. Blachnio, A. Przepiorka (2019), "Be aware! If you start using Facebook problematically you will feel lonely: Phubbing, loneliness, self-esteem, and Facebook intrusion. A cross-sectional study", *Social Science Computer Review*, **37**(2), pp.270-278, DOI: 10.1177/0894439318754490.
- [19] A.K. Butt, T. Arshad (2021), "The relationship between basic psychological needs and phubbing: Fear of missing out as the mediator", *PsyCh Journal*, **10**(6), pp.916-925, DOI: 10.1002/pchj.483.
- [20] M.J. Blanca, R. Bendayan (2018), "Spanish version of the phubbing scale: Internet addiction, Facebook intrusion, and fear of missing out as correlates", *Psicothema*, **30**(4), pp.449-454, DOI: 10.7334/psicothema2018.153.
- [21] D.J. Kuss, E. Kanjo, M.C. Rumsey, et al. (2018), "Problematic mobile phone use and addiction across generations: The roles of psychopathological symptoms and smartphone use", *Journal of Technology in Behavioral Science*, **3**(3), pp.141-149, DOI: 10.1007/s41347-017-0041-3.

- [22] A.J. van Deursen (2020), "Digital inequality during a pandemic: Quantitative study of differences in COVID-19-related internet uses and outcomes among the general population", *Journal of Medical Internet Research*, **22**(8), DOI: 10.2196/20073.
- [23] E. Fino, M. Mazzetti (2019), "Monitoring healthy and disturbed sleep through smartphone applications: A review of experimental evidence", *Sleep and Breathing*, **23**(1), pp.13-24, DOI: 10.1007/s11325-018-1661-3.
- [24] M.Y. Gavali, D.S. Khismatrao, Y.V. Gavali, et al. (2017), "Smartphone, the new learning aid amongst medical students", *Journal of Clinical and Diagnostic Research*, **11**(5), DOI: 10.7860/JCDR/2017/20948.9826.
- [25] J.Y. Kim, P.G. Choe, Y. Oh, et al. (2020), "The first case of 2019 novel coronavirus pneumonia imported into Korea from Wuhan, China: Implication for infection prevention and control measures", *Journal of Korean Medical Science*, **35**(5), pp.1-4, DOI: 10.3346/jkms.2020.35.e61.
- [26] C. Montag, E. Wegmann, R. Sariyska, et al. (2021), "How to overcome taxonomical problems in the study of Internet use disorders and what to do with "smartphone addiction?", *Journal of Behavioral Addictions*, **9**(4), pp.908-914, DOI: 10.1556/2006.8.2019.59.
- [27] R.B. Clayton, G. Leshner, A. Almond (2015), "The extended iSelf: The impact of iPhone separation on cognition, emotion, and physiology", *Journal of Computer-Mediated Communication*, **20**(2), pp.119-135, DOI: 10.1111/jcc4.12109.
- [28] J.P. Abel, C.L. Buff, S.A. Burr (2016), "Social media and the fear of missing out: Scale development and assessment", *Journal of Business and Economics Research*, **14**(1), pp.33-44, DOI: 10.19030/jber.v14i1.9554.
- [29] V. Franchina, M.V. Abeele, A.J. van Rooij, et al. (2018), "Fear of missing out as a predictor of problematic social media use and phubbing behaviour among Flemish adolescents", *International Journal of Environmental Research and Public Health*, **15**(10), pp.1-18, DOI: 10.3390/ijerph15102319.
- [30] W. Cao, Z. Fang, G. Hou, et al. (2020), "The psychological impact of the COVID-19 epidemic on college students in China", *Psychiatry Research*, **287**, pp.1-5, DOI: 10.1016/j.psychres.2020.112934.
- [31] G. Mertens, L. Gerritsen, S. Duijndam, et al. (2020), "Fear of the coronavirus (COVID-19): Predictors in an online study conducted in March 2020", *Journal of Anxiety Disorders*, **74**, pp.1-33, DOI: 10.1016/j.janxdis.2020.102258.
- [32] S.M. Jungmann, M. Witthöft (2020), "Health anxiety, cyberchondria, and coping in the current COVID-19 pandemic: Which factors are related to coronavirus anxiety?", *Journal of Anxiety Disorders*, **73**, pp.1-9, DOI: 10.1016/j.janxdis.2020.102239.
- [33] S. Taylor, M.J. Zvolensky, B.J. Cox, et al. (2007), "Robust dimensions of anxiety sensitivity: Development and initial validation of the Anxiety Sensitivity Index-3", *Psychological Assessment*, **19**(2), pp.176-188, DOI: 10.1037/1040-3590.19.2.176.
- [34] L. Yan, H.T. Zhang, J. Goncalves, et al. (2020), "An interpretable mortality prediction model for COVID-19 patients", *Nature Machine Intelligence*, **2**(5), pp.283-288, DOI: 10.1038/s42256-020-0180-7.
- [35] B. Oosterhoff, C.A. Palmer, J. Wilson, et al. (2020), "Adolescents' motivations to engage in social distancing during the COVID-19 pandemic: Associations with mental and social health", *Journal of Adolescent Health*, **67**(2), pp.179-185, DOI: 10.1016/j.jadohealth.2020.05.004.
- [36] S. Casale, G.L. Flett (2020), "Interpersonally based fears during the COVID-19 pandemic: Reflections on the fear of missing out and the fear of not mattering constructs", *Clinical Neuropsychiatry*, **17**(2), pp.88-93, DOI: 10.36131/CN20200211.
- [37] J.F. Hair, R.E. Anderson, B.J. Babin, et al. (2010), *Multivariate Data Analysis: A Global Perspective*, **7**, Pearson Education, 800pp.
- [38] C. Fornell, D.F. Larcker (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, **18**(1), pp.39-50, DOI: 10.1177/002224378101800104.
- [39] J. Hulland (1999), "Use of partial least squares (PLS) in strategic management research: A review of four recent studies", *Strategic Management Journal*, **20**(2), pp.195-204, DOI: 10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7.
- [40] J.F. Hair, M. Sarstedt, L.M. Matthews, et al. (2016), "Identifying and treating unobserved heterogeneity with FIMIX-PLS: Part I - method", *European Business Review*, **28**(1), pp.63-76, DOI: 10.1108/EBR-09-2015-0094.
- [41] J.F. Hair, G.T.M. Hult, C.M. Ringle, et al. (2021), *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)*, SAGE Publications, 384pp.
- [42] A. Diamantopoulos, N. Kakkos (2007), "Managerial assessments of export performance: Conceptual framework and empirical illustration", *Journal of International Marketing*, **15**(3), pp.1-31, DOI: 10.1509/jimk.15.3.1.
- [43] L.T. Hu, P.M. Bentler (1999), "Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", *Structural Equation Modelling: A Multidisciplinary Journal*, **6**(1), pp.1-55, DOI: 10.1080/10705519909540118.

Perceptions of farmers on risk management strategies in Son La province, Vietnam

Van Bac Ho*

Thai Nguyen University of Agriculture and Forestry, Quyet Thang Commune, Thai Nguyen City, Thai Nguyen Province, Vietnam

Received 25 May 2022; revised 2 August 2022; accepted 12 August 2022

Abstract:

Commercial fruit farmers in Son La province of Vietnam face substantial risks and they often struggle to implement appropriate risk management responses. A field survey was conducted to achieve a comprehensive view of the risk perception and risk management practices of fruit farmers in Son La province. Our findings indicated that there were 14 sources of risks, which were grouped into production, market, human, and finance categories. Among the risk sources, production was the most serious source of risk, which included seedling quality, unfavourable weather conditions, and disease risk as single risks. Risk management strategies were also categorised, namely, diversification, product quality, human resource, and consultancy. Within these categories, quality regulation, disease prevention, and product preservation were perceived as the most important risk management strategies. In addition, a number of socio-economic variables had significant effects on farmers' perceptions of sources of risk and management responses. Technical support and or information sharing via extension services, and production conversion toward VietGAP would be useful for fruit farmers to manage various risks.

Keywords: fruit farms, risk management, risk perception, Son La province, Vietnam.

Classification number: 4.1

1. Introduction

In general, agricultural production is a risky activity because it is linked to biological processes and natural surroundings in which farming operates [1]. These relationships easily affect outputs of agricultural production. Moreover, risk sources farmers face are changing due to various factors such as increasing market liberalisation and industrialisation of the sector [2]. Risks are closely linked to vulnerability of production output. Therefore, it also affects farm households by keeping them in poverty or falling into poverty, especially in developing countries [3]. Under risks of failure, farmers must consider any activities or investments that have higher expected outcomes [4]. In agriculture,

farmers are confronted with a variety of risks and uncertainty that force them to make decisions in a risky production environment. These risks are mainly due to climate variability and change, the complexity of biological processes, the seasonality of production, and the geographical separation of production area and product consumers [5]. Increased frequency of natural disasters, variability of yield and prices of farm products, imperfect markets of input and outputs, and absence of financial assets along with limited extent and design of risk mitigation tools are also risk sources affecting agricultural production [6]. Classification of risk sources in agriculture is very meaningful to cope with these risks. There are many ways of classifying the sources of risks.

*Email: hovanbac@tuaf.edu.vn

According to M.D. Boehlje, et al. (1994) [7], these risks are categorized into production management, marketing, and finance. They could also be categorized into production risk, price risk, disaster risk, and technological risk [8]. Risks of agricultural production have been grouped into production risk, marketing risk, financial risk, legal and environmental risk, human resource risk [9].

Horticultural production makes up an important proportion in agriculture of Vietnam, especially in the fruit sector. In 2018, the total export value of horticultural products reached 3.8 billion USD - an increase of 47.3% compared with those in 2017. Overall, fruit export value accounts for more than 80% of total export value of vegetable and fruit products. In Vietnam, the Son La province has been considered as a central area of commercial fruit production in the north region. The farming system in Son La province is highly intensive and diversified with a majority of the farmlands growing a variety of fruit trees such as mango, longan, lichi, and climbing lemon, etc. Mango production in the Son La province accounts for 58% of total mango production in the Northern Vietnam. Total longan planting area of the province also is twice the size of that in Hung Yen province - a traditional and famous longan planting area in the northern region [10]. Although there are several risk sources in commercial fruit production, risk perceptions that affect farmers' choices and decisions are still unknown. A comprehensive understanding of farmers' risk perception is essential in designing suitable risk management strategies that remove or reduce negative effects of factors creating risks in agricultural sector. This also means that good risk management strategies will offer farmers maximum benefits. The various risk management strategies have different effects on farming operation, but none of those strategies can deal with all types of risk [11]. Therefore, sufficient

understanding on farmers' risk perception and their response is an important demand in creating policies to improve not only agricultural production but also a farmer's ability to manage risk.

2. Literature review

Agricultural production is inherently risky. Outputs of farms heavily depend on weather and biological process over which farmers have little chance to control. Moreover, competition in domestic and international markets exposes farmers to unanticipated price fluctuations [12]. However, negative impacts of risk can be minimized if farmers identify them early and have good preparation with suitable measurements.

A number of studies on farmer's perceptions of agricultural risks and risk management strategies were found in the existing literature. According to a global review article by T.T. Duong, et al. (2019) [13], about 200 published articles were on the topic of risk perception and management in agriculture. Among these studies, more than half of the studies aimed at agricultural risks in the crop sector, while studies in the animal sector and mixed production sectors (both crop and animal) made up 27 and 19%, respectively. Surprisingly, of about 200 studies, there was no study category in the horticultural sector - an important production sector to the world.

Although there exists a multitude of studies on risk perception and management, only few prior studies explore risk management of horticultural farms [14-17]. Three out of four studies were targeted toward risk management of fruit production, but all those studies were conducted in developed countries. This is in contrast with the global review of studies on farmer's perceptions of agricultural risks and their management response [13], which

stated they were predominantly conducted in Asia (29%), followed by America (25%) and Europe (22%). Few studies also indicated that geographic location, farm type, institutional structures, and other factors affecting the farming operation of farmers influenced their risk perceptions and management responses [2, 18].

There are substantial differences between horticultural (e.g., fruit and vegetables) and agricultural production (e.g., crop, dairy). The difference comes from less political support and less impact from direct subsidies, lower equity ratio, and different product marketing channels. This would result in existing agricultural risk perceptions and management responses that are often not applied to horticultural production [17]. Moreover, fruit plants are often perennial crops. This implies that the decision to plant perennial trees is comparable to a long-term investment decision. Thus, flexibility is more limited compared with vegetable and cash crop productions. Despite the importance of risk perceptions and management decisions, similar studies in a Vietnamese context are not available. Therefore, this study is an attempt to provide empirical insight into: (1) fruit farmers' risk perceptions and risk management and (2) characteristics of a fruit farm and/or farmer that relate to these farmers' perceptions.

3. Analytical framework

Economists have traditionally used an expected utility theory to serve both normative and descriptive purposes in studies of risky choice [19]. However, many studies criticized that the expected utility theory fails to describe observed behaviour [20, 21]. To describe decision-making behaviour, understanding the individual's frame of reference for evaluating choices is very necessary because the basis for his or her choices and a decision maker's perceptual

view is affected by the person's reality [22, 23]. Thus, in the study, a descriptive approach was used to characterize how fruit farmers perceive and manage sources of risk. Moreover, farm and farmer characteristics were also expected to have influences on their risk perceptions and management responses [24, 25]. The relationship between farm and farmer characteristics, risk perceptions, and management response could be illustrated by the model of the decision-making environment for the firm [26, 27]. Fig. 1 summarizes the groups of variables used in the study. Specifically, $P \rightarrow E/P$ describes how farm and individual characteristics (P) influence farmers' perceptions of risk types (E/P). The relationship $P \rightarrow E/P \rightarrow B$ reflects how the farm/individual characteristics impact farmers' risk management strategies (B).

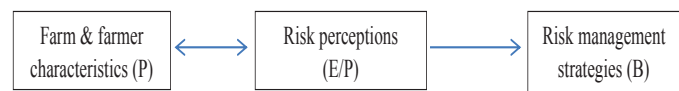


Fig. 1. Adapted from the model of a firm's decision-making environment [26].

4. Materials and methods

4.1. Study area, sampling, and data collection

Son La is located in the northwest region of Vietnam and has an advantage of commercial agriculture with more than 147,272 ha of which fruit production land including longan, mango, and citrus trees accounts for the most proportion. Fruit tree farms have been continuously increasing due to provincial agriculture policy working to transition low-value crops into high-value crops [10].

The present study was conducted in Son La province from July to October 2020. Both primary and secondary data were used in the study. Secondary data was used to select the study site for primary data collection, which was information gathered using a multi-stage sampling technique. At the first stage, three communes of each district (Mai Son and Van Ho districts) were chosen. In the next stage, all fruit farmers from those communes

were numbered on a list. Then, 30 fruit farmers from each commune were randomly selected for data gathering through direct interviews via a semi-structured questionnaire set. The questionnaire consists of three main parts including: (1) basic information of household and farm characteristics, (2) farmers' perception of risk sources, and (3) their risk management responses. The 5-level Likert scale is widely applied to measure farmers' risk perception and risk management [28]. After deleting invalid and missing observations, the remaining data from the 172 fruit farmers were used to analyse the study results.

Determination of sample size plays an important in any study and it heavily rely on field of study, applied econometric model, and analysis technique and so on. In the study, data was analysed by using principal component analysis (PCA) technique and multiple linear regressions, further described in Subsection 4.2. For PCA, there are a few explicit guidelines for determining suitable sample size. E. Guadagnoli, et al. (1988) [29] reviewed several studies that concluded absolute minimum sample sizes ranging from an N of 50 [30] to 400 [31]. In general, a larger sample size is always better [32].

4.2. Statistical analysis

Risk perceptions and management of fruit farmers were first studied using descriptive analyses. The PCA technique was employed to summarize the information because the number of variables was quite large. The PCA technique is popularly used to analyse data in which its relationships could be described by inter-correlated quantitative dependent variables [33]. The objective of the technique is that the most important information is extracted from the dataset, called components. The criterion of eigenvalue >1 was used as a guideline to determine how many components to extract. In this study, there were 14 risk sources and 10 risk management strategies that were perceived and managed by farmers, respectively. The PCA has a strong advantage of reducing the dimension of the variables without losing much information.

Standardised factor scores for each farmer and factor were saved for multivariate analyses in the next step. Multiple linear regressions are popular models to explore associations between farm and farmer characteristics and risk management strategies [24, 28], as outlined in Fig. 1. The linear regression equation is given as:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_{ji} X_{ji} + \varepsilon_i$$

where Y_i are scores obtained from i^{th} farmer's risk management ($i=1, 2, \dots, n$). These scores are automatically generated by predict syntax after PCA procedure; X is exploratory variables to be included in the analysis ($j=1, 2, \dots, n$) as described in Table 1. β_0 is constant; β_{ji} is estimated coefficients in the regression models; and ε_i is random error.

The correlation matrix indicated that its coefficients between all pairs of independent variables were low. The variance inflation factor (VIF) equals 1.19, indicating no multicollinearity problems. The value (d-statistic) of Durbin-Watson test were very close to 2, implying no autocorrelation. No heteroskedasticity was detected using the Breusch-Pagan test.

4.3. Description of variables used in the regression model

The dependent variables were farmers' risk management responses, based on which four components were extracted from PCA analyses. Exploratory variables in the regression were chosen on basis of economic theories, references to findings of previous studies, and actual statuses of agricultural production in the study area. Many studies indicated that farmers' risk perceptions and risk management strategies were affected by characteristics of household and farming condition, including age, ethnic minority, educated level, main occupation, agricultural labours, planting area, accessing to extension service, and credit access [3, 24, 25]. Definitions of the variables are shown in Appendix 1, while their descriptive statistics are presented in Table 1.

Table 1. Descriptive statistics of variables used in the regression.

Exploratory variables	Unit	Mean	Std.err	Min	Max
Age	years	44.5	11.2	22	75
Ethnicity	dummy	0.7	0.5	0	1
Education	years	9.2	2.8	1	12
Occupation	dummy	0.8	0.4	0	1
Agr-labor	person	2.3	0.8	0	5
VietGAP	dummy	0.6	0.5	0	1
Farmland	ha	0.83	0.9	0.02	6
Extension	dummy	0.67	0.5	0	1
Credit	dummy	0.6	0.5	0	1

Source: Estimation from author's surveyed data, 2020.

Descriptive statistics of all variables in Table 1 indicated that the fruit planting area of households ranged from 0.02 to 6.0 ha. Average fruit land was quite small with about 0.83 ha per household. Average age of the head of household was 44.5 years old, and 70.0% of households belonged to the Kinh ethnic group. Agricultural production is the main livelihood source of all the families accounting for 80.0% total surveyed respondents. The heads of household had a formal education level of secondary school. In the study area, farmers producing fruit under Vietnamese Good Agriculture Practices (VietGAP) accounted for 60.0% in 2020. Accessed level of extension and credit services were 67.0 and 60.0% of interviewed respondents, respectively.

5. Results and discussion

5.1. Perception of risk sources

Fruit farmers' perception on main sources of risk is presented in Table 2. The second column of the table indicates the ranking of risk sources based on the average scores in the third column. Average scores of farmers' risk sources vary from 4.18 to 3.09, where the higher values implied more risk than lower ones. Next columns include the four main components, which were selected on the basis of loadings scores greater than 0.3 and their close relationship among risk sources.

Table 2. Mean score and varimax rotated factor loadings for sources of risk.

Sources of risk	Rank	Mean	Most important components			
			Production	Market	Human	Finance
Seedling quality	1	4.18	0.4085	0.1380	0.0287	0.2223
Pest and disease	3	3.86	0.3821	-0.1243	0.2283	0.1709
Unfavourable weather	2	4.05	0.5324	-0.0355	0.1616	0.1650
Product preservation	8	3.03	-0.3931	0.2120	0.2839	0.1610
Unstable yield	4	3.22	-0.3146	-0.2393	0.1505	0.2900
Selling price instability	6	3.11	-0.0490	-0.3819	0.2020	0.2955
Preference change	10	2.96	0.2141	0.5784	0.3265	0.0755
Quality regulation	14	2.55	-0.1870	0.3640	0.0661	0.2219
VietGAP criteria	11	2.95	0.0045	-0.4256	0.2351	0.2843
Capital shortage	12	2.89	0.0454	0.0762	-0.1664	0.3734
Interest rate of credit	13	2.89	-0.2421	0.2205	0.0485	0.3577
Indebted credit	9	3.02	0.0360	-0.0914	-0.0390	0.3226
Health of household head	5	3.16	0.0511	0.0717	-0.5462	0.2217
Lack of labour	7	3.09	0.0493	-0.0046	-0.5298	0.2932

Note: Extraction method: Principal Component Analysis using Varimax rotation. Loadings of ≥ 0.31 are in bold. Adequacy measurement: Kaiser-Mayer-Olkin criteria (KMO)=0.71
Source: Estimation from author's surveyed data, 2020.

According to the study, there were 14 sources of risk perceived by fruit farmers that also cover all aspects of production process in the area. In general, output of fruit production would be affected by seedling quality, weather conditions, pests and disease, and yield, which are sources of perceived risk with the highest rankings. Seedling quality obviously has a strong impact on yield and fruit quality. Good seedling quality will be a very advantageous base for plant care and creates potential for good output in the coming years. The seedling quality of perennial trees becomes more

important than annual crops because perennial trees have a longer basic construction phase without any income earnings in this stage. Interviews indicated that farmers bought seedlings from different sources based on their experience rather than choosing certified seedling providers. Thus, it is easy to understand that farmers are very worried about seedling quality. In addition to seedling quality, weather conditions also have very strong impacts on agricultural production because of the nature of agriculture. Climate variability or unfavourable weather will have negative impacts on output and influence the development of pests and diseases. In turn, pests and diseases will damage crops and reduce agricultural yield. The next source of risk that may have an impact on production output is the health of the head of household. The head of household plays an important role in decision making for all production processes. The next five sources of risk that may have a significant impact on output of fruit production based on the farmers' perceptions are the selling price of fresh fruit, shortage of labour, product preservation, and debt, which were ranked from 6th to 9th, respectively. The five sources of risk that have lowest rankings include quality regulation by the government, credit interest rates, shortage of investment capital, VietGAP criteria, and customer preference changes.

Before applying PCA, the KMO index was estimated to measure the adequacy of the sampling. The KMO index varies from 0 to 1, and an overall value equal to or greater than 0.5 is considered an acceptable condition. In this study, the overall KMO of the dataset was 0.71, suggesting that the data is sufficient for principal component analysis. Table 2 presents the risk source loadings, which were grouped into four main components with eigenvalues greater than 1, accounting for 63.6% total variance. On the basis of the loading scores and their relationship to single risk sources, components 1-4 are labelled as production, market, human, and finance, respectively. Component 1 has the highest loading of unfavourable weather conditions that comes from the farmers' concerns

about unusual climate variability. This worry is completely suited to characteristics of agricultural production, which heavily relies on the surrounding environment and climate conditions. Seedling quality is also a single source of risk grouped into this component together with pests, product preservation, and unstable yield. Component 2 has the highest loading score of customer preference change. The loading scores of VietGAP criteria, market price, and related government regulation are ranked in order. These factors have impacts on selling price, thus farmers' income, and is out of the control of fruit farmers. Therefore, they were grouped into the market component as mentioned above. Component 3 consists of head of household health and agricultural labour with high loading scores of 0.5462 and 0.5298, respectively. This risk source reflects the change in the number of farming labourers due to health problems and participating in off-farm work. Finally, component 4 includes capital shortage, interest rates, and debt with loading scores of 0.3734, 0.3577, and 0.3226, respectively.

5.2. Perception of risk sources

More than 15 risk management strategies were given for fruit farmers' consideration. Farmers indicated their perceived importance of each management strategy on a Likert scale from 1 (not important) to 5 (very important). Farmer's perceptions of the 10 risk management responses are presented in Table 3.

Strategies generally perceived as very important were to obey quality regulation, prevent and reduce fruit disease, fresh fruit preservation, produce fruits under VietGAP standards, and hire labourers. Other management strategies include diversifying marketing channels, reduction of production cost, income diversification, buying health insurance for family labourers, and market information, which had lower ranking orders and were considered as less important.

The overall MSA (measure of sampling adequacy) for the risk management variable was 0.65,

Table 3. Mean score and varimax rotated factor loadings for risk management.

Management responses	Mean	Rank	Most important components			
			Diversification	Quality	Human resource	Consultancy
Product preservation	4.16	3	0.0572	0.4762	0.1343	0.0635
Disease prevention	4.17	2	0.1617	0.0540	-0.2279	0.8479
Income diversification	3.09	8	0.4405	-0.1515	-0.0168	0.1094
Input cost reduction	3.12	7	0.4115	-0.1685	-0.3091	0.1248
Marketing channels	3.24	6	0.4527	-0.0603	-0.3063	-0.2313
Finding information	2.47	10	0.2431	-0.2701	-0.2421	-0.3796
Quality regulation	4.19	1	0.2560	0.5499	-0.0284	-0.1661
VietGAP production	4.15	4	0.2973	0.5258	0.0352	-0.1037
Health insurance	3.07	9	0.3097	-0.1147	0.5442	0.1153
Hiring labourers	3.53	5	0.3055	-0.2242	0.6194	-0.0186

Note: Loadings of ≥ 0.31 are in bold. Adequacy measurement: KMO=0.65. Source: Estimation from author's surveyed data, 2020.

suggesting that the matrix was suitable for factor analysis. Table 3 also presents the varimax rotated factor loading for risk management strategies. The number of management strategies was reduced from 10 to 4 components with eigenvalues greater than one, explaining 74.24% of the total variance.

Components 1-4 were labelled as diversification, product quality, human resource, and consultancy, respectively. To reduce financial risk, various single management responses that were applied by farmers were grouped into Component 1. This component was named diversification because it had high loadings for diversification of sale channels (target market, marketing channels), income diversification (off-farm income), and reduction of production cost (fertilizer, pesticide, other inputs). Component 2, product quality, had high loadings for obeying quality regulation, producing under VietGAP standards, and fresh fruit preservation. All these single management responses aimed at producing fruits with high quality and more safety, which are required more often now from domestic and foreign consumers. Component 3 had heavy loadings of hired labour and health

insurance, and thus was accordingly labelled as human resource. Farming labour is very important for fruit production in the area. Commercial fruit farmers often have large areas of fruit farmlands. Often, family labour only is not enough to meet to a farmers' labour demand. Thus, lack of agricultural labourers was quite popular in the study area. Hiring labours and exchange of family labour were two strategies chosen to reduce shortage of farming labourers, especially during caring and harvesting time. Component 4, consultancy, includes disease prevention to minimise crop damage, and other technical information that is important for farmers' fruit production. To meet consumers' increasing requirements about fruit quality and safety, farmers have been converting fruit production toward VietGAP standards. Moreover, many high-breeding fruit varieties were introduced and planted in the study area. In addition, disease prevention and other related issues for fruit farms also needs support and consultancy from technical staff. Thus, technical consultancy or training courses and information sharing are very necessary for farmers.

5.3. Factors affecting risk management strategies

Multiple linear regressions were used to determine the relationship between information on socio-economic characteristics and management responses. The regression coefficients and the goodness-of-fit measures of the models are presented in Table 4. All four models were highly significant and all of them explained around 10% of total variance.

All socio-economic variables, except age and education, had significant effects. Farming owners who are of the Kinh ethnicity perceive consultancy as more important than other ethnic groups. Households with their main occupation in agriculture placed more emphasis on improving product quality because their main income source comes from fruit production and other crops. In turn, product quality and quantity had strong and direct impacts on their income. Families with more labourers were more likely to be associated with off-farm jobs and other activities for income diversification. Not surprisingly, they were significantly less concerned about diversification. Farmers producing fruits

Table 4. Estimation of multiple linear regressions for risk management.

Exploratory variables	Diversification	Quality	Human resource	Consultancy
Age	-0.008	-0.003	0.011	0.001
Ethnicity	0.240	-0.240	-0.283	0.528***
Education	-0.051	0.038	-0.030	0.043
Occupation	0.016	0.165***	0.242	-0.267
Agr-labour	-0.333**	-0.105	0.112	0.009
VietGAP	-0.355	-0.045	0.090	0.382**
Farmland	-0.150	0.086	0.045**	-0.123
Extension	0.533*	0.356	-0.085	0.109
Credit	0.935***	0.171	0.261	0.055
Constant	0.819	0.681	-0.691	-0.838
R²	0.1094**	0.1076**	0.0863*	0.1479***

Note: ***, **, and * denote significance at 1%, 5%, and 10% levels, respectively. Source: Estimation from author's surveyed data, 2020.

toward VietGAP standards considered technical consultancy and related information sharing as more important. Farmers with larger fruit farmlands were more likely to perceive human resources as very important. Farmers accessing extension services and credit found the diversification management response more important.

6. Conclusions

The present study provided insights into the risk perception and management strategies of fruit farmers in Northwest Vietnam, where fruit production plays an important role in a household's livelihood. Appropriate statistical techniques were applied to identify farmers' risk perceptions, risk management strategies, and factors affecting fruit farmers' risk perception and their responses, which included principal component analysis and multiple regression models. The findings of the study indicated that there were 14 sources of risk, which were categorised as production, market, human, and finance. Among the risk sources, seedling quality, unfavourable weather conditions, and disease risk were the most serious in fruit farmers' perception as single risks. Moreover, risk management strategies were categorized as diversification, product quality, human resource, and consultancy. Quality control regulation, disease prevention, and product preservation were

perceived by fruit farmers as the most important risk management strategies. In addition, a number of socio-economic variables had significant effects on farmers' perceptions on sources of risk and management responses. Technical support and or information sharing via extension services, and production conversion toward VietGAP would be useful for fruit farmers to manage various risks.

Appendices

Appendix 1. Definition of variables and their expected signs in the regression.

Variables	Code	Definition	Sign
Age	X ₁	Age of household head (years)	+/-
Ethnicity	X ₂	Member of ethnic group (1=Kinh; 0=otherwise)	+
Education	X ₃	Educated level of household head (years)	+/-
Occupation	X ₄	Main income of household (1=agriculture; 0=otherwise)	+
Agr-labour	X ₅	Number of agricultural labours of household (person)	-
VietGAP	X ₆	Fruit farming system (1=VietGAP; 0=otherwise)	+/-
Farmland	X ₇	Fruit planted land measured in ha	+
Extension	X ₈	Access to extension service (1=yes; 0=no)	-
Credit	X ₉	Access to credit service (1=yes; 0=no)	-

ACKNOWLEDGEMENTS

This research was funded by the Vietnam National Foundation for Science and Technology Development (NAFOSTED) under grant number 502.01-2019.323.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] H. Akcaoz, B. Ozkan (2005), "Determining risk sources and strategies among farmers of contrasting risk awareness: A case study for Cukurova region of Turkey", *Journal of Arid Environment*, **62**(4), pp.661-675, DOI: 10.1016/j.jaridenv.2005.01.018.
- [2] M.P.M. Meuwissen, R.B.M. Huirne, J.B. Hardaker (2000), "Risk and risk management: An empirical analysis of Dutch livestock farmers", *Livest. Prod. Sci.*, **69**(1), pp.43-53, DOI: 10.1016/S0301-6226(00)00247-5.
- [3] S. Riwthong, P. Schreinemachers, C. Grovermann, et al. (2017), "Agricultural commercialization: Risk perceptions, risk management and the role of pesticides in Thailand", *Kasetsart Journal of Social Sciences*, **38**(3), pp.264-272, DOI: 10.1016/j.kjss.2016.11.001.

- [4] R. Ullah, G.P. Shivakoti, G. Ali (2015), "Factors affecting farmer's risk attitude and risk perceptions: The case of Khyber Pakhtunkhwa, Pakistan", *International Journal of Disaster Risk Reduction*, **13**, pp.151-157, DOI: 10.1016/j.ijdrr.2015.05.005.
- [5] A.M. Komarek, A.D. Pinto, V.H. Smith (2020), "A review of types of risks in agriculture: What we know and what we need to know", **178**, *Agricultural Systems*, DOI: 10.1016/j.agsy.2019.102738.
- [6] R.C.A. Jain, M. Parshad (2007), *Working Group on Risk Management in Agriculture for The XI Five Year Plan*, Government of India, Planning Commission, 144pp.
- [7] M.D. Boehlje, V.R. Eidman (1994), *Farm Management*, McGraw-Hill, 458pp.
- [8] A. Miller, C.L. Dobbins, J.G. Pritchett, et al. (2004), *Risk Management for Farmers*, Department of Agricultural Economics, Purdue University, pp.1-27.
- [9] United States Department of Agriculture Risk Management Agency (1997), "Introduction to risk management", <https://www.uwagec.org/riskmgt/GeneralTopics/IntroRiskMgt.pdf>, accessed 22 May 2021.
- [10] N. Thuy (2020), "In 2019, the total area of agricultural products and main fruit trees in the province reached 147,272 hectares", *Son La Electronic Information Public*, <https://www.sonla.gov.vn/4/469/63804/545755/thong-tin-ve-nong-san/nam-2019-tong-dien-tich-nong-san-cay-an-qua-chinh-cua-tinh-dat-147-272-ha>, accessed 19 March 2021 (in Vietnamese).
- [11] G.F. Patrick (1998), *Managing Risk in Agriculture*, Purdue University, 30pp.
- [12] B. Fleisher (1990), *Agricultural Risk Management*, Lynne Rienner Publishers Inc., 148pp.
- [13] T.T. Duong, T. Brewer, J. Luck, et al. (2019), "A global review of farmer's perception of agricultural risks and risk management strategies", *Agriculture*, **9(1)**, DOI: 10.3390/agriculture9010010.
- [14] S. Martin, (1996), "Risk management strategies in New Zealand agriculture and horticulture", *Review of Marketing and Agricultural Economics*, **64(1)**, pp.31-44, DOI: 10.22004/ag.econ.12298.
- [15] M. Röhrig, B. Hardeweg (2014), "Risk preference and risk perception of apple producers in Germany: Development of a measurement concept", *DGG-Proceedings*, **4(11)**, DOI: 10.17660/actahortic.2015.1103.38.
- [16] M. Vassalos, Y. Li (2016), "Assessing the impact of fresh vegetable growers' risk aversion levels and risk preferences on the probability of adopting marketing contracts: A Bayesian approach", *International Food and Agribusiness Review*, **19(1)**, pp.25-42.
- [17] A. Porsch, M. Gandorfer, V. Bitsch (2018), "Risk management of German fruit producers", *Review of Agricultural and Applied Economics*, **XXI(1)**, pp.10-22, DOI: 10.15414/raae.2018.21.01.10-22.
- [18] G.F. Patrick, W.N. Musser (1997), "Sources of and responses to risk: Factor analysis of large-scale U.S. cornbelt farmers", *Risk Management Strategies in Agriculture: State of the Art and Future Perspectives*, pp.45-53.
- [19] R.H. Thaler (2000), "From homo economicus to homo sapiens", *Journal of Economic Perspectives*, **14(1)**, pp.133-141, DOI: 10.1257/jep.14.1.133.
- [20] G. Moschini, D.A. Hennessy (2001), "Uncertainty, risk aversion, and risk management for agricultural producers", *Handbook of Agricultural Economics*, Elsevier, **Vol. 1**, part A, pp.87-153, DOI: 10.1016/S1574-0072(01)10005-8.
- [21] M. Rabin, R.H. Thaler (2001), "Anomalies: Risk aversion", *Journal of Economic Perspectives*, **15(1)**, pp.219-232, DOI: 10.1257/jep.15.1.219.
- [22] J.G. March, Z. Shapira (1987), "Managerial perspectives on risk and risk taking", *Management Science*, **33(11)**, pp.1404-1418, DOI: 10.1287/mnsc.33.11.1404.
- [23] R.L. Priem, L.G. Love, M.A. Shaffer (2002), "Executives' perceptions of uncertainty sources: A numerical taxonomy and underlying dimensions", *Journal of Management*, **28(6)**, pp.725-746, DOI: 10.1016/S0149-2063(02)00193-9.
- [24] O. Flaten, G. Lien, M. Koesling, et al. (2005), "Comparing risk perceptions and risk management in organic and conventional dairy farming: Empirical results from Norway", *Livestock Production Science*, **95(1-2)**, pp.11-25, DOI: 10.1016/j.livprodsci.2004.10.014.
- [25] H.V. Bac, T. Nanseki, Y. Chomei (2018), "Farmers' perception on agricultural risks and their determinants: The case of tea production in Thai Nguyen province, Vietnam", *Journal of the Faculty of Agriculture, Kyushu University*, **63(2)**, pp.479-485, DOI: 10.5109/1955671.
- [26] W.F.V. Raaij (1981), "Economic psychology", *Journal of Economic Psychology*, **1(1)**, pp.1-24, DOI: 10.1016/0167-4870(81)90002-7.
- [27] P.N. Wilson, R.G. Dahlgran, N.C. Conklin (1993), "Perceptions as reality on large-scale dairy farms", *Review of Agricultural Economics*, **15(1)**, pp.89-101, DOI: 10.2307/1349714.
- [28] S. Aditto, C. Gan, G.V. Nartea (2012), "Sources of risk and risk management strategies: The case of smallholder farmers in a developing economy", *Risk Management - Current Issues and Challenges*, Intech, Croatia, pp.449-474, DOI: 10.5772/50392.
- [29] E. Guadagnoli, W.F. Velicer (1988), "The relation of sample size to the stability of component pattern", *Psychological Bulletin*, **103(2)**, pp.265-275, DOI: 10.1037//0033-2909.103.2.265.
- [30] P.T. Barrett, P. Kline (1981), "The observation to variable ratio in factor analysis", *Personality Study and Group Behaviour*, **1(1)**, pp.23-33.
- [31] L.M. Aleamoni (1976), "The relation of sample size to the number of variables in using factor analysis techniques", *Educational and Psychological Measurement*, **36(4)**, pp.879-883, DOI: 10.1177/001316447603600410.
- [32] J.W. Osborne (2004), "Sample size and subject to ite ratio in principal components analysis", *Practical Assessment, Research and Evaluation*, **9(11)**, DOI: 10.7275/ktzq-jq66.
- [33] H. Abdi, L.J. Williams (2010), "Principal component analysis", *Wiley Interdisciplinary Reviews: Computational Statistics*, **2**, pp.433-459, DOI: 10.1002/wics.101.

Moral rights and their position in the digital world

Van Anh Le*

University of Oxford, Wellington Square, Oxford City, United Kingdom

Received 23 June 2022; revised 9 September 2022; accepted 22 September 2022

Abstract:

The proliferation of technology and the internet has made moral rights more vulnerable than ever. Although the digital age plays a significant role in disseminating culture to a larger audience, the online environment also comes with a threat to the author's personal interests. Their "spiritual children" are more easily under attack. However, under international law, moral rights have not been considered duly. The Berne Convention, the TRIPS Agreement, WIPO Internet Treaties, and even EU Harmonize Directives all shy away from the moral rights issue in the "Digital age". In an era when technology is developing faster than the laws regulating it, the exigency for moral rights development in copyright law must be paid more attention. This paper examines how the internet influences the protection of moral rights and to what extent it has made them more susceptible. In conclusion, the study suggests that the protection of moral rights should be loosened to resolve the conflict between users and authors. To some extent, in the digital age, the author should learn how to coexist with acceptable modifications to work as long as they do not cause significant harm to his honour or reputation.

Keywords: moral rights, the author's right, the internet.

Classification number: 6

1. Introduction

Defining property only as something tangible has passed a long time ago. Since the time of the Romans, people have been aware of a property's value, which comes from a human's mind. It is not less important or valuable than material assets like houses, land, trees, cattle, precious stones, or jewellery. Along with the industrial and transport revolutions, the demand for protecting inventions and works of art from another's use without creators' permission was raised. As a result, intellectual property (IP) rights under the primary forms of patents, trademarks, and copyright came into the world.

Despite being a part of or a separate part of copyright (depending on whether you are a common law or civil law scholar), moral rights

have not been paid as much attention as their comrade economic rights. The biggest reason for this "discrimination" is that civil law and common law systems approach moral rights differently. The resulting outcome is that moral rights carry less weight than economic rights. While countries like France and Germany have long time recognised "an authors' rights framework" (*Droit d'auteur* in French or *Urheberrecht* in German) since the time of the Roman Empire against plagiarism [1], the United Kingdom (UK) and the United States (US) did not adopt privacy or personality rights of the author until becoming the signatory members of the Berne Convention [2].

The proliferation of technology and the internet has made moral rights more vulnerable than ever. Although the digital age disseminates culture to a larger audience, the online environment also

*Email: van-anh.le@law.ox.ac.uk

threatens the author's personal interests. Their "spiritual children" are more easily attacked, but moral rights have not been considered duly under international law. The Berne Convention, the TRIPS Agreement, WIPO Internet Treaties, and even EU Harmonize Directives all shy away from the moral rights issue in the "Digital age". This paper examines how the internet influences the protection of moral rights and to what extent it has made them more susceptible.

2. Copyright in the common law system

The history of British copyright law is closely attached to printing technology's advent. In the past, wealthy and powerful people such as kings, lords, or religious leaders financially supported talented people in return for gaining a monopoly on their works of art. Consequently, the public could not access these works because they were unique and kept private for the sponsors' enjoyment. Gutenberg's invention of the moveable type in 1455 and the development of the printing press, which later led to the first "bestseller" of Chaucer's *Canterbury Tales* in 1478, made a breakthrough in the printing industry. Those inventions spurred printing multiple copies quickly and at little expense, providing many copies of works to more people. To restrict and control printing, Henry VIII set up a privilege system to limit certain registered members of the Stationers' Chamber who could print books. The book titles must be entered on the Company's Register before publication. Because only the members of the Company had the right to publish their books in perpetuity, this right was called "copyright", which means the right to make copies [3]. The history of copyright in England proves that the early idea of copyright solely focused on the economic interests a work would bring to an author, or the sponsor, rather than emphasising the author himself.

The privilege system was then replaced by the world's first copyright law - the Statute of Anne, enacted in England in 1710. The Statute restrained

the publishing industry, destroyed its monopoly power, and permitted the importation of books in foreign languages rather than directed toward the authors of books and their rights. The right to copy, which had been restricted to the Stationers before, was now granted to everyone. However, instead of being a perpetual right, the new copyright would expire after fourteen years, with a renewal for the same period.

In 1790, the first US Congress transposed similar content of the Statute of Anne into the US Copyright Act 1790, an Act for the encouragement of learning, by securing the copies of maps, charts, and books to the authors and proprietors of such copies. The law granted American authors the right to print, reprint, or publish their work for fourteen years and a right of renewal for the same term [4]. Until now, this Act experienced several revisions. While the first revision in 1831 expanded the term of protection to twenty-eight years plus a fourteen-year extension, the second time in 1870 focused on administrative registration. The major revision occurred in 1909, broadening the scope of subject matters to all works of authorship and extending the renewal term to twenty-eight years.

The most significant change was undertaken in 1976 for two main reasons. Firstly, the US realised the existing copyright provisions could not keep pace with technology development, so an effort should be made to cope quickly with scientific advances. Secondly, it was a preparatory step to the US's participation in the Berne Convention. While some concepts such as fair use, first sale doctrines, and library photocopying were available in other jurisdictions, they were not adopted in the US before 1976.

3. Copyright in the civil law system

In contrast, the civil law system uses the term *Droit d'auteur* or the author's rights to recognise the author's creativity and emphasise the natural rights in their creation. The concept of moral

rights can be traced back to Ancient Greece and the Roman Empire, when copyright works were supposed to imbue with the author's personality [5]; hence, those rights were more concerned with protecting their works from being copied and put under another person's name. Moral rights are non-proprietary rights based on the theory that an author is a genius individual capable of producing extraordinary works. Consequently, they and their works are closely connected. The work reflects one's unique personality; any damage - even if it is not physical - could affect them personally, intellectually, and spiritually. The scholars living in ancient times were the first to be recognised as the authors of their works; however, they did not have any economic rights to control dissemination and copying. Notably, the value of authorship is more than the merely financial aspect because it is not only the cream of intellectual work but also the author's "spiritual child". As the cream of the intellectual work, an artist is entitled to receive remuneration for their time and effort. As the "spiritual child" that the creator brings into the world, they are free to control its destiny and object to infringement on their work.

4. Common law versus civil law

The difference between "common law copyright" and "civil law author's rights" creates different treatments of moral rights and affects legal matters such as originality, formalities, and duration. For example, if the civil law system requires originality as the author's intellectual creation for a copyrightable work¹, the common law system sets a lower threshold. Firstly, to be considered an original work under UK law, a work must not be a copy. The word "original" does not

require "the expression of original or inventive thought"². Secondly, the work must be crystallised from a sufficient level of independent skill, labour, or judgment³. In other words, the UK concept of originality focuses on the input that the author contributed to the resulting work.

A similar trend can be found regarding the formality of copyright protection. The work is automatically protected when it comes under a specific material; some common law countries, namely the US, require formalities such as registration, notice, or deposit if an author wants to seek the protection. However, formalities are not conditions to grant copyright protection but serve as initial proof in the case of a dispute. The Anglo-Saxon copyright regime believes that since copyright is the remuneration for one's creative work, formality is necessary to prove such work's fruits. Furthermore, the protection term granted by civil law countries was longer than the common law nations; in France, moral rights last forever. Economically, copyright, like patents or trademarks, is a monopoly (even when it is called a weaker monopoly than others); the protection is granted long enough for the author to recoup his investment and profit from his work. It then falls into the public domain when the author's exclusive right expires.

Nevertheless, the most significant difference between the two legal systems is the position on moral rights. The civil author's rights framework comprises two sets of rights: economic and non-economic rights, known as moral rights. While the former emphasises commercial exploitation of a work, moral rights are personal rights relating to an author himself instead of his output. Put another way, while copyright is a property right relating to

¹Case C-5/08. Judgment of the Court (Fourth Chamber) of 16 July 2009. Infopaq International A/S v Danske Dagblades Forening; Cofemel v G-Star Raw (C-683/17); SI and Brompton Bicycle Ltd v Chedech/Get2Get (Case C-833/18).

²University of London Press v University Tutorial Press [1916] Ch 601.

³Ibid.

the physical aspect, moral rights are considered a human right involved more in the philosophical view [6]. Only the individual creators, not their work, are protected by moral rights. Civil law countries rank the author's moral interest at the first spot and put the economic aspect second. In contrast, the UK and the US did not adopt moral rights in their copyright legislation until the nineteenth century.

5. Moral rights in international agreements

Copyright internationalisation began with the Berne Convention for the Protection of Literary and Artistic Work in 1886. It bridged the gap between two legal systems by requiring member states to recognise the moral rights of paternity (or attribution) and integrity. To implement the Berne Convention, the UK adopted the Copyright, Designs, & Patents Act 1988 (the 1988 Act), which confers the moral rights of specific works. The US, in contrast, delayed joining the Berne Convention more than a hundred years after its creation. When the US finally decided to become a Berne member in 1989, moral rights were exercised, but provisions were limited to meet the minimum requirements only [6].

One year after its participation, the US Congress enacted the Visual Artists Rights Act (VARA) - the first federal legislation which granted the moral rights of paternity and integrity to solely visual artists. However, the US VARA restricted the subjects and range of moral rights. While some European countries provide moral rights of publication and withdrawal in addition to two central moral rights (attribution and integrity), these extra moral rights are not considered in any US legislation yet. Furthermore, only the visual artists can be protected from any distortion modification that might contravene the author's original output; other creative activities like music works are

excluded because they cannot meet the definition of "visual art"⁴. Because of such restrictions, since signing the Berne Convention, the US does not sufficiently comply with Article 6*bis* - the provision addressing moral rights. Therefore, whether moral rights are recognised and exercised in the USA is unclear [7].

5.1. The Berne Convention

The Berne Convention is the first international treaty that harmonised copyright laws between the continental and Anglo-Saxon standpoints. However, the first version of the Convention left moral rights in the margin of protection. After several modifications in Brussels (1948), Stockholm (1967), and Paris (1971), minimum requirements of moral rights were set up in Article 6*bis*; the signatory parties could provide higher protection if they chose to. Article 6*bis* protects the right of paternity and the right of integrity only. The right of paternity or attribution refers to the author's right to have their name on a work, use a pseudonym, or remain anonymous. The right of integrity permits an author to control the form of his work. France provides two additional rights: the right of publication, the one not to reveal a work before the creator agrees, and the right of retraction, the one to withdraw a work after it has been published because the author is not happy with its display anymore [6].

As mentioned above, because the Berne Convention sets out the minimum protection, Article 6*bis* leaves some questions unanswered. Firstly, it is unclear whether the right of paternity includes the right not to be identified as the author of a work (the right to object against false attribution). Secondly, it is unclear whether the destruction of a work, especially in cases where such destruction does not affect an author's "honour

⁴17 US Code § 101.

or reputation”, can be seen as infringing the right of integrity. Thirdly, Article 6*bis* is silent on the appropriate duration of moral rights. Fourthly, it does not reveal whether the right of paternity and integrity should be transferable or can be waived. Finally, confusion can be found in the relationship between the two rights stated by the Article. Although a scholar believes those rights overlap, the wording differentiates the right of attribution and integrity [7]. Despite these grey areas, the Berne Convention has created a landmark when it claimed the independence and difference of moral rights from economic rights for the first time. Even when the latter is transferred to another party or the creator is not the copyright owner (e.g., employees produce the work under the contract), the author still possesses personal rights. In this way, Article 6*bis* strongly affirms the author’s unique personality embodied in his work.

To conclude, not only does the Berne Convention shorten the distance between two legal systems, but it also provides the essential basis for pursuing creative activity - recognition and fair reward. It has laid the foundation for the harmonisation of copyright law.

5.2. The TRIPS Agreement

The TRIPS Agreement has exerted the most influence on global IP norm-setting. The failure to include IP rights on the agenda in the previous round-the Tokyo Round-did not deter the US and European Community from bringing IP issues as a part of the compulsory negotiation package. After several working programs, the TRIPS Agreement went into force in 1994. This document dubbed a “milestone” in international IP law, reinforced the role of the Berne Convention when a state can only join the TRIPS after ratifying the Berne. However, moral rights are not included in TRIPS; they are left to domestic legislation. The reason can be found in the agreement’s title, which only covered in Trade-Related Aspects, whereas moral

rights, in contrast, fall outside the economic scope of IP rights. On the one hand, the silence of the TRIPS is not disadvantageous because the member states have great latitude in approaching moral rights. On the other hand, this exclusion weakens the position of those non-proprietary rights in international copyright standards. In addition, the TRIPS Agreement did not accommodate nor advance a digital agenda.

5.3. WIPO Internet Treaties

WIPO Copyright Treaty (WCT): The WCT setting out provisions relating to the so-called “digital agenda” covers the following issues: the rights applicable for the storage and transmission of works in a digital system, the limitations on and exceptions in a digital environment, technological measures of protection and rights management information. One more time, moral rights in the cyber world are continuously on the margin of international copyright concern.

WIPO Treaty on Performances and Phonograms (WTPP): Along with the WCT, the Treaty on Performances and Phonograms in 1996 amounts to the “Internet Treaties” adopted by WIPO to address the copyright and related rights of the digital age. Although WTPP focuses on neighbouring rights rather than copyright, Article 5 regulates the rights of attribution and integrity of performers, which is precisely parallel to Article 6*bis* of Berne. Similarly, these rights were recognised independent of the economic rights and are still valid after the performer's death, at least until the extinction of his economic rights.

6. The UK Copyright, Designs, and Patents Act (CDPA) 1988

The CDPA 1988, apart from two core moral rights, has the right not to be named as the author of a work which one did not create (the right to object against false attribution) and the right to privacy of certain photographs and films (the right

to privacy). The rights of paternity, integrity and privacy exist as long as copyright exists in the work⁵. The right against false attribution, while available in some common law countries, is treated as a part of the ordinary law of obligations rather than a type of moral right [8]. Under the CDPA, this right continues for 20 years after the death of the person falsely attributed as the author⁶. UK's moral rights are more limited than those in some other jurisdictions [9]. Several countries also recognise different types of moral rights, such as the right to control the publication of the work (the right of disclosure) and the right to withdraw a work after it has been published (the right of withdrawal).

The right of paternity or attribution is one of the most recognised rights of moral rights. It is a right to be identified as the author of the work. Distinct borders were drawn to distinguish different expressions of paternity. The right of identification implies that the author freely remains anonymous, such as a name, pseudonym, or symbol to be identified as the creator. When the author wants to reveal his hiding identity, that is known as the right of disclosure. Another version, the right of assertion, aims to prevent the usurpation of paternity and affirm his authorship even when it is not a case of usurped paternity [10].

The right of integrity is to protect the work from distortion or mutilation where the creator may only protest the change to the work that negatively affects his "honour or reputation". It is unnecessary to require the definition of honour or reputation; however, in the cyber world where a work is possibly removed, extracted, ripped, and even mixed with others to create a new object, the assessment of honour or reputation is more difficult to assess. Should the injury to an author's prestige

be determined based on the public's reaction or the author's personal view? What happens if the modification amplifies his name to a large audience, yet the author supposes it severely mutates the original context? Even though honour or reputation is an ambiguous and discretionary concept to give a consensus definition, the determining criteria should be set to avoid arbitrariness when settling a copyright dispute.

7. Moral rights in Vietnam

On 16 June 2022, Vietnam adopted the third Amendment of its 2005 IP law. The moral rights of authors/creators are regulated as follows⁷:

1) The right to name the work. This right can be transferred; 2) The right to attach their real names or pseudonyms to their works and to have their real names or pseudonyms acknowledged when their works are published or used; 3) The right to publish their works or authorize others to publish their works; 4) The right to protect the integrity of the work from being misrepresented by others; not allow others to modify or mutilate the work in any way that is detrimental to the honour and reputation of the author.

There are few observations of Vietnam's relevant provisions. Firstly, it is not clear whether such moral rights are waivable, and this issue has never been tested before the court or other authorities. Secondly, it is very bizarre that the legislators regard the name of the work and the work itself as two separate parts by giving them different rights. Last but not least, the right to publish, which is an economic right in other jurisdictions, is viewed as a moral right in Vietnam. Consequently, the right to publish the work can be transferred and protected for 50 years post-mortem⁸.

⁵The Copyright, Designs, & Patents Act 1988, s 86 (1).

⁶The Copyright, Designs, & Patents Act 1988, s 86 (2).

⁷Article 19 of Vietnam's IP law (amended in 2022).

⁸Article 20.1(a) of Vietnam's IP law (amended in 2022).

8. Moral rights and the internet

The internet and technologies change the way creators produce their works. A study by the EU indicates two ways digital technology also helps safeguard moral rights. Firstly, identifying a work has become more accessible thanks to different technological identification systems [11]. The creation of a standardised code for literary material (ISBN), phonograms (ISRC number) and audio-visual material (ISAN number) by digital technology can be regarded as a new form of paternity right. Although those systems might not reveal the author of the work, they can be used “as a tool to authenticate the work” [11]. They do not precisely refer to the creator’s name but are capable of providing the origin of the work in a commercial exploitation environment. The study equates copyright authentication to trademark because it invokes the commercial origin [11].

Secondly, digital technology can protect the integrity of a work from illegal modification. Technical protection methods like encryption, digital signature, and identification system strengthen the integrity of works because they help the authors to prove that their results have been distorted. However, these methods cannot replace moral rights; their roles are limited to supporting the right holders in tracking and proving infringements of moral rights [11].

On the other hand, the internet and the digital environment potentially threaten the author’s non-economic rights. The Digital Age creates a new conflict between users and authors. It has furnished the users with infinite means and opportunities to manipulate, adapt, and transform the fruit of creative labour in digital form without the copyright owner’s consent [12]. A user may be unaware of the exact content of the original work or ignore the author’s real identity. New realities of

the digital environment play a newer justification to retain moral rights. They could serve the public interest and preserve our intellectual history and cultural heritage in an environment where original versions of works are hard to maintain and trace.

Unlike patents or trademarks that need registration to seek protection, copyright does not require such, so its territorial nature is weaker than other types of IP rights. In addition, the philosophical aspect of copyright is becoming more and more vulnerable due to the mobility of the internet. The internet permits wide dissemination of works at the speed of light. Only one click can transmit the information from one side of the globe to the other. Thus, nothing stops these works from uploading, compressing, and downloading.

Traditionally the tenet “there is no copyright in an idea; copyright only subsists in the expression” is one of the fundamental copyright principles. A poem cannot be protected unless the author transforms it into a material form. Similarly, a composer only seeks protection for his musical work through a recording expression. Today the right to integrity becomes weaker in the digital age. To be understood by computers and disseminated online, a work cannot be preserved in its originality. It must be translated into a digital form, leading to a loss in quality. The difference in loss of quality will vary from one work to another. For instance, the colour and the nuances of an original painting might not be maintained under the compressed version. However, it is problematic whether this alteration sullies the author’s honour or reputation or not because the degree of damage based on assessing the injury to his prestige is a subjective decision. The reduction in the quality of any output, such as a movie, a song, or a piece of music, may always make authors unhappy because they devote their lives to creating and disseminating art, knowledge, and culture. They want to preserve the

work precisely as designed, without alterations. However, not every modification is prejudicial. For example, a musician composes a song with the length of 4 minutes 30 seconds, but that song ends at 4:23 minutes; the remaining 7 seconds without music are added just for an echo effect. Technology tools can entirely compress it with the new length of 4 minutes 23 seconds to decrease the capacity. Undeniably the integrity of the composer's work is distorted, yet the issue raised here is whether this distortion is severe enough to his honour or reputation?

Another digital tool that affects a work's structure is deleting parts or mixing one piece with another. Technologies allow removing or extracting positions from their original context and combining them to create complete works. It is impossible to detect the change [11] leading to the new role of authors, switching from "authoring" to "contributing" [12].

The right to integrity suffers from the internet, and so does the right to paternity. Movies are usually recorded in DVD (digital versatile disc) and VHS (video home system) formats. For these movies to be shared, the data will be ripped and converted from the MPEG-2 (moving pictures expert group) to other portable formats like DivX, AVI (audio video interleave) and many different forms. Such conversion might reduce the resolution, impeding the audience's enjoyment. Another example can be found in sound recordings. The music is also ripped from CDs and converted from audio CD format to MP3 (MPEG-1 audio layer 3) format to reduce the size and facilitate the transmission. The transformation of file formatting allows the user to quickly put the work on websites but the fear that the quality cannot remain the same as the originality is evident.

Although coding, ripping, transcoding, and conversion may not fall in the coverage of the

definition of adaptation and translation in copyright law, they still violate Article 6*bis* of the Berne Convention because the right to receive credit as an author has been ignored. In a standard DVD movie, the audience can recognise the author's name through the labels and the prints on the disc or in the recording as in the acknowledgements and the digital rights management (DRM) codes embedded in the disc. Music listeners are also aware of moral rights through labels and the DRMs [12].

However, the internet inevitably makes moral rights more susceptible even when these works are legally uploaded. Although the minimum information on the work's authorship will be revealed, the data may be lost when a work is downloaded or sent over a website under a false author name [10]. Moreover, unlawful distribution on the internet gives little care to moral rights. The file ripper embeds their information in the movie or song file, claiming authorship. DRMs are usually removed to make the files more portable, but the uploaders do not replace them with any measure to guarantee the right of attribution [13]. This conduct can be regarded as "plagiarism", stealing others' work rather than putting it under their name.

The internet has made it possible to disseminate works on an unprecedented scale. In the meantime, the right to withdraw a work is also affected. Before the internet era, an author could retract his output when he was not happy with it anymore or when its display no longer reflects the author's worldview. However, the internet nullifies this right. Once a work is distributed online, it is impossible to take it back.

Nevertheless, stricter protection of moral rights can hinder the growth of cultural industries such as music, movie, and tourism. It inhibits the exploitation and experiment of the creation

of new art. Furthermore, the abuse of the right of withdrawal might cause a significant loss to a publisher if an author wants to retract his work out of the marketing display; mainly, many companies currently have used the internet as the primary channel to popularise new works. The film industry and music industry are strong cases in point.

9. Conclusions

The internet has internationalised our lives since its creation. Its appearance upsets the definition of “distance” leading to the erosion of geographical boundaries. The world has become smaller and flatter, but the scope of the conflict is broader and more diversified than ever. Moral rights are inherent and do not produce economic benefits to the copyright owners. The position of moral rights is weaker and far more disadvantageous in the digital age when the right to paternity and the right to integrity are attacked by advanced technology. The creator’s ability to control the destiny of his “spiritual child” falls out of his hand. Work unity relies on users’ altruistic motives, which seems a wholly ineffective response.

Once a work has been published online, monitoring its circulation is impractical. Trailing the transmission requires international cooperation, both technical and legal. Mutual technical assistance and mutual judicial cooperation amongst countries is the key to mitigating and punishing copyright infringement.

The above analysis points out that the internet has weakened moral rights; therefore, the author argues that moral rights should be acknowledged in a more flexible manner. Internet and digital technologies have resulted in revisions of some traditional concepts. The protection of moral rights should be loosened to resolve the conflict between users and authors. To some extent, in the digital age, the author should learn how to coexist with acceptable modifications to work as long as they do not cause significant harm to his honour or reputation.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] C. Colston, J. Galloway (2010), *Modern Intellectual Property Law*, 3rd Edition, Routledge Publisher, 896pp.
- [2] L. Bently, B. Sherman, D. Gangjee, et al. (2019), *Intellectual Property Law*, 5th Edition, Oxford University Press, 1520pp.
- [3] J.A.L. Sterling (2015), *Sterling on World Copyright Law*, 4th Edition, Sweet & Maxwell Publisher, 1761pp.
- [4] Association of Research Libraries (2022), *Copyright Timeline: A History of Copyright in The United States*, <https://www.arl.org/copyright-timeline/>, accessed 12 May 2022.
- [5] H. Selle (2008), “Open content? Ancient thinking on copyright”, *International Review of Antiquity Law*, **55**, pp.469-584.
- [6] A. Danoff (2007), “The moral rights act of 2007: Finding the melody in the music”, *Journal of Business, Entrepreneurship and The Law*, **1(1)**, pp.181-207.
- [7] J.D. Lipton (2011), “Moral rights and supernatural fiction: Authorial dignity and the new moral rights agendas”, *Fordham Intellectual Property, Media and Entertainment Law Journal*, **21(3)**, pp.537-580.
- [8] I. Eagles, L. Longdin (2004), “Technological creativity and moral rights: A comparative perspective”, *International Journal of Law and Information Technology*, **12(2)**, pp.209-236, DOI: 10.1093/ijlit/12.2.209.
- [9] L. Bently, B. Sherman (2004), *Intellectual Property Law*, 2nd Edition, Oxford University Press, 1271pp.
- [10] C.F. Molina, E. Peis (2001), “The moral rights of authors in the age of digital information”, *Journal of The American Society for Information Science and Technology*, **52(2)**, pp.109-117, DOI: 10.1002/1097-4571(2000)9999:99993.3.CO;2-B.
- [11] M. Salokannel, A. Strowel, E. Derclaye (2000), *Study Contract Concerning Moral Rights in The Context of The Exploitation of Works through Digital Technology: Final Report*, Europäische Kommission Publisher, 252pp.
- [12] S. Kheria (2007), “Moral rights in the digital environment: ‘Authors’ absence from authors’ rights debate”, *Proceedings of The Annual Conference - Hertfordshire University*, <https://www.bileta.org.uk/wp-content/uploads/Moral-rights-in-the-Digital-Environment-Authors-absence-from-Authors-rights-debate.pdf>, accessed 12 May 2022.
- [13] O.B. Vincents (2007), “When rights clash online: The tracking of P2p Copyright Infringement vs. the EC personal data directive”, *International Journal of Law and Information Technology*, **16(3)**, pp.270-296, DOI: 10.1093/ijlit/eam007.

The analysis of counterfeits and their impact on countries' development

Tram Nguyen^{1*}, Tang Li²

¹IP Paralegal at Gottlieb, Rackman & Reisman,
270 Madison Ave, New York City, New York State, United States

²Senior Voip Infrastructure Engineer,
570 Washington Boulevard, Jersey City, New York State, United States

Received 8 July 2022; revised 20 September 2022; accepted 5 October 2022

Abstract:

While the wealthy world hides its use of counterfeit, it is a part of a million people's everyday life or a survival mechanism in underdeveloped nations. Counterfeiting brings in bad costs at different levels in different fields, but the terrible impact has spread in all directions. Counterfeiting severely harms the consumers' health and, from there, affects the state of health and the function of a country... The community has habituated to living with counterfeits, and the effects are mostly ignored. Detecting counterfeits is difficult since the image is never straightforward and getting data to bring the awful effect to light is thus more difficult. Fighting counterfeiting necessitates governments enacting effective anti-counterfeit regulations, providing sufficient training to detect counterfeit items, and improving public awareness. Recently, thorough information regarding counterfeiting in many countries was gathered with the assistance of international organisations. From there, the unthinkable impact of counterfeiting on several countries, including Vietnam, became clear. And, as you can see, we are living in the so-called "The era of counterfeit".

Keywords: counterfeit, damage, economic impact, norm.

Classification number: 6

1. Introduction

The term "counterfeit" can be widely defined as imitating anything legitimate with the goal of stealing, destroying, or replacing the original for use in unlawful activities or otherwise deceiving persons into believing that the imitation is of equal or higher value than the genuine.

It is used as a clarifying noun when paired with additional terms such as counterfeit document, counterfeit product, counterfeit culture, or counterfeit commodities. Before 2020, counterfeits were widespread yet invisible.

Since 2020, COVID-19 has provided a chance for Intellectual Property (IP) to rise significantly. The strong acknowledgement and protection of IP lead to the awareness of counterfeiting and its effect.

The Organization for Economic Cooperation and Development (OECD) stated: "Trade in counterfeit and pirated goods is a major challenge in an innovation-driven global economy. These practices negatively affect the sales and profits of affected firms while also having adverse revenue, economic, health, safety and security effects for governments, businesses and consumers.

*Corresponding author: Email: tramnguyenIP@outlook.com

Organised criminal groups play an increasingly important role in these activities by benefiting significantly from profitable counterfeiting and piracy operations" [1].

On this front, the OECD and the EU Intellectual Property Office (EUIPO) collaborated to show policymakers how counterfeit and pirated trade scales have harmed their economies. Counterfeit and pirated goods accounted for up to 2.5 per cent of global trade in 2013, amounting to 461 billion USD - a heinous sum of money. In the same year, the EU reported that counterfeit and pirated items accounted for up to 5% of imports, totalling 116 billion USD (85 billion EUR).

Losing money sounds bad enough, but steadily losing a hundred thousand jobs is equally scary. According to statistics provided by Statista, in 2020, 300.000 jobs were lost due to counterfeiting in the US alone. According to another number provided by International Chamber of Commerce, experts projected net job losses of 4.2 to 5.4 million worldwide by 2022.

On 29 September 2016, the EUIPO stated that fake medicines cost the EU 10.2 billion euros every year, and 37.700 jobs are lost across the pharmaceutical sector in the EU. Reports and accompanying data have shown the enormous impact of counterfeiting. Those numbers themselves should strike a wake-up call in consumers around the world. However, understanding counterfeit products in developing countries still needs to improve. People often mention counterfeit as fake clothes despite their presence in all shapes and sizes.

Furthermore, do the above-identified reports alert about counterfeit clothes only? Is there anything else under the umbrella of "counterfeit"?

2. Everything can be counterfeit

The most straightforward example of counterfeit in Vietnam is fashion items with luxury brand logos, for instance, Dior, Channel, or Hermes, which can

be sold at a much lower price than their authentic counterparts. This example is popular with people but is not related to their benefit; therefore, it does not ring an alarm in their heads. Furthermore, if a person does not see it as a severe problem, they do not fight against it.

However, what if now, they are enlightened with the information that Everything can be counterfeit? Will they think twice about keeping counterfeit as part of their lives or their norm?

"Fake products can be found in a large and growing number of industries, such as common consumer goods (footwear, cosmetics, toys), business-to-business products (spare parts or chemicals), IT goods (phones, batteries) and luxury items (fashion apparel, deluxe watches). Importantly, many fake goods, particularly pharmaceuticals, food and drink, and medical equipment, can pose serious negative health and safety risks" [1].

Counterfeits in some industries directly put consumers at serious health risks like fake foods, fake tobacco, fake tobacco substitute, fake beverages, and fake pharmaceutical products.

On 19 January 2020, Blake Williams, Mollie Phelps and James Cox, all from Aveley, Essex, UK charged with selling counterfeit goods (Tobacco). The case contributed to the piled-up crime of counterfeit tobacco in the UK. UK authority stated that "A major supplier of dangerous fake tobacco across Essex and East London has been prosecuted and convicted. If this gang had continued its criminality, the loss to HM Revenue and Customs would have been significant. The tobacco was poor quality and smelled of white vinegar, added by the criminals as an anti-mould agent. Fake tobacco often contains other dangerous elements, including asbestos and rat droppings. The supply of illicit tobacco costs the UK around £2.5 billion a year - money that could be used to fund vital public services" [2].

The US also faced counterfeit drugs despite having strict drug regulations and frequent quality auditing. The New York city-based Center for Medicine in the Public Interest once estimated that the global trade in fake pharmaceuticals - including treatments for malaria, tuberculosis and AIDS - would reach \$75 billion a year in 2010.

US Patent and Trademark Office stated, "Counterfeit medications are deliberately and fraudulently mislabeled. Their quality is unpredictable because they might be made with the correct formulations, with the wrong formulations, without the active ingredients, with insufficient amounts of the active ingredients, or any combination of the aforementioned. All counterfeit drugs are 100% illegal, whether they are "harmless" or not. It is a criminal offence to manufacture, process, pack, or otherwise distribute counterfeit pharmaceuticals or medical devices" [3].

As the world's population have multiplied, humans have faced severe illnesses and diseases. As patients have a strong demand for drugs and medical devices, counterfeiters take advantage of the situation to counterfeit traffic drugs. The Food and Drug Administration took 130 enforcement

actions against fake medication rings in the US from 2016 through 2021. These counterfeiting operations produced tens of millions of pills, approximately 1,000 kilograms (2,200 pounds) of active ingredient powder that could be turned into pills. The Food and Drug Administration also estimated that there are 11,000 rogue pharmacies selling drugs online, where 64,6% of the counterfeit products were sold [4].

In Vietnam, one recent case shook the public about how fake drugs intertwine in Vietnamese people's life without people knowing: Truong Quoc Cuong, 59 years old, head of Vietnam's drugs and cosmetics management in 2021, was arrested and prosecuted as he permitted a local company to import over 54 billion VND (USD 2.38 million) worth of fake medicine for domestic sale.

In this case, there were seven types of counterfeit medicine, which were Extrafovir; Kaderox-250; Kafotax-1000; MGP Axinex-1000, MGP Mosinase-625, H2K Levofloxacin and H2K Ciprofloxacin, disguised under cover of production by a fraud company called Health 2000 Canada, which did not own any drug factory in any location. The investigation showed that 2,4 million fake boxes of these drugs were sold to hospitals,



Fig. 1. Image of counterfeit drugs: Which is fake and real? Can you distinguish?

pharmacies, and pharmaceutical companies in Vietnam and then delivered to citizens in need. Consuming counterfeit drugs poses a grave risk to buyers' health as the fake medicines can affect the body immediately and create severe allergies or life-threatening reactions [5].

Furthermore, in the same year of this case, 2021, customs officers at Huu Nghi border gate in Lang Son province, Vietnam, uncovered fake goods and narcotics in more than 90 cargo containers. All counterfeit items were seized, but they were only a fraction of counterfeit global trade [6].

Not just adults, but even children, are victims of counterfeiting. For youngsters, there are counterfeited traditional and electronic toys. These toys are offered under the same or similar well-known trademarks to consumers, such as Lego, Mattel, and Nintendo. Because counterfeited toys are of poor quality and contain hazardous materials, they pose severe health and safety dangers to little children. Counterfeit toys can cause skin infection, choking, and bursting. Fake electronic toys, particularly video game items, are on the rise as inauthentic suppliers from China sell phoney video games to meet the demand for owning video games at very cheap rates.

"Nintendo, the largest producer of video game products, claims that China, Taipei and Hong Kong (China) are the largest sources of counterfeit video games in the world. Trade-in pirated software is said to be carried out through cartels with connections in all three countries and the United States. The operations of these cartels cost \$800 million in losses to the US market for Nintendo in 1996 (Reuters News Service, 1990-97)" - OECD survey quoted [7].

Two main areas of counterfeit toys are China and Turkey, as factories of the largest toy companies in the world are located here. Genuine and fake products are produced at the exact location and, from there, are shipped worldwide on different

complex routes, making them hard to distinguish and track.

Aircraft component counterfeiting is another concern. An ordinary person would find it difficult to believe that part of the plane they use to travel is fake. Nevertheless, it is a pressing issue that airlines are facing. Washers, bolts, nuts and screws made by small companies worldwide must go through a quality control unit under local governments' supervision. Yet, somehow, the fake parts of Aircraft have found different routes to merge into the supply chain, and then these counterfeit parts are put into the tiny aeroplane or Boeing.

"Although very stringent controls exist for the supply of spare aircraft parts, there have been some incidents of airplane crashes caused by fake components. While a genuine nut is costly to produce and may sell for US\$400, a counterfeit can be manufactured for a fraction of the amount and sold on the black market for a high profit. The black market for aircraft parts in the United States is virtually unregulated and includes more than 5000 brokers (Jackson, 1994)" [8].

Besides counterfeit tangible goods, there is bogus IP.

Counterfeiting and trademark infringement: Counterfeit trademarks happen when products are sold using words, logos, slogans, or any sign similar or identical to the registered trademark. The goods carrying counterfeit trademarks must be used in the course of trade and without the consent of the trademark proprietor to be considered fake trademarks. Therefore, counterfeit trademarks are often intertwined with trademark infringement.

Copyright piracy: TRIPS defined copyright piracy as any goods which are copies made without the consent of the right holder in the country of production and which are made directly or indirectly from an article, where the making of that copy would have constituted an infringement

of a copyright or a related right under the law of the country of importation. Copyright piracy always carries copyright infringement. However, not all infringement acts are piracy. Piracy of copyright work takes away all profit of the original work, and it must be a duplicate of the original. Piracy happens in these categories of copyright products: DVDs and CDs, Digital downloads, Photographs, Broadcasts of sporting events, Books or Journals, and Computer programs.

As the volume of world trade has risen significantly in recent years, so does the volume of counterfeit. Counterfeit issues appear in multiple primary profitable industries of the world economy as well as create harm to the consumers.

So why do people still choose to buy and use counterfeit?

3. Reasons for the rising of counterfeit

To the authors' surprise, most people acknowledged that they have bought and used counterfeit and seem likely to continue to do so. After all the harm counterfeiting items can cause, counterfeiting remains part of living culture in many countries, especially the developing world. So why do they choose to do what they do?

First, because the counterfeit is cheap, the cost of buying a counterfeit product is a fraction compared to the price of an authentic one. The financial reason drive those who favour low-price tags and do not attach to the brand, to buy counterfeit products.

Genuine Yves Saint Laurent handbags (also known as Saint Laurent or YSL) averagely sell for \$1,000 to \$3,000, but with a short click on eBay, consumers can get similar counterfeited ones for as low as \$10. To avoid direct trouble, the Chinese factory replaced the classic "YSL" logo with the "Y8L" logo, but through the shape, patent, and style, most consumers know that they are buying a fake version of the Yves Saint Laurent handbag.

Also, Genuine Hermes Birkins sell in the store from \$10,000 to \$150,000, with a typical Birkin handbag costing above \$25,000, but through a different channel, a fake one can be bought for \$50 - one-third of the price of the ticket to New York Musical Broadway Show.

Another well-known example that must be listed is Gucci. On average, owning an authentic Gucci bag costs buyers \$1000 - \$15000. However, consumers can own a similar one for \$20 and still fool people as the fake looks just like the real one.

Second, many strongly need to keep up with the current fashion trend. They don't mind buying counterfeit as long as they can be rewarded for catching up with the trend and impersonating the star. They are unaware that the picture conveyed by a fraudulent product is wrong. They will, however, happily acquire counterfeit things by focusing on their imagination. Significant investments are unavoidable when a person decides to follow and regularly catch up with the trend, especially in fashion. Such buying behavior dramatically follows the latest fashion trends set by designers and celebrities who wear authentic clothes; these products are too exorbitant for an average individual. For example, in the summer collection 2022 of Dolce & Gabbana, a twill shirt costs around \$1,500 to \$2,000. The price tag does not match the average salary of an ordinary American.

In developing countries, pursuing using authentic items is considered financial suicide. So, to show the trendy vibe, people make friends with counterfeit items. Once the mindset has been set that way, many individuals start to expand the range of counterfeit products, from clothing to many other things, including prescription drugs.

Third, some groups do not care if the items are fake or real. However, a small group of people do not know that they are buying counterfeit goods - although, with the popularity of news and social media, the percentage of this group remains very

low. For example, “58.5% of counterfeit and pirated products traded worldwide in 2016 were sold to consumers who knew they were buying fake products, with the remaining share purchased unwittingly. The share of fakes destined for secondary markets varies significantly by sector, with relatively low values for products directly threatening consumer health and safety (e.g. 31.3% for pharmaceuticals) and high value for luxury products (e.g. 65.4% for fake watches)” [8].

The fourth reason links to law enforcement in developing countries where businesses lack the use of anti-counterfeiting technologies due to lacking money and necessary resources. Implementing product authentication using different ways, such as counterfeit QR codes or NFC tags or cooperating due diligence auditing methods, requires a reasonable budget, available human resources, and accessible education - which many countries do not have.

Weak IP law and a nonfunctional system of monitoring the supply chain are other reasons for counterfeit floods in the country and integrate deep into people’s day-to-day life. One example is Russia. “Russia has been on the Special 301 Priority Watch List since 1997. Russia’s copyright piracy problem remains one of the most serious of any country in the world. According to the IIPA, piracy rates in Russia for most sectors were estimated at around 80% in 2004, and losses exceeded \$1.7 billion. In the past few years, there has been an explosion in the growth of illegal optical media disc plants run by organized crime syndicates with widespread distribution channels. Russia has also developed a serious online piracy problem, as exemplified by offering pirated materials on multiple websites”[9]. However, recently, Russia has taken necessary action to fight piracy and build a better system to watch counterfeits.

The last reason may exist only in this and upcoming centuries as it intertwines with the

significant development of one type of trade channel - eCommerce, which has contributed to large volumes of low-value, small packages. eCommerce has no border. Nowadays, scanning billions of small packages requires humans’ hard work combined with advanced technology. Often, small packets flow in the country through all sizes of logistic companies. However, unfortunately, many of them contained counterfeit products.

In 2022, the US customs border seized 17,001 packages through Airline Express Logistics Service, 6,886 small packages through Post Office, and 1993 cargo containing fake items [10].

These small shipments contain counterfeit goods with the same health, safety, and economic security risks as large, containerized shipments. And not only the US but governments of many other countries also are running projects to scan and seize packages or cargo purchased through eCommerce.

4. Protections again counterfeiting

With the severe threat from counterfeiting as it has grown from a \$30B trade problem in the 1980s to exceed \$3 trillion in 2022, more and more companies and governments are looking deep into multiple ways to fight to counterfeit.

Companies are forming a structured and systematic series of regulations regarding anti-counterfeiting. Besides recurrently using Trade Secret in the method of marking products and paying serious attention to advertising the company’s Trademark to establish goodwill, companies also public their effort to fight counterfeiting through media, which shows the expected and positive impact on their consumers as the consumers choose to buy directly with the retail stores than unknown sources.

Companies also cooperate with government agencies and Non-Profit Organizations (NGOs) to develop a due diligence process, invent anti-

counterfeiting technology, and make proper labelling methods, to exempt the products from future loss in counterfeiting significantly.

Many beauty device technology companies in Japan, like Yaman and Zeus, developed anti-counterfeiting black cards, which store unique and authentic numbers for each device their factory produced. The black card is used as an ID for the item and shows some effectiveness.

In the optical field, the hologram is used to detect counterfeits. This light technology works as a detective when it allows a “two- or three-dimensional image to be recorded on a flat surface as a micro-relief diffraction pattern” [7].

In the electronic field, smart cards are widely accepted as anti-counterfeiting devices. The card is embedded into the computer chip to level up security. Alternatively, in the video or software field, the encrypted codes are often tagged deep in the product to distinguish the copied version from the original one; lower the video quality or make the software unable to work as expected.

In chemical technologies, the photochromic (or light-reactive) and thermochromic (or heat-reactive) inks are often counted as the most productive way to fight counterfeit. These types of ink will be put on the label, package, or product itself. In addition, these types of inks generally are invisible to human eyes but can be detected by machines - making them more reliable tools for discovering and disqualifying the copied version.

Networking and collaborating are great ways to strengthen and fight as a group. A large number of national anti-counterfeiting organisations worldwide are listed in Table 1. Most of these organizations work directly with their government but also support other countries in the neighboring regions. Recently, many government agencies in different countries have taken the matter into their hand as they start to build tools and a database

to measure the impact of counterfeiting on their land. These government associations also provide advanced training to customs officers regarding detecting and handling counterfeited items.

Table 1. List of national anti-counterfeiting organizations around the world.

Base	Organisation	Acronym
Bangladesh	Anti-Counterfeit Association	
Belgium	Anti-Counterfeit Association	BACA
France	Comité Colbert (luxury goods)	
France	Union des Fabricants	
Germany	Anti-Piracy Organisation	VBP
Hungary	Brand Protection Association	BPA
Italy	Anti-Counterfeiting Advisory Group	
Italy	International Anti-Counterfeiting Committee	COLC
Japan	Customs IP Information Centre	CIPIC
Korea	Korean IP Office	KIPO
Netherlands	Anti-Counterfeiting Foundation	
Philippines	COMPACT	
Philippines	The IP Association	IPA
Spain	ANDEMA	
Sweden	Anti-Counterfeiting Group	ACG
Thailand	Anti-Counterfeiting Committee	MOEA
United Kingdom	Anti-Counterfeiting Group	ACG
United States	International Anti-Counterfeiting Coalition	IACC
United Kingdom/France	Counterfeiting Intelligence Bureau	CIB

Source image: <https://www.oecd.org>.

Also, many formed and active working associations exist in the private industry listed in Table 2 below. Some build educational material, courses, or channels to educate people about counterfeiting; some associations lobby to create anti-counterfeiting laws. Even though pursuing different methods in fighting counterfeits, they all research, gather and frequently publish data regarding the counterfeit and its impact on multi aspects of human life.

Table 2. List of anti-counterfeiting associations in specific fields.

Product	Organisation	Acronym	Base
Software	Business Software Alliance	BSA	United States
General	European Brands Association	AIM	Belgium
Audio films	International Federation of Film Producers	FIAPF	France
Musical recordings	International Federation of the Phonographic Industry	IFPI	United States
Copyrights	International Intellectual Property Alliance	IIPA	United States
Spirits	International Federation of Spirit Producers		Hong Kong (China)
Motion pictures	Motion Picture Association	MPA	United States
Watches	Swiss Watch Federation		Switzerland
Toys	Toy Industries of Europe	TIE	Brussels

Source image: <https://www.oecd.org>.

Furthermore, consumer education remains the most effective way to fight to counterfeit. The 2019 International Trademark Association (INTA) study showed that 74% of Gen Z respondents think buying genuine products is essential. Governments and associations worldwide have built many

campaigns to educate consumers, especially young consumers about the importance of trademarks, brands, and the dangers of counterfeit products. For example, the National Geographic Society runs yearly Campaigns Against Counterfeiting and Piracy for students. International Trademark Association also host Unreal Campaign to educate the youth about the danger of counterfeiting.

But, after all: It is impossible to fully protect products from being counterfeited.

Despite this saying, experts and consumers around the world argue that the mentioned above methods are helping with people's awareness and the battle against counterfeiting.

5. The counterfeits situation in Vietnam

As a part of the world and a bridge in international trade channels, Vietnam carries the pain of fighting counterfeits like many other countries.

Market Management Department under the Ministry of Industry and Trade stated that the department dealt with 90,000 counterfeit cases a year, mainly in the form of knock-off beverage products, cigarettes and garments. The department also imposes fines annually worth some VND 400 billion (over \$19 million). In the first quarter of 2014, over 25,000 counterfeit cases were resolved; however, many more went undetected. Eighty percent of counterfeit goods in Vietnam come from China, and recently, there has been a trend of producing fake goods bearing famous Vietnamese brand names. "A facility could make more than 1,000 counterfeit products of a well-known brand, especially since the bag factories of big companies are mainly located in Vietnam," the director of a local bag brand revealed. According to data from The Market Surveillance Department (MSD) under the Ministry of Industry and Trade (MOIT), which is still the core enforcement agency in anti-counterfeiting, it tackled 2,282 cases of IP counterfeits and infringements in 2015. This number leapt to 4,874 cases in 2016.

Solution for consumers in a market filled with counterfeits:

- Scrutinise labels, packaging, and contents: It is very hard to identify fake goods or authentic just by simple looks; however, the tags, packaging and content proved their usefulness when choosing legit products. Consumers should buy from established, reputable sellers for purchases above 500\$, especially in computer devices, electronic devices, and drugs. Besides, consumers should look for broken seals, expired dates, and contents in the package to verify if the goods were modified. Consumers should remember that for drugs or medicine, do not buy from unknown sources. Consumers should contact their doctors for trusted sources for their treatments.

- Avoid buying products without tax charges: Consumers should check their receipts to verify the payment and sale tax charges. Often, the seller of counterfeits won't add tax charges or clarify their finances with authority; therefore, they will take away sale tax charges or hide it internationally. Be aware of the receipt for missed sale tax charges.

- Always seek established, authorised and trusted sellers or retailers: Consumers should buy goods from qualified sellers or retailers. Consumers can find the list of retailers or sellers in the registered directory with the government, like the tax bureau or entrepreneur union. Buying from an unknown vendor can contain a high risk of getting counterfeits.

- Educating your family, friends, and people you know about counterfeits: Not everyone is aware of the harmful impacts of counterfeits on them individually; from the above analysis of the effects of counterfeits on human health, consumers should educate people in their network about counterfeits, how to spot them, and where to buy legit products.

- Don't fall for sale: The consumer should be aware and cautious about the deal "too good to be

true". The sale of 70-90% may involve counterfeit goods.

- Using secure payment or purchasing system: The consumer should use certain payment methods for their transaction and stop if the consumer thinks the purchasing system is unsafe to put information into.

- Educating your children about counterfeiting.

- Report fake goods, suspicious vendors, and spam of goods.

6. Solution for brands in the battle of counterfeits

An anti-counterfeiting strategy should be built in close cooperation with law enforcement agencies. Register a trademark with authority; generally, it is the Intellectual Property Office of the countries where brands sell goods; register the trademark with Customs and Border Protection, then spend time teaching these officers about your goods and fakes in the main border or ports. They will be efficient in stopping goods.

In addition, local police are often better and more responsive than larger federal agencies, especially for smaller cases; often, state governments have active consumer protection agencies with law enforcement capabilities, so utilize this force in fighting small counterfeits vendors or self-made factories in a small radius. At the discovery of the counterfeits, brands can request such actions below: "destruction of counterfeits; removal of unlawfully applied marks from goods or packaging; commencement of administrative proceedings and confiscation of counterfeits; and initiation of civil action against the owner of the counterfeits" [11]. Brands can also pursue infringers by filing a petition to initiate administrative, criminal or civil action against imports of counterfeits, IP infringement, or a civil claim against parallel importations.

Suggestion for monitoring counterfeits in the upcoming future:

One evident and trendy way of monitoring and fighting counterfeits is using advanced technology. QR and RFID schemes can use blockchain technology to prevent fraud and counterfeiting. To improve product safety, international pharmaceutical, alcohol, and food industries already use QR codes and RFID tags to track products as they move from factory to consumer. The code or tag is a digital product ID scanned every time the product changes hands so the consumer can trace its origin and history.

Other high-tech methods must be mentioned holographic bubbles, radio-frequency identification chips, and smart tags. They come in handy for tracking and identifying the fake goods as well.

7. Conclusions

Counterfeiting brings in bad costs at different levels in different fields, but the terrible impact has spread in all directions.

Counterfeiting creates a direct loss in sales to the right holders of the primary industry where counterfeiting occurs. As a result, billions of dollars yearly are lost to counterfeiting, and millions of jobs are cut down. Besides losing profits, companies are afraid that their goodwill will collapse, especially if these companies want to link themselves to the image of quality brands.

Counterfeiting severely harms the consumers' health and, from there, affects the state of health and the function of a country.

Counterfeiting creates high economic costs for the country where counterfeit takes part in. Loss of sales, loss of tax revenue, loss of jobs, discouraging investment in products, and discouraging invention will happen if a country tolerates counterfeit for a long time.

Removing the norm of using counterfeit entirely from society will be challenging, but it is possible. The longer the delay in government action, the more

profound the norm in the people's mindset, and the expenses needed to spend fighting counterfeits will rise. Understanding the issues will help build a suitable series of actions to fight counterfeiting. And after understanding the problems caused by counterfeiting, it will be time to take action.

CRediT author statement

Tram Nguyen: Conceptualisation, Methodology, Writing - Original draft preparation; Tang Li: Conceptualisation, Editing.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

[1] OECD and European Union Intellectual Property Office (2019), "Trends in trade in counterfeit and pirated goods", DOI: 10.1787/g2g9f533-en.

[2] D. McKevey (2019), "Essex based gang supplying fake tobacco sentenced", *Linkedin*, <https://www.linkedin.com/pulse/essex-based-gang-supplying-fake-tobacco-sentenced-david-mckelvey/>, accessed 15 January 2022.

[3] United States Patent and Trademark Office (2019), "Counterfeit medications", <https://www.uspto.gov/ip-policy/enforcement-policy/counterfeit-medications>, accessed 15 January 2022.

[4] The U.S. Food and Drug Administration (2022), *Criminal Investigations*, <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/criminal-investigations>, accessed 15 January 2022.

[5] T. Lam (2022), "How 7 types of fake drugs in the VN Pharma mission were 'cleared the way' for supply", *VnExpress*, <https://vnexpress.net/7-loai-thuoc-gia-trong-vu-vn-pharma-duoc-don-duong-cap-phep-the-nao-4413918.html>, accessed 15 January 2022 (in Vietnamese).

[6] V. Tho (2021), "Drugs, counterfeits discovered in cargo containers in transit in Vietnam", *Tuoi Tre News*, <https://tuoitrenews.vn/news/society/20210524/drugs-counterfeits-discovered-in-cargo-containers-intransit-in-vietnam/61111.html>, accessed 15 January 2022.

[7] Organization for Economic Cooperation and Development (1998), "The economic impact of counterfeiting", <https://www.oecd.org/sti/ind/2090589.pdf>, accessed 15 January 2022.

[8] Organization for Economic Cooperation and Development (2007), "The economic impact of counterfeiting and piracy", <https://www.oecd.org/sti/38707619.pdf>, accessed 15 January 2022.

[9] United States Copyright Office (2005), "Statement of Marybeth Peters, the register of copyrights before the Subcommittee on Intellectual Property, Committee on the Judiciary", <https://www.copyright.gov/docs/regstat052505.html>, accessed 15 January 2022.

[10] U.S. Customs and Border Protection (2021), <https://www.cbp.gov/>, accessed 15 January 2022.

[11] A.L. Lim, D. Sando, N. Moshynska, et al. (2017), "How to combat counterfeiting", *World Trademark Review*, <https://www.worldtrademarkreview.com/article/how-combat-counterfeiting>, accessed 15 January 2022.

Reducing health inequalities in Vietnam: Implications for health in all policy

Nguyen Anh Dang^{1*}, Thi Phuong Thao Nguyen²

¹*Institute of Sociology, Vietnam Academy of Social Sciences,*

1 Lieu Giai Street, Lieu Giai Ward, Ba Dinh District, Hanoi, Vietnam

²*School of Public Policy and Urban Affairs, Northeastern University, 310 Renaissance Park,*

1135 Tremont Street, Boston City, Massachusetts State, United States

Received 26 April 2022; revised 18 July 2022; accepted 25 July 2022

Abstract:

Inequalities in healthcare are critical issues and reaching disadvantaged groups is necessary to close the current gap. In many areas of the country, especially in the ethnic and remote regions of Vietnam, a citizen's access to social services and use of health resources are limited. Vietnam is currently undertaking various measures to reduce health inequalities among specific populations, especially ethnic minorities. The government is re-designing the healthcare system to ensure its resilience and inclusiveness by enhancing equal access to health services specifically in the context of COVID-19. The goal is to reduce gaps in service that have great influence on citizen's health outcomes particularly across ethnic groups. To address these gaps, the Government may consider the following suggestions: (1) Increase the efficiency, effectiveness, and sustainability of health insurance; (2) Build partnerships across sectors; and (3) Integrate health in all policies. A combination of both building partnerships across sectors and integrating health in all policies should be promoted. In this article, the authors make policy recommendations to effectively address the complex and multi-faceted issues of health inequalities in Vietnam.

Keywords: ethnic minorities, health in all policy, health inequalities, social inclusion.

Classification number: 7

1. Introduction

Health inequalities are unjust and avoidable differences in the health of citizens across the population and between specific population groups. Health inequalities go against the principles of social justice because they can be preventable. The existence of health inequalities means that the right of an individual to access the highest attainable standard of physical and mental health is not being experienced equally across the population and between specific social groups. Health inequalities refer to differences in health care among specific population groups. These inequalities are driven by structural factors and determined by circumstances beyond an individual's control. Today's income

disparity and the existing COVID-19 pandemic are major factors widening inequalities in health. These circumstances limit a citizen's opportunities to live longer and healthier. Different determinant factors can make it difficult for vulnerable groups to access and utilize health services. These include class, race, ethnicity, gender, income, education, residence, disability, all of which can affect an individual's ability to achieve good health.

1.1. Health inequalities in Vietnam

For many decades, Vietnam has achieved good results in terms of health outcomes for its citizens, providing an example of a relatively low-income country that has succeeded in its public health efforts despite the lack of resources [1, 2]. However,

*Corresponding author: Email: danganhphat1609@gmail.com

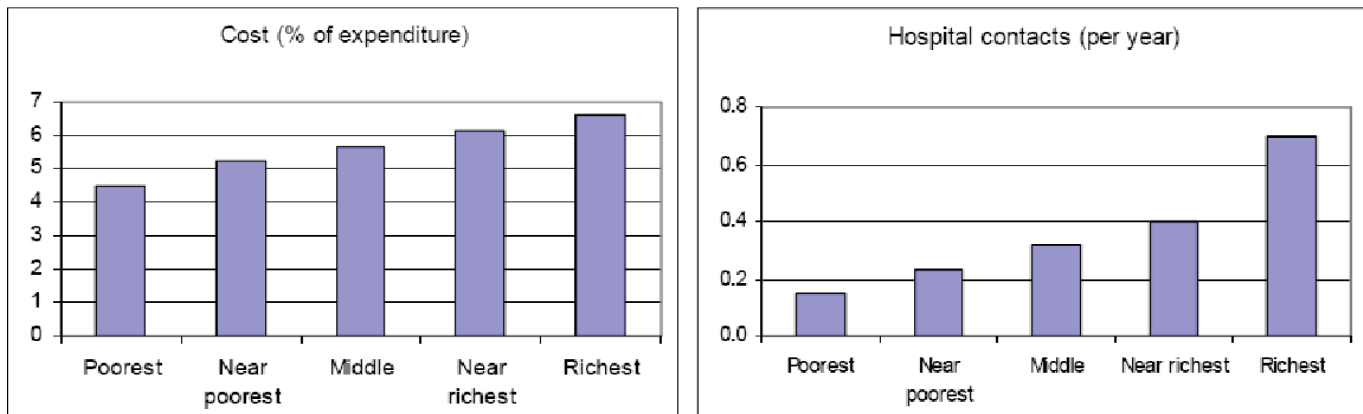


Fig. 1. Widening health inequalities in Vietnam [7].

during the first decades of the 21st century, ethnic groups and those living in mountainous areas in Vietnam have suffered from health inequality due to differences in socioeconomic and environmental factors. It is no surprise that the poor and ethnic minorities have limited access to resources and receive less health care [3, 4].

Indeed, health inequalities persist in Vietnam among the poor, ethnic minorities, and disadvantaged people. To identify this problem, it is necessary to examine the uninsured population in the current healthcare system. Over the past decade, according to the Vietnam Social Security (2021) [5], the extent of health insurance coverage in Vietnam has been increasing over time (65% in 2012, 75% in 2015, and 91% in 2021). Despite these efforts, many people still rely on out-of-pocket payments. T.D. Nguyen, et al. (2016) [6] indicated that only one-fifth of the near-poor population (20.3%) were covered by health insurance. They found that there was a significant link between enrolment in health insurance and poor health status. Vulnerable groups are likely to forgo adequate access to health-boosting resources, which leads to health inequalities among specific populations. The poor also have less frequent visits to the hospital and spend less on healthcare than the rich in Vietnam (Fig. 1).

There are numerous factors influencing health inequalities. The income gap between ethnic minority groups and the majority group of

Kinh/Hoa¹ is a strong determinant of health inequality, which is significant and has been increasing over time. Ethnic minorities belong to the lowest income quintile while the Kinh/Hoa group is of a much higher quintile. At present, 35% of ethnic minorities are still living in poverty. This means reducing extreme poverty is more of an inclusion agenda to help ethnic minorities have more share in the growth process [5]. People in poorer areas are not able to obtain all the healthcare services they need. Meanwhile, the rich have four times greater access to healthcare services as compared to the poor. In addition, poorer citizens in residing in mountainous areas have six times less access to health services than the rich in lowland areas.

Although Vietnam's child mortality rate is generally very low compared to current national income levels, it remains quite high among ethnic minorities. The rate of undernutrition among children under 5 years of age has only slightly improved while the infant mortality rate is four times higher than that of the Kinh and Hoa groups [9]. As reported by the Vietnam Social Security (2021) [5], poverty, lack of education, as well as unemployment are barriers that the poor and ethnic minorities must overcome to gain access to health

¹In Vietnam, Kinh and Hoa ethnic groups both lived in the relatively developed regions characterised by the highest level of income. They accounted for over 86% of the total population in 2019 [8].

services despite the fact that they are provided with free health insurance. M. Malqvist, et al. (2013) [2] found that geographic separation affects the ability of ethnic minority groups to access healthcare services. Generally, these citizens tend to isolate themselves in mountainous and remote regions. A number of programs such as the “Socio-Economic Development Program for the Communes Facing the Greatest Hardships in Ethnic Minority and Mountainous 15 Areas” (Program 135) have been established to build infrastructure and improve public services in mountainous and remote areas. However, health services and infrastructure remain unavailable, and citizens in highland areas have less access to health services than those in lowland areas. The poor mainly visit commune health stations, which are poorly equipped and understaffed. Because of geographical difficulties, patients visit health facilities only when they are in serious condition.

The frequency of access to maternal health care services of the richest group was three times higher than that of the poorest group. About 25% of the poorest get access to health care services as compared with 67% of the richest. Citizens that have completed secondary school had a three times greater chance of accessing maternal healthcare services than those who are illiterate. Maternal mortality rates in the poorest 62 districts in Vietnam are five times higher than the national average, and ethnic minority children have a four-fold higher level of infant mortality. Although the population has seen a decrease in infant and under-five mortality rates, these rates have increased among ethnic minorities [10].

According to a survey undertaken by the Hanoi University of Public Health and the World Health Organization (2021) [11], catastrophic health expenditures have already pushed many households into poverty, leading to lower income that negatively affects their health status (Fig. 2). Most of these citizens are forced to pay out of pocket for health treatments and expenses that exceed their financial capability by at least 40%.

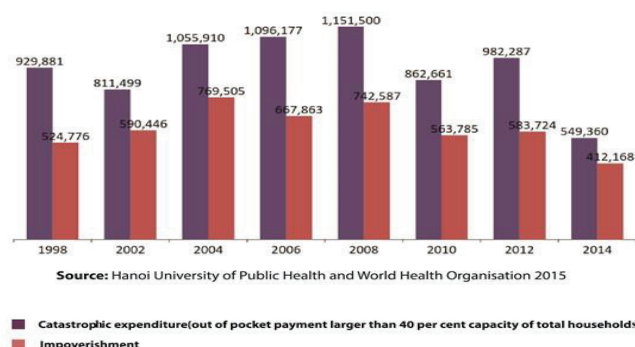


Fig. 2. Households with catastrophic expenditure and impoverishment [11].

In addition to income, poverty, and residential location, language barriers are also cited as a major factor influencing health inequality. Q.T. Tran (2015) [12] showed that ethnic minorities in the Northwestern region went to the hospital for examination but could not speak the Kinh language. As a result, this created an invisible barrier in communication between doctors and patients. The study reported ethnic patients found it difficult to navigate the health system as well as urban facilities such as bus transport when they had to seek medical services.

1.2. Health inequalities in the COVID-19 outbreak

Since 2020, Vietnam has experienced an unexpected infection surge with coronavirus outbreaks (COVID-19). The pandemic has imparted negative impacts of rising poverty, livelihood, and widening income inequalities. All areas across sectors such as food security, travelling, livelihood, unemployment, health, education, and culture have been largely affected. Ethnic minorities and low-income citizens living in mountainous regions were hit the hardest. In addition, the COVID-19 pandemic also caused serious psychological and mental health damage. Individuals across the globe have been experiencing anxiety, insecurity, and stress due to job loss, reduced income, lockdown, testing, infection, pains, and hospitalization.

According to United Nations Development Fund for Women (UNIFEM) and United Nations Development Programme (UNDP) (2020) [13], the impact of COVID-19 exacerbated stark disparities between low-income ethnic minorities and those living in big cities, reversing the government's efforts of narrowing down inequalities. The study revealed a greater loss in income for ethnic minorities than for Kinh households in the same area. Regarding the share of total household income, ethnic minority households (70.3%) suffered a reduction of 4.8 percent points higher than Kinh households (65.5%).

The health and lives of children in ethnic minority areas were found seriously affected by their limited access to healthcare services. As a result of social distancing during the COVID-19 pandemic, many ethnic minority families faced a greater difficulty accessing health services. As reported by Institute of Labour and Social Affairs (ILSSA), Arish Aid, and UNWomen (2021) [14], about 88% of commune health stations had to temporarily stop providing vaccination services during social distancing. At the same time, advocacy and guidance on child healthcare as well as the regular monitoring of child development of children under 5 years old were also temporarily suspended. The same study revealed that the nutrition levels of ethnic minority children have been significantly affected during the COVID-19 pandemic, especially those living in poor households. However, emergency support policies have not provided prompt support to meet the demands of affected groups of children.

Therefore it is necessary to immediately formulate relevant health policies to remedy the negative impacts of COVID-19 on health equity and to protect vulnerable groups, especially ethnic minorities, from health crises. Indeed, such negative impacts are long lasting and not easy to overcome. This problem is challenging not only because national reserves are heavily strained by public spending to mitigate pandemic impacts, but also due to inequality issues.

To ensure that ethnic minority households benefit from the government's support of people affected by the COVID-19 pandemic, mainstreaming health equity into policies for recovery and development post-COVID-19 must be safeguarded. Local citizens and healthcare workers require more information and basic resources for disease control. More importantly, they need effective access to healthcare services and knowledge about COVID-19 prevention methods such as wearing masks, washing hands, sanitizing their homes, practising 5K², and ensuring personal hygiene daily. In this regard, research assessment and communication are necessary to inform authorities in a timely manner and provide them with evidence for making decisions.

2. Conclusions and policy suggestions

Inequalities in healthcare are critical issues and reaching disadvantaged groups is necessary to close the current gap. In many areas of the country, especially in the ethnic and remote regions of Vietnam, a citizen's access to social services and use of health resources are limited. There are structural factors creating health inequality gaps, one of which is poverty in ethnic groups. Addressing this requires policy and program interventions to overcome key challenges imposed by geography constraining the integration of ethnic minorities and citizens living in lagging areas who are not yet fully engaged in the more dynamic parts of Vietnam's economy.

So far, Vietnam has taken steps to build an environment favourable for the protection and improvement of their citizen's health. Resolution No. 20-NQ/TW dated 10/25/2017 focuses on the targeted groups including ethnic minorities, households, and enterprises in ethnic and mountainous areas. During the 1990s, the government initiated the Health Fund program to cover basic health services for the poor. In 2010, Vietnam adopted universal health coverage as part of its national agenda for health development and

²The Ministry of Health has officially announced a message featuring 5K (in Vietnamese): *Khau trang* (facemask) - *Khu khuan* (disinfection) - *Khoang cach* (distance) - *Khong tu tap* (no gathering) - *Khai bao y te* (health declaration) in order to help citizens get used to living safely with COVID-19 in "new normal" period.

has implemented a series of policies and reforms to achieve such goals.

The Law on Health Examination and Treatment, considered one of the most crucial reforms undertaken by the government, was amended in 2017 in order to ensure affordable medical services at all levels and has proved to be an important legal base for reducing health inequalities. However, health inequalities cannot be solved or eliminated by merely one single policy, which can be deteriorated in large-scale crises such as the COVID-19 pandemic. Placing citizen health and life first is a humane approach in pandemic prevention efforts in Vietnam. In particular, taking care of mental health, especially when living together with a pandemic, is very necessary along with efforts to treat and save patients while reducing the number of deaths from COVID-19. Conducting timely diagnoses and treatments of mental health are important to protect citizens from the negative, long term, and dangerous impacts of the COVID-19 pandemic [8].

Therefore, the government should combine a variety of strategies from multiple angles and mobilise not only internal but also external resources to address this issue. Fostering strong cooperation is essential for creating a collective impact for changes that meet the needs of citizens. The Ministry of Health can play a bridging role associated with various stakeholders such as experts, advocates, practitioners, and the business and private sectors. Further, it can function as a facilitator to open channels for collaboration across sectors so that all stakeholders are engaged in the design and implementation of policies to address health inequalities. Once harmony is found and responsibilities are assigned to go beyond one-time collaboration, health equity policy will become the most effective at advancing its primary goals.

To continually improve health equity, it is necessary to pursue social inclusion in healthcare and support. Therefore, the government should commit to:

1. The promotion of healthcare and medical treatment to all citizens towards equity, efficiency, and inclusion so that the health system is

developed to meet the needs of all social segments and approaches international standards.

2. The improvement of public policies to ensure citizens are protected, cared for, and that their health quality is enhanced toward an inclusive “new normal” during the period of socio-economic recovery from COVID-19.

3. The guarantee for citizens of all backgrounds to be able to access appropriate health services culturally and linguistically and digital technologies that can improve the delivery of health care and social protection services.

4. The mobilisation of effective collaboration with other agents, private health providers, community-based organizations, residents, and other partners.

Indeed, there are three strategic alternatives that can be considered to achieve health equity. They also facilitate collaboration among stakeholders in their efforts to reduce health inequalities, namely:

2.1. Increase the efficiency, effectiveness, and sustainability of health insurance

The system of health insurance has been institutionalized in pursuit of universal healthcare in Vietnam. The implementation of the health insurance policy for the poor and near-poor has not only taken an important step forward in the fight against poverty but has also provided vulnerable citizens with effective protection. The Ministry of Health has developed a plan to improve the efficiency of health insurance use among citizens of ethnic minority, in mountainous areas, and poor households. Concurrently, the government should revise the level of co-payment for medical examination and treatment costs for the near-poor to overcome their difficulties seeking long-term treatment of chronic diseases (e.g., haemodialysis, cancer, diabetes, etc.), which involves high costs and long-term payments.

2.2. Build partnerships across sectors

It is essential to build partnerships across sectors by engaging the private sector to advance coalition-led efforts that improve the healthcare system. The Ministry of Health needs to engage

with other stakeholders to leverage resources and existing funding as well as foster collective action. Reaching out to citizens experiencing the greatest health disparities and engaging with them toward participation is considered one of the best strategic plans to address health inequalities. This approach requires a multi- and cross- sector collaboration that relies on effective engagement and strong support from different sectors to work toward a common good.

2.3. Integrate health in all policies

The health in all policies approach can help sustainable and consistent access to healthcare. It requires close cooperation and collaboration among stakeholders, who best understand the community context to incorporate health in decision-making and monitoring processes. To be successful, this approach entails strong commitments from policymakers and health service providers, which contribute to the development of trust and an allocation of responsibilities assumed by various stakeholders.

CRediT author statement

Nguyen Anh Dang: Conceptualisation, Writing, Reviewing; Thi Phuong Thao Nguyen: Writing and Editing.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

[1] A. Gabriele (2006), "Social services policies in a developing market economy oriented towards socialism: The case of health system reforms in Vietnam", *Review of International Political Economy*, **13**(2), pp.258-289, DOI: 10.1080/09692290600625504.

[2] M. Molqvist, D.T.P. Hoa, N.T. Liem, et al. (2013), "Ethnic minority health in Vietnam: A review exposing horizontal inequity", *Global Health Action*, **6**(1), DOI: 10.3402/gha.v6i0.19803.

[3] A. Sepehri, R. Chernomas, A.H.A. Lodhi (2003), "If they get sick, they are in trouble: Health care restructuring, user charges, and equity in Vietnam", *International Journal of Health Services*, **33**(1), pp.137-161, DOI: 10.2190/MXC5-CQ0A-XK3M-KPUB.

[4] The World Bank (2021), "Shared gains: How high growth and anti-poverty programs reduced poverty in Vietnam", <http://documents.worldbank.org/curated/en/282401615960140813/Shared-Gains-How-High-Growth-and-Anti-Poverty-Programs-Reduced-Poverty-in-Vietnam-Vietnam-Poverty-and-Shared-Prosperity-Update-Report>, accessed 20 December 2021.

[5] Vietnam Social Security (2021), "Summary of implementation of Decision no. 21-NQ/TW of the Ministry of Finance on strengthening the Party's leadership in health work in the period 2012 - 2020", <https://baohiemxahoi.gov.vn/chidaodieuhanh/Pages/thong-tin-bao-chi.aspx?CatelD=0&ItemID=17842&Otltem=date>, accessed 20 December 2021 (in Vietnamese).

[6] T.D. Nguyen, A. Wilson (2016), "Coverage of health insurance among the near-poor in rural Vietnam and associated factors", *International Journal of Public Health*, **62**, DOI: 10.1007/s00038-016-0911-z.

[7] M. Rama (2007), "Social protection and labor markets in Vietnam", *Commission on Growth and Development: Labor Markets and Growth*, October 15, 2007, Washington D.C: World Bank.

[8] General Statistical Office (2020), *Completed Results of The 2019 Vietnam Population and Housing Census*, Statistical Publishing House, Hanoi, 842pp (in Vietnamese).

[9] N.A. Dang (2021), "Influences of COVID-19 pandemic on mental health", *Southern Social Sciences Review*, **10**(278), pp.8-19.

[10] United Nations Population Fund and the Ministry of Health (2017), "Exploring barriers to accessing maternal health and family planning services in ethnic minority communities in Vietnam", <https://vietnam.unfpa.org/en/publications/exploring-barriers-accessing-maternal-health-and-family-planning-services-ethnic>, accessed 20 December 2021.

[11] World Health Organization (2021), "Financial protection", https://www.who.int/health-topics/financial-protection#tab=tab_1, accessed 20 December 2021.

[12] Q.T. Tran (2015), "Income sources and inequalities among ethnic minorities in the Northwest region, Vietnam", *Environment Development and Sustainability*, DOI: 10.1007/s10668-015-9700-8.

[13] United Nations Development Programme (2020), "COVID-19 socio-economic impact on vulnerable households and enterprises: A gender-sensitive assessment", <https://www.undp.org/vietnam/publications/covid-19-socio-economic-impact-vulnerable-households-and-enterprises-gender-sensitive-assessment>, accessed 20 December 2021.

[14] B.T. Hien, N.T.B. Thuy, H.T. Hang, et al. (2021), "The impact of the on ethnic minorities in Vietnam, regarding their access to social protection and direct cash transfer policies, from a gender equality lens COVID-19 pandemic", *United Nations Entity for Gender Equality and The Empowerment of Women*, <https://asiapacific.unwomen.org/sites/default/files/Field%20Office%20ESEAsia/Docs/Publications/2021/11/vn-DTTS-ENG.pdf>, accessed 20 December 2021.

FUNAN (Phu Nam) from a new perspective

Minh Giang Vu*

Vietnam National University - Hanoi,
144 Xuan Thuy Street, Dich Vong Hau Ward, Cau Giay District, Hanoi, Vietnam

Received 10 January 2022; revised 23 March 2022; accepted 8 April 2022

Abstract:

Funan (Phu Nam) is a historical entity that existed during the first seven centuries CE and left a tremendous cultural heritage. For different reasons, many historical aspects of this kingdom remain unexplored. For a long time, it was studied mainly through scattered and sketchy records collected from ancient Chinese bibliographies. Only after the archaeological discovery of the Oc Eo by Louis Malleret did the historical understanding of the Funan kingdom become fuller. However, due to the war, the research was unable to progress further. After 1975, Funan was revived mainly within circles of archaeological studies. Using novel archaeological evidence, this article reconstructs the lives of Funan inhabitants. It sees Oc Eo as a culture of indigenous origin with a community speaking Malayo-Polynesian languages. It also shows that the Oc Eo indigenous culture had lasting vitality. Despite the fact that the Funan state collapsed in the seventh century, archaeological evidence demonstrates many of its cultural traditions preserved and developed by later southern communities.

Keywords: Funan, Oc Eo, Southern Vietnam.

Classification number: 8.1

1. Historical understanding of the Funan Kingdom

There has been a long history of studying Funan. Before Louis Malleret discovered the Oc Eo archaeological site in 1944, we could only trace vestiges of this ancient Kingdom, which was located in Southern Vietnam, according to Chinese records and ancient stele. French researchers have also raised questions about ancient irrigation works found on pictomaps since the 1930s. In ancient Chinese records, Duong Phu's *Di Vat Chi* from Eastern Han (23-220) is the earliest reference to the Kingdom, but the record was very vague [1]. There are other documents showing that in the following years traders and emissaries of

Funan regularly had exchanges with Giao Chau's counterparts in the North. For more than half a century under the rule of Dong Wu (210-263), activities in Giao Chau, including interactions with Funan, were documented in official historical files such as the *Ngo Thu* of the Three Kingdoms [2]. In this account, names and titles like Phu Nam Quoc (Funan Kingdom, 扶南国) and Phu Nam King (Funan King, 扶南王) were used to refer to the population and leader of a country in Southern Vietnam, respectively. Based on information in ancient Chinese records from the late nineteenth century, some European scholars have theorized the existence of a kingdom called Funan between

*Email: giangvuminh@gmail.com

the beginning of the first millennia to around the sixth and seventh century [3]. Later, understanding of the Kingdom was also supplemented with epigraphical documents written in Sanskrit [4] based on which researchers could indicate the location of Funan, which was mainly in the lower Mekong and partly in the southeast border region of Cambodia.

When French archaeologist Louis Malleret excavated Oc Eo (today's Thoai Son district, An Giang province), a series of architectural vestiges were found and many artifacts were unearthed. The discoveries were largely foundations of Indian-style architectures. Gradually, with much more architectural materials found on the extended archaeological sites, researchers were able to postulate about the existence of an ancient city. These materials reflected a high level of achievements in terms of both the material and spiritual life. The existence of many gold, silver, and zinc currencies is also an indicator of trade developments. One discovery that attracted special attention was two gold coins that resembled those with inscribed images of Antoninus Pius and Marcus Aurelius. Although the existence of these artifacts in Oc Eo with origins from Southern Europe remains a mystery that needs further extensive research, the availability of Roman monies is a compelling evidence of a highly developed international trading port.

After Malleret's discovery, because of the war, archaeological research made almost no significant progress over the next 30 years. Publications related to Funan were mainly based on ancient writings, and the French already published epigraphical materials or general historical studies of the area. The major limitation of research before 1975 is that they have not delved into the relationship between ancient legends and records of Funan and the archaeological findings of Malleret and French scholars on the Oc Eo culture. This research found almost no fundamental difference between the two periods before and after the destruction of the

Kingdom of Funan [4]. After 1975, archaeological excavations were reorganized, but they were mainly carried out based on historical and cultural presuppositions of the southern provincial governments. The results of these excavations verified and expanded Malleret's research achievements, establishing a relatively complete picture of the area and periodizing major stages of development of the Oc Eo culture, and providing a more concrete view about the inhabitants [5]. Nonetheless, there was a lack of attention to the origin of the owners of the Oc Eo culture and the historical evolutions of Funan.

A new feature in the study of the Oc Eo culture after 1995 was the participation of foreign archaeologists including French, German, and Japanese scholars, especially Piere-Yves Manguin, the representative of the French School of the Far East (École française d'Extrême-Orient - EFEO). New findings at archaeological sites on both Vietnamese and Cambodian territories have revealed a close linkage between Oc Eo cultural cores and Angkor Borei (Takeo Province). At the workshop "The Oc Eo Culture and The Kingdom of Funan," held in 2004, an important research direction on Funan was launched. It cut the development of Funan into two periods: the Kingdom era (from the beginning of the first millennia AD to the beginning of the third century) and the Empire era (from the third century to the beginning of the seventh century). This periodization is substantiated by both historical and archaeological evidence, paving the way for the study of Funan's history in relation to the lands outside Vietnam's territory [6].

Important aspects for understanding Funan are the characteristics of the population and the "post-Funan" era. In 2006, the Vietnamese Historical Science Association published a book titled *A History of Vietnam's Southern Land* in which the authors relied on linguistic and cultural evidence to argue that the inhabitants of Funan mainly spoke a language from the Malay-Polynesian family.

Most of the inhabitants of the Mon-Khmer group came to the south in the seventh century, after Funan was defeated by Chenla. This book also points out that for ten centuries (from the seventh to seventeenth centuries), the land was virtually unmanaged, completely devoid of administrative units and almost abandoned, sparsely populated, and underdeveloped [7]. An important step toward a more scientific understanding of the Kingdom came from interdisciplinary research about the formation and development of the land, which was published in ten monographs in 2017, including a focus on the history of the land before the seventh century corresponding to the formation and development of Funan [8].

So far, researchers have not found reliable evidence to estimate the beginning of Funan. Most researchers rely on mythical accounts recorded in ancient Chinese about the marriage of an indigenous “queen” to a character from India. The core of this story is later supported by archaeological evidence. The remains of what is believed to be an Oc Eo port show that this is not just an imported product. Approaching the Oc Eo era, this area had developed high-yielding rice cultivation reaching the level of a true agricultural civilization. Clearly, there was a combination of an indigenous rice farming culture with external commercial and religious factors. Founded upon a highly developed rice agriculture, the emergence of a city around the first and second century AD with architectural density, including large-scale religious buildings, a system of canals, and many sophisticated ornaments made of rare materials, is vivid evidence of a material infrastructure, social foundation, and spiritual life. All of these must be supported by a well-developed state organization.

Based on existing research evidence, it may be assumed that the archaeological findings at Oc Eo and other sites are vestiges of the Kingdom of Funan that was mentioned in varying ancient texts and epigraphical documents. The state of Funan emerged around the first century AD. It resulted

from the interactions between endogenous factors, a highly developed rice agriculture supported by well-organized social structures, and exogenous elements like commercial and religious activities arriving from the Indic civilization [8]. Before the Common Era, interregional trade between the Indian and Pacific Oceans had been quite bustling, leading to the formation of a cross-cultural relationship between the two civilizations of India and China. In the process, there was a strip of land that occupied a very important role. It was the Kra strait, a narrow area on the Malacca Peninsula that separates the Gulf of Thailand from the Andaman Sea in the area sandwiched between the Kra Buri river and Sawi bay (about 40 km wide). Under the contemporary conditions of waterway traffic, it took roughly ten days to travel from southern Vietnam to the Andaman sea and then across the Strait of Malacca to reach India. Meanwhile, it only took a day to travel from the Southwest Sea to the Kra strait. Traders would transport their goods through Kra not only to save time but also to avoid rough seas. The Kra strait became the largest transit zone as a consequence. Indian traders soon realized that close to the Kra strait was a wealthy area with dense population and especially well-developed agricultural production. This area is part of today’s southwest Vietnam. They settled and developed this area into an important base for trades and cultural disseminations. The state of Funan was a product of this process.

2. State and territory during the Kingdom era

In 2008, Phan Huy Le established a process of two-stage development of the Funan state, namely the Funan Kingdom and Funan Empire¹. This is a very important identification, which is not only a simple periodization but also a new research direction for understanding the Oc Eo and Funan cultures in spaces outside the South of Vietnam.

¹Authors used ‘empire’, instead of ‘imperial’ to avoid conflation with the scale of the Ottoman, Roman and Han Chinese. In this essay, we use ‘empire’ to indicate Funan when it began its military conquests.

From a purely archaeological approach, scholars also point to the differences between the two periods according to stratigraphical developments. In this perspective, Pierre-Yves Manguin clarified further the two-stage development of Oc Eo-Funan. According to him, the vestiges related to trade, irrigation, and traveling were younger than the third century, while architectural monuments, burial sites, and religious statues mostly appeared from the fourth and fifth centuries [9]. The work of foreign scholars, either based on ancient texts, epigraphical documents, or recent archaeological evidence, also segmented the history of Funan into two stages with different social characteristics². The early stage is equivalent to the Kingdom era and the latter corresponds to the Empire era.

Existing historical documents do not allow us to have a detailed picture of the structure, nature, and function of the Funan state during the Kingdom era. Even information about the leaders of Funan was not systematically recorded. Based on the scattered evidence in ancient Chinese writings, compared with the epigraphic information, researchers have produced a list of Funan leaders of state during the Kingdom era (from the first to the third century AD), but this information is not entirely accurate, especially the name and duration of each reign. Having said that, the following table (Table 1) may give readers a rough picture of the Funan Kingdom.

Table 1. The Kings of Funan during the Kingdom era³.

	Names in Vietnamese	Original Chinese	Length of reign	Notes
1	Hồn Điền - Liễu Diệp	混填 - 葉柳	First century AD	During first three centuries AD, activities and lengths of reigns were not exact.
2	Hồn Bàn Hương	混盤況	Second century AD	
3	Hồn Bàn	混盤盤	Third century AD	

According to the above speculation, the first leaders of Funan were a collaboration between Liễu Diệp, the indigenous leader, and Hồn Điền, a foreigner. The couple ruled the kingdom together and may have passed it on to their children. It is unusual for the first name 'Hon' to appear only in the next two generations for nearly two centuries. There may have been many changes in leadership during that period, but Chinese documents record only long-reigning monarchs or prominent activities. Michael Vickery made an important remark that the transmission of the throne began on the patriarchal principle (first name Hon), but changes took place relatively often and were not fully recorded in Chinese historical accounts [10].

In ancient Chinese texts, the words *quoc* (國) and *vuong* (王) were used to discuss Funan and its leaders, but from other relevant documents it is not difficult to notice that the structure and organization of the state in Funan was different from the Chinese model. Thus, there may have been many hypothetical assumptions about Funan state formation. Researchers agree that the state of Funan was an authoritative organization influenced by Indian civilization. The early and widely influential author who produced this idea was George Coedès, the director of the EFEO. Accordingly, Funan was among the Southeast Asian states that were formed during Indianization. This

²See, for example: M. Vickery (2003), "Funan Reviewed: Deconstructing the Ancients", *Bulletin de l'Ecole française d'Extrême-Orient*, pp.90-91 and pp. 101-143: Vickery relied on ancient texts and epigraphic documents to segment Funan into two periods: The first marks by rulership with indigenous titles and last name, i.e., Hon (Hun) and Pham (Pan? Pong) and is considered pre-historic; The second came with Indian titles, i.e., Chandra (Chien Dan), Kaundinya (Kieu Tran Nhu), and varman (Bat Ma). Manguin, Pierre-Yves 2009, *The Archaeology of Funan in the Mekong River Delta: The Oc Eo Culture of Vietnam* made similar argument: The first period is marked with "control of flood plains and urban development"; The second began with "Indianization".

³Georges Coedès, *La Stele de Ta-Prohm*, *Bulletin de l'Ecole française d'Extrême-Orient (BEFEO)*, Hanoi, 1906; *Histoire ancienne des États hindouisés d'Extrême-Orient*, Hanoi, 1944; *Les états hindouisés d'Indochine et d'Indonésie*, Paris, 1948; Le Huong (1974), *Su Lieu Phu Nam*, Nguyen Nhie Publisher, Saigon; Luong Ninh (2006), *Nuoc Phu Nam*, Vietnam National University HCM Publisher.

is often conceptually referred to as Indianized states (*État hindouisé*) [11]. However, the specific shape of this type of state remains a dispute. Majority of scholars use "kingdom" as an ad hoc concept to describe Funan-related historical events. They, however, have not delved into the state structure or operation.

In 1985, K.R. Hall attempted to generalize the characteristics of states in Southeast Asia by introducing the concept of hegemony, according to which these countries had no clear borders but depended on state authority. This differed greatly from the "territorial state" that appeared very early in Northeast Asia [12]. This idea has also been developed by O.W. Wolters (1999) [13], a Southeast Asia expert, with the concept of Mandala. In Sanskrit, Mandala (मण्डल) means a centre in a complete system⁴. Hinduism and Buddhism have used mandalas as a sacred symbol with lotus-winged shapes or circles radiating from the central ring. Different Buddhist sects see Mandala as a perfect cosmological model.

Wolter's Mandala gained wide purchase with many scholars using the concept to characterize a unique state form for Southeast Asia, including Funan. According to this concept, during the Kingdom period, Funan had a centralized state located right at the middle of the Oc Eo trading area.

When introducing Mandala, Wolters implies an unstable political situation riddled with political factions. It was because of the naturally dispersed, fragmented, sparsely populated conditions and loose power relations. However, this concept is only from a power politics perspective. The strength of the Funan state in the first stage was lying in its economic foundation. With the location of an international trading port, Oc Eo has a potent attraction in the coastal regions, creating

a complete system and close organic connection. A Mandala-style state organization, with its flexibility, was very suitable for trading activities.

Vestiges of Funan during its Kingdom era are mainly located in the Long Xuyen Quadrangle area. The national territory at that time did not have a definite border but fluctuated depending on the strength of the central government. The "core" space of this kingdom corresponds to the Long Xuyen Quadrangle region today. In this cultural space, between the first and fourth centuries AD, there appeared a rather affluent society at the foot of Mount Ba The and the high ground of Oc Eo. Here, researchers have discovered archaeological sites of Go Cay Me, Go Tu Tram, Go Cay Thi, and Go Oc Eo. Especially on the slopes of Linh Son Mountain, a tomb containing coal ash has been found. This type of tomb has many typical features of Arikamendu (India) pottery style⁵. This discovery allows us to think about the arrivals of the first monks in the area. Most likely, this was the tomb of one of those who used to work in the temples on the Linh Son Mountain.

It is noticeable that during this period, besides residential vestiges, there was a system of land moats surrounding Go Cay Thi, Go Oc Eo, and their transporting canals. Digging a section of a canal in that area, archaeologists discovered a wooden paddle. Most likely, this came out of the system of moats of the Oc Eo - Funan trading port in the early days. Based on archaeological evidence, the distribution of the Funan population during the Kingdom era mainly followed the thriving economic area in Oc Eo, corresponding to the region that was later known as the Long Xuyen Quadrangle. The first capital of Funan mentioned in historical documents was Na Phat

⁴Mandala in Kanji is read Man Da La (曼陀羅), can be translated as Luan vien cu tuc (輪圓具足) or a perfect circle.

⁵Arikamendu was a seaport at the southeast of India, near Bengal Bay. Archaeologists have noticed the importance of this seaport in the development of trading linkages from the Mediterranean, through the Indian Ocean, Bengal Bay, to Southeast Asia. Archaeological evidence showed that there were multiple exchanges of ceramic commodity from Arikamendu.

Na (Naravarangara), which is assumed to be within this area.

The owners of the Oc Eo culture were mainly Funan inhabitants. The findings at Go Cay Tung (today's An Giang), an archaeological site, are important in determining the cultural characteristics of the pre-Oc Eo inhabitants. Here, there were densely populated with various artifacts that had been discovered. Among them was a quadrangle stone axe with an extruded ledge in the middle of the blade. This type of axe is almost identical to the 'beaked adze' found in Malaysia and Indonesia. Southeast Asian scholars believe that 'beaked adze' is a product of Malay-Polynesian culture. Its distribution area has been identified as the living area of Malay-speaking inhabitants - Da Dao or Nam Dao (Austronesian). Along with the axe-like tools, at Go Cay Tung, archaeologists also found ceramic items that are very similar to those found in Malaysia such as containers with bell mouths and ledges. From other archaeological sites such as Gong Ca Vo, Giong Phet, Long Buu (Ho Chi Minh City), Go Cao Su (Long An), and Loc Giang (An Giang), among others, excavated burial relics all confirm that Oc Eo was a culture of indigenous origin, closely related to Sa Huynh culture in the Central region whose owners were mainly Malay-Da Dao inhabitants.

Along with the discovery of Oc Eo, Malleret and Bouscarde also found an archaeological site in Rach Gia with many ceramic objects similar to those found in Oc Eo. This provides an understanding of osteoarchaeological characteristics of Oc Eo inhabitants, especially from the six skulls and many human bones found here. Anthropologist Génét Varcin discovered that these skulls were proto-Malay human, similar to the Upper Malay-Da Dao speaking inhabitants of the Central Highlands. Recently, at Go Thap (Dong Thap) and Oc Eo (An Giang), Vietnamese archaeologists also found two ancient skulls that carry Indonesian (another name for proto-Malay) osteoarchaeological properties [14]. Burial vestiges left in the tombs

were very close to the typical burials of Central inhabitants, where the cultural traits of Malay-Da Dao were well-grounded. This further attests to the information recorded in ancient Chinese texts. According to *Tan Thu*, Funan's funerals and marriages were almost identical to those of Lam Ap.

In terms of language, the authors of *Luong Thu* made a very important comment, accordingly, the speaking language of Funan inhabitants was not very different from the language of Ti Kien, which was a Chinese name of Pekan, a region in the southeast Malay peninsula. This is a reliable assessment because *Luong Thu* is the official historical account of a Chinese dynasty with frequent interactions and close ties with Funan and other countries in Southeast Asia. In terms of writing characters, Funan used Sanskrit, which originated in India. Many Southeast Asia study experts in the last decades of the twentieth century also argue that most Funan's inhabitants were Malay-Da Dao [15]. These people settled in Southern Vietnam very early on and were able to create a developed agricultural product conditioning state formation at the beginning of the Common Era. There may have been other groups of inhabitants at that time, but they were the key inhabitants of Funan.

The main inhabitants of Funan Kingdom comprise five divisions:

Aristocrats, royal members: This is the group with unique political statuses and enjoyed special privileges. From the jewels and artifacts found in the monuments, we can notice a high level of enjoyment among the aristocrats and royal members during this period.

Clergy: The density of religious architecture substantiates the fact that clergy had a significant social role in Funan society. Ecclesiastical power was closely associated with state power in the tradition of Brahmin.

Merchant: Funan state formed under the powerful influence of foreign traders and the rapid economic growth of the country was also associated with trading activities, so traders were a wealthy population and exerted a significant influence on social life.

Artisan and the urban poor: They were labourers whose lives depended on the development of the economy and state rulership.

Farmers and fishers in rural and coastal areas: They were those who contributed the most important products to feed society and create a foundation for economic development but had a relatively poor life. According to Khang Thai and Chu Ung who were sent to Funan by the Dong Wu in the early third century, the people here “remain naked, except for women wearing clothes with holes to put their heads in”. The two further remarked that this was a beautiful country, but it was not good to leave people with nothing to wear [16].

Besides gold jewellerys, jewels and other precious materials that were obviously owned by wealthy castes, ordinary ceramic materials were also quite common. For example, some human statues, including lamp legs found in Oc Eo, show a marked difference in the livelihood of people living in Funan.

3. Funan during the Empire era

Located on an ancient route of international maritime trading, Funan, with abundant food sources, forest products, and handicrafts, became a wealthy city after a few centuries. With its economic power, Funan gradually dominated commodity transactions coming from its neighbours. An all-around development of the state ensued.

From the time of Hon Ban, Funan had a talented army general in charge of major state affairs. He was Pham Su Man, a person with a different first name from the reigning king. This event was a milestone in Funan state formation. From here,

there was a shift in the reigning family line, from Hon (混) to Pham (范), and it also marked the beginning of Funan military expansions. After ascending to the throne, Pham Su Dang “built large ships, subdued over ten countries at sea, expanded the land to five or six thousand miles wide, and self-titled “Funan King” [17].

Between the third century and 627, when Funan collapsed, state structure experienced various changes, but because of the lack of information, researchers cannot restore much of the information about the state leaders. Based on a variety of documentations, a list of state leaders can be compiled as follows:

Table 2. The state leaders of the Funan Empire.

No	Name	Chinese originals	Length of reign (AD)	Note
1	Pham Su Man	范師曼	220-225	
2	Pham Kim Sinh	范金生	3rd century	Pham Su Man's son
3	Pham Chien	范旃	230-243	
4	Pham Truong	范長	243-250	Pham Su Man's son
5	Pham Tam	范尋	250-287	
6	Truc Chien Dan	竺旃檀	357	Candana
7	Kieu Tran Nhu	僑陳如	420-434	Kaundinya
8	Tri Le Ba Dat Ma	持梨陀跋摩	434-440	Śrī Indravarman
9	Kieu Tran Nhu Xa Gia Bat Ma	僑陳如闍耶 跋摩	484-514	Kaundinya Jayavarman
10	Luu Da Bat Ma	留陀跋摩	514-550	Rudravarman

From the Table 2 above, we can observe two periods without information, before and after the reign of Truc Chien Dan (about 135 years). Similarly, the identity of the state leader after Rudravarman until the complete collapse of the empire (as early as 627) remains unknown.

Pham Su Man ascending the throne can be considered as the beginning of Funan Empire. Along with the rise of the central court, there were fierce battles for political powers. According to the Tale of Funan in *Kang Thai*, there was a conflict between the children of Pham Su Man (范師曼),

Pham Kim Sinh (范金生), Pham Truong (范長), and his niece and nephew Pham Chien (范旃) and Pham Tam (范尋)⁶. As a result, kings with the first name Pham came from both sides and took turns ruling Funan until the middle of the third century.

During the Empire era, the power and size of the central state significantly increased but the nature of the Funan state remained essentially mandala-like, under which the method of governing remained largely based on the ability to dominate minor states (small Mandalas) rather than a direct rule with military power as in a territorial state⁷. This does not mean that the central state was loosely organized. Along with its economic power, the state was also backed by the clergy. During the reign of Pham Su Man, the leader of the Funan Empire was deified according to the Hindu Deva-Raja (God and King are one) model⁸.

In order to manage a vast empire, Funan's capital was moved westward to Angkor Borei (today's Takeo Province, Cambodia)⁹, about 100 km from the former in Oc Eo. Here, archaeologists discovered many architectural vestiges of citadels. Between the two capitals there was an over 80 km-long canal, which was dug at the end of the third century [18]. Although the archaeological site is not large (only about 300 hectares), the

density of architectural artifacts, including fortified ramparts, moats, and also freshwater reservoirs (Baray), show that state formation in Angkor Borei was more complete than in Oc Eo.

Around the end of the fifth century, from the specific descriptions of the Funan state in *Dieu Tu Liem*, the author of *Luong Thuy*, the king's palace had stone floors and the court attendance was held upstairs. During court meetings, the king wore a long robe with a gold belt, a string of jewels around his neck, a tall hat, and a gold sword on his back. The king sat on the throne with a dragon-shaped ornament overhead, in front of which was a carpet of gold vases. Every time he travelled, the king rode an elephant and was surrounded by a parasol-holding retinue. His escorts, both guards and concubines, also rode elephants. The convoy also used drummers and horns. The court met three, sometimes four, times a day.

Although Funan had grown to the level of an empire and the court was quite organized with abundant material resources, there was almost no sign of law, an extremely important tool for state control. According to the Book of Nam Te, until the reign of Kieu Tran Nhu Xa Gia Bat Ma (Kaundinya Jayavarman (484-514)) in Funan, there was no prison. When disputes arose, the community responded by resorting to divine settlement. In one example, they would put a ring or an egg in a pot of boiling water and make the accused reach in. In another, the suspect had to walk seven steps holding a hot metal wire. The suspect may also have been thrown into the water. If, after these tests, the suspect remained unharmed; they were declared innocent. If he was burned or did not float on the water, he would be deemed guilty and was castigated. It was customary for offenders to be dismembered, enslaved, or even beheaded. This type of punishment was based primarily on religious beliefs. In ancient times, in the places where religion reigned, similar punishments were applied. Westerners called this the Ordeal. This further confirms that religion played a huge role

⁶Pham (范), as a first name, is often found in the title of king and royal members of Southeast Asian countries influenced by Indic civilisation. It did not represent bloodline relationships but a translation of the word Varman (वरमन्) in Sanskrit originally meaning shield or protection. It was then sacralised as godly protection and used for royal titles. More frequently, Varman could be translated as Bat Ma (跋摩).

⁷Luong Ninh in many of his research, mostly Nuoc Phu Nam, argues that Funan state, by the time of its expansion was not a Mandala polity. Critiques tend to portrait Mandala as a loosely organized institution.

⁸In Sanskrit, Deva (देव) means God and Raja/Rajan (राजन्) means ruler, leader, king, or prince. Deva-Raja was a unity of sacred and secular power.

⁹Based on the assumptions of several French authors, the capital of Funan after the third century was located in Prei Veng. However, according to recent archaeological evidence, it was Vyadrapuna in Angkor Borei, Takeo province, Cambodia.

even when Funan had entered the Empire era. Also, according to *Luong Thu*, Funan inhabitants worshiped “gods in heaven”. They cast bronze statues, some with two faces and four hands, some with four faces and eight hands, each holding an object like a child. From this description, we can recognize the religion that was described in *Dieu Tu Liem* was Hinduism. The statues with many hands were variants of Trimurti (the three Hindu gods) including Brahma, Vishnu, and Shiva. The statue with many faces is Brahma, the Creator [17].

4. Imperial expansions of Funan

Within the currents of the international trade networks, along with Funan, there were other economic centres with Mandala-style institutions. As Funan grew, many small states were annexed. Around the third century, Pham Su Manh had acquired more than one hundred kingdoms including Do Con (都昆), Cuu Tri (九稚), Dien Ton (典孙), etc. and ruled an expansive territory of 5.6 thousand miles [19]. Small states such as Don Ton, Xich Tho, Ban, Dan Dan, Cat Miet...¹⁰ were all parts of the Funan Empire. Among these locations, with the exceptions of Cat Miet, an ancient kingdom of the Khmer located to the south of Lake Tonle Sap (Cambodia), and Don Ton, near Kra strait (northern Malay Island, locations are only conjecture). Based on the information collected from ancient Chinese texts about Pham Su Man’s expansion of his territory to 5.6 thousand miles, which was about 2,500-3,000 km (1 mile is roughly 500 m), his kingdom could have encompassed the entire area of Southern Vietnam, South Central, southern Thailand, Cambodia, and part of the northern Malay Peninsula near the Kra strait.

The concept of “empire” has been introduced recently and was mainly to support stage-based understanding of Funan state formation and cultural influence rather than establishing a new concept of

“empire”. Although historical accounts mentioned that Pham Su Manh “built large sailboats that could carry a few hundred soldiers, crossed the sea to Don Ton”, and that General Chieu Dan under Pham Kim Sinh had up to 2,000 troops under his command, of all the relics that were excavated, there is little material evidence showing that the Funan “empire” was a powerful military force. So far, there were not many archaeological artifacts at Oc Eo that can be categorized as weapons. This differs from Angkor, where there were well-equipped armies with horses and elephants. Their unsheathed weapons can be easily found on the walls of Angkor Thom, Angkor Vat, and the parade grounds in front of the ancient royal palace. This is very compelling evidence of a powerful military empire. When excavating Phum Snay, a city that existed roughly from the first to fourth centuries (pre-Angkor era) in north-western Cambodia (today’s Banteay Meanchey), corresponding to the period of the Funan Kingdom, archaeologists discovered both men and women were buried with swords, spears, axes, or weapons forged with iron. Even women often carried swords when they died [20, 21]. This is one of the typical vestiges of those who are believed to be the direct ancestors of the later Chenla.

There is not much ground to postulate about the military power of Funan during its Empire era. Despite having a powerful army, the state had to rely more on beliefs in sacred forces. In the area that was once the territory of Funan, among the remaining monuments, religious architectures such as temples and shrines account for a very high proportion. The number of statues of Vishnu, Linga, wooden and stone-made Buddha statues, along with the system of temples, towers, or tower tombs, create a rich spiritual environment in Funan. Together with a powerful team of monks, the Deva-Raja institution and ecclesiastical and monarchical power united and gained legitimacy in a region heavily influenced by Hinduism and Buddhism. It was an important ideological platform for the Funan Empire.

¹⁰Cat Miet (吉蔑) is a transliteration of Khmer, a small state later becoming Chenla, former Cambodia.

Other than sacred authority, Funan's strength lied in the wealth brought about by international trade. Since becoming a centre of international trade, Oc Eo quickly turned into a busy and wealthy port. Its position and economic strength affected other parts of the Southeast and the Gulf of Siam. Under the effects of international trade, many communities moved out of rice farming, fishing, logging, and mining and approached Mandala-style state formation to better integrate into the network of foreign trade activities. Thanks to the direct holding of trading ports that were also supported by merchants and foreign monks (India and China), Oc Eo aristocrats assumed commanding power and then developed into conquerors establishing a dominant empire. However, the core power of Funan came not only from Oc Eo inhabitants but also from the participation of many sub-communities scattered from the Tien river and Hau river up to Long An and Can Gio. Under Pham Su Man, Funan was strong enough to dominate further states located around the Gulf of Siam, including small port cities on the coast of the Gulf of Thailand, Malaysia, and parts of Java and Sumatra. Funan became the dominant force in the East-West trade route and could coordinate import and export transactions across the entire Southern Vietnam and ports along the Gulf of Siam.

5. Funan's foreign relations

The inhabitants of Oc Eo had contact with Indian merchants and clergies very early on and, since the early days of Funan state formation, foreign interactions were mainly with these agents. According to several historical documents, it was not until the Three Kingdoms (220-280) when Funan established foreign relations with the Dong Wu. This may be the first official diplomatic relationship recorded in history. From here, Funan began exchanging messengers with foreign countries, especially those outside the Indian world. According to *Luong Thu*, Chu Ung (朱應)

and Khang Thai (康泰), the authors of *Phu Nam tho tuc* (The indigenous custom of Funan) or *Phu Nam Truyen* (The Tale of Funan), were Dong Wu's emissaries sent by Sun Quan (229-252) to southern countries, including Funan. It is not clear exactly what year the Dong Wu delegation came to Funan, but according to the Book of Wu, it is said that in December of the sixth year of Xich O (243), the last year of Pham Chien's reign, Funan also sent messengers to Dong Wu to offer musicians and tributes. These were documented rather clearly thanks to the official nature of the relationship. Long before that, when Sun Quan gained control of Giao Chau (after 229), Funan had a regular and close relationship with Dong Wu through the land of the Viet. During this period, along with merchants, many Indian monks came to Luy Lau and Hop Pho. In return, the Oc Eo culture observed the imprint of Han culture in Giao Chau such as construction tiles with clown faces imprinted on the tips, metal bowls with high tin content, and engraved copper knobs in the lap and surrounding sunken lines. These artifacts were associated with spreading Buddhism to mainland Southeast Asia. A favourite Han product was bronze mirrors, which were found rather abundantly in Oc Eo, Khao Sam Keo, and Phu Khao Thong (near Kra strait), which was believed to be a territory of Don Ton, a kingdom of Funan. Giao Chau played an important role in the relationship between feudal China and Funan. From the third century onwards, official relations were carried out here.

Around the mid-30s of the third century, the struggle for power in Funan ended with Pham Chien ascending to the throne. Soon after, the king sent two missions to India and China in between 240 and 243. The Funan leader was made "An Nam Phu Nam King" by Dong Wu. In the subsequent periods from the third to the seventh centuries, relations with Funan were also recorded in many official documents of Twenty-Four Histories (*Nhi thap tu su*) of the Chinese

official dynastic history. Funan's relations with China took place in the context of China not yet becoming a unified empire but was frequently divided into small states during the Luc Trieu era (220-589). Funan was relatively far away and had sufficient wealth, hence, the relationship with Dong Wu, Tan, Liang, Chen, Song... was quite lenient. During the reign of Kieu Tran Nhu Xa Gia Bat Ma, the Funan Empire reached its height. The king was particularly interested in relations with China. Shortly after the founding of Liang, in the second *Thien Giam* year (503), Kieu Tran Nhu sent a mission to the capital of Kien Khang to establish diplomatic relations with the new dynasty. The delegation was warmly received by the Wu of Liang, was offered many items as gifts, and was granted the title of *An Nam tuong quan Phu Nam vuong*. The Liang emperor also noted that Funan, although a distant country, constantly sent envoys and always maintained peaceful relations with the North [17].

From the third to the seventh centuries, Funan continued expanding its relations with India. Further west, Funan also established relations with Mediterranean countries. In Oc Eo, archaeological evidence, from the fourth to seventh centuries, shows that there are many artifacts of Western Asian and southern European origin.

6. Living style during the Empire era

According to the records of Chu Ung and Khang Thai, when they arrived (in the third century), "the Kingdom of Funan is 399 miles wide, has many cities, has high walls and houses inside. [Funan inhabitants] have dark skin, curly hair... women wear blankets from neck to toe, wear earrings... Their [lifestyle] is simple but no stealing. They cultivated in old manners, planting one and harvest in all three years. Along with rice, they grow vegetables, beans, sugar cane, cotton and raise silkworms. They are good at sculpting and skilfully using chisels. Many of the utensils are made of silver. People pay taxes by gold,

silver, pearls, and aromatherapy oil. They know how to read and have written documents. Their written characters are like those of the Ho..."¹¹ The scenery of the country is beautiful". In the rural areas, besides farming, people also went fishing and practised animal husbandry, raising pigs, chickens, cows, sheep, and elephants [22].

After Funan had expanded its territory and become a vast empire, Chinese authors' attitude towards the country changed. According to *Luong Thu*, besides the quality of honesty and kindness, people in Funan were insidious and cunning. They were good at trading but often attacked neighbouring towns if the latter chose not to submit. In urban cities, craftsmanship such as copper casting, pottery, jewellery, sugar making, and weaving... had grown to a high level. People lived in stilt houses made of wood and roofed with leaves in the middle of a chessboard-like canal system. They did not dig wells but created freshwater reservoirs. Transport was mainly by boats.

They are very good at fighting with weapons like swords, javelins, bows, and crossbows. Warriors wore armour made of animal skin. Losers were enslaved. In Funan society during this period, besides aristocrats and merchants, there was a community of labourers with the slavery status. Most of them were used in public works such as in the construction of religious structures, citadels, and, especially, digging canals. Canals, sometimes up to nearly 100 km long, show that the labour force involved was not small.

In Funan, when someone died, the male mourner must be high-headed and shaved. The whole family was dressed in white mourning clothes. They had different burial styles depending on each region and family, which was usually cremation. The dead were burned with firewood, then ashes

¹¹Ho Nhan (胡人) was a Chinese name for communities living in the West and North. Some used Nam Phan writing system (Pali पाण्डि). Community in Funan used Sanskrit (संस्कृत वाक्).

were put into a jar for burial. Fishers used the method of water burial. After the ceremony, they released the body into the river to feed the fish. There was also land burial. The body was put in a box, and after the ceremony, it was buried deep in the ground. This form is quite similar to practices of the Vietnamese and Chinese. However, the Funan did not have reburial practice. The most special one was sky burial. The dead were given rituals, taken into forests or desolate places to feed the animals. All four burial practices were very popular in ancient India [17]. The practice of sky burial is still maintained today in Tibet.

7. Decline

The major factor conditioning Funan development into the Empire era was trade, especially foreign trade, but the foundation for that development was agriculture. Since the pre-Oc Eo period, the South of Vietnam has been a region with highly productive agriculture. This was an attractive condition for foreign traders to base their trade activities. This area was a relatively young delta, newly formed over 8,000 years ago with many depressions. Along with nine large river mouths, there was a dense man-made canal system that was made, which was highly vulnerable to rising saltwater. Around the fourth century, a geological event took place that had detrimental impacts on Southern agriculture: the local encroaching sea. According to recent research, by the middle of the fourth century, sea levels had risen by 0.5 m and peaked at 1 m in the 30s of the seventh century. The rising levels stopped for about half a century, then gradually lowered until the mid-twelfth century, when it returned to prior levels [23]. As a result, most of arable land in the coastal region of Funan was flooded and salinized, not only causing rice farming to be destroyed but also turning many areas into wastelands in later centuries. Rice was an important commodity in ancient time, and more importantly, food sources ensured a large workforce operating in non-agricultural sectors

such as trade, crafts, construction, urban services, and the military. Local encroaching seas was a natural phenomenon but had huge socio-political impacts. Salinization reduced the productivity of rice production in the region, creating an imbalance between two social forces in Funan. Coastal port power had its dominance dwindle while the highland forces, including Chenla, who had been in a dependent position, had increasing leverage. This may also be one reason Funan was increasingly focusing on developing its capital in the high ground at today's Angkor Borei.

While its colonies were constantly growing, the centralised power of Funan state was exercised primarily when the king forbade them from trading with outsiders, but at the time this power did not limit the dynamic of economic activities, just like India's multi-port city or multi-polity system. Funan colonies were originally small towns mainly formed under the influence of international trade at the Strait of Kra, a major point of commodity transactions. Among these, Chenla was a country with traditions differing from the Oc Eo culture, the foundation of Funan, while the Cat Miet were highland inhabitants who relied on agriculture and hunting. At the burial sites of Oc Eo, weapons were rare, meanwhile, at Phum Snay (Prey Veng, Cambodia), archaeologists discovered many weapons made of iron such as swords, knives, and axes. This evidence indicates that Phum Snay communities were not of the same origin as those from Oc Eo and Funan. They were closer to the residents of Mun River basin (Thailand) such as Noen U-Lok and Non Muang Kao, who originally belonged to the Mon-Khmer culture and were battle tested [24, 25]. At its height, the Funan Empire was able to subdue Chenla and turned it into a northern colony. Dynastic marriage was a typical trust-building institution.

Along with the growth of the colonized states, Funan's centrality also suffered because the Kra strait lost its importance. Merchant vessels traveling between the Pacific and Indian

Ocean were less likely to use inroad method for transporting goods at intermediate hubs. There were also emergences of Madala polities in the areas surrounding the Straits of Malacca and Sunda, a Malaysian peninsula, including Sumatra, Java, and the southwestern part of Borneo (Kalimantan). These polities formed an alliance and created a shared port system. A large centre with increasing power was formed in Palembang on the island of Sumatra. Smaller port cities were placed under the control of the Sumatra power centre known as Srivijaya¹², a powerful empire that later acquired a partial territory of the Southeast Asian mainland. The power of the Funan Empire was mainly built on commercial foundations, supported by trading activities on both sides of Kra. As this area gradually lost the role of an inter-world bridge, it led to the weakening of Funan.

Unlike the Funan region, which was a low plain near the sea, the imperial capital of Vyadhapura was relatively high and dry. This was the traditional land of the Khmer. When the Chenla state was formed, the Mandala of battle-tested Khmer used to be a strong military support for Funan. However, with the local encroaching sea salinizing arable lands in the low section of the Mekong, highland agriculture, not affected by sea level rise, gradually prevailed. This strengthened Chenla, leading to its political separation from Funan.

With already burning desires for a separation, conflicts in Funan politics became bitter after Kaundinya Jayavarman's death in 514. Competitions for the throne took place and weakened the regime. In this context, secession tendencies among colonies increased. Taking advantage of a weakening Funan, Chenla repeatedly attacked Vyadhapura. In 550, Bhavavarman, along with his brother Citrasena,

staged a large-scale attack forcing the Funan court to flee the capital to Na Phat Na. Shortly after this victory, Bhavavarman ascended to the throne of Chenla and moved the capital to Isanapura (now in Kampong Thom Province, Cambodia). He ruled the kingdom for 50 years.

Na Phat Na (Naravaranagara) located in Oc Eo became the homeland of Funan. The state of Funan continued to exist here for nearly eight more decades. During this time, Chinese history recorded that more Chenla envoys than Funan came to visit China. This shows that since 550, Chenla had indeed become an independent kingdom, but Funan was not yet eradicated. The last Funan envoy to China was recorded in the second year of the Tang Dynasty (627) [26].

Although there is no available document accurately indicating the time of Funan's demise, based on the above materials, most researchers agree this event did not occur earlier than 627.

8. Southern Lands in the post-Funan Empire

The fact that the Vyadhapura court had to abandon the citadel of Dac Muc¹³ in 550 marked the end of Funan Empire. Prior to this moment, Funan had already experienced a tough period. There are few records of this period, even the names of state leaders since the death of King Rudravarman in 550 remain unknown. The lack of information in the ancient Chinese texts indirectly confirms that Funan virtually had no communication with China during the late South-North Dynastic era and later Sui and Tang Dynasties.

Oc Eo originally had sufficient conditions to help Funan prosper, but when scions and descendants of Rudravarman returned, the land was no longer the same. Most trading activities had moved to the vicinity of the Straits of Malacca and Sunda, driving Oc Eo into inevitable decline. Rising

¹²Srivijaya was an imperial centre surrounded by small states in the Southeast Asian Islands. It existed until the end of the thirteenth century. In Sanskrit, sri means 'lightning' and Vijaya means 'honour.' In ancient Chinese texts, this word was recorded as That Loi Phat The (室利佛逝) or Tam Phat Te (三佛齊).

¹³Dac Muc (特牧): The capital of Funan from the third century was recorded in Chinese ancient texts. Researchers agree the name was translated into Chinese of "Vyadhapura", a Sanskrit word appearing in epigraphic documents meaning "hunter city".

sea levels salinised arable land and agricultural production struggled. Meanwhile, rising Chenla was showing its imperial intentions.

Although absent from historical records for a long time, the fact that in 627, as recorded in *Duong Thu*, Funan still sent envoy and tribute to Trang An. This showed that Funan state continued to exist for another 80 years. It is possible that the state settled in Na Phat Na. This also meant that the Funan state placed great expectations on the Tang Dynasty, a rising dynasty, something the nobles in Funan did not look for during the late South-North era.

Unlike politics, culture had a strong and lasting vitality. Oc Eo was a prosperous culture underpinning not only the foundation of the Funan civilisation but also radiated to external domains. Funan disappeared from the political stage after losing to Chenla, one of its former colonies in the seventh century, but the imprint of the Oc Eo culture persisted for a long time afterwards.

9. Conclusions

Funan was one of the three ancient states that experienced significant achievement in Vietnam's history. For a long time, Funan was known only through scattered evidence recorded in ancient Chinese texts, information recorded in Sanskrit epigraphical documents, and some partly tarnished relics found in archaeological sites. After Louis Malleret's 1944 archaeological discovery in Oc Eo, there have been varying studies linking written documents with material evidence to provide a clearer view of Funan. However, over 30 years of the Anti - American resistance war hindered further research, especially archaeological excavation and field research.

Important new findings are foremost about Funan inhabitants. In the past, for many reasons, mainly because of the lack of information, identification of the origin of Funan was limited. In fact, from ancient writings, Funan was clearly distinguished

from Chenla, but the differences were difficult to systematise. With interdisciplinary approaches, Vietnamese and international scholars over the past thirty years have attempted to excavate myriads of historical resources and have made significant progresses. From archaeological and written documents, Oc Eo was a culture of indigenous origin, a member of Malay-Polynesian linguistic group. They had many commonalities with the inhabitants of the central coast in Vietnam. After many historical changes, the Chenla of Mon-Khmer origin were the latecomers, possibly by the seventh century when Funan was in decline.

Another important finding is the two-stage periodisation of Funan. The first era lasted from the founding of Funan during the early years of the Common Era to the third century. This was the period when rice cultivators from Southern Vietnam had an audience with traders from India, China, the Romans, and southeast Asians, which quickly led to the establishment of Funan. Different from polities commonly found in Northeast Asia, the Funan state acted as a hub and attracted those at the peripheries. Thanks to its prime location, Funan quickly developed into a centre of dominant power reaching beyond the original Oc Eo, approaching the lower Chao Phraya River and the northern part of Peninsular Malaysia, around the Kra strait, a trading zone for both Chinese and Indian worlds.

One of the new aspects of Funan study is the combination of the analysis of historical documents with geomorphological and paleontological data. Findings on the local encroaching sea, along with geopolitical and geo-economic analyses, help explain the decline and demise of Funan. This also tells us why Southern Vietnam, until the seventeenth century, was still a desolate region.

These new findings, especially in archaeology, have shown the powerful vitality of the Oc Eo culture. Although Funan state has been destroyed since the seventh century, archaeological evidence

showed that the Oc Eo culture survived into later eras. From the tenth century onwards, Angkorian culture showed its influence on the land, now named Thuy Chenla, according to Chinese records.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] Y. Fu (1936), *Foreign Body Records* (Duong Phu's: Di Vat Chi), Commercial Press, 18pp (in Chinese).
- [2] C. Shou (2016), *Three Kingdoms Volume 60, Wu Shu Volume 15* (Tran Tho: Tam Quoc Chi, book 60, Ngo Thu, book 50), Baidu Encyclopedia Free Online Encyclopedia, Beijing (in Chinese).
- [3] P. Pelliot (1903), "Le Fou-nan", *Bulletin of The French School of The Far East*, **3**, pp.248-303, DOI: 10.3406/befeo.1903.1216 (in French).
- [4] L. Huong (1974), *Su Lieu Phu Nam*, Nguyen Nhieu Publisher, 172pp (in Vietnamese).
- [5] L.X. Diem, D.L. Con, V.S. Khai (1995), *Oc Eo Culture, New Discoveries*, Social Science Publisher, Hanoi, 536pp (in Vietnamese).
- [6] Vietnamese Association of Historical Science (2008), *Oc Eo Culture and Funan Kingdom*, The Gioi Publisher, Hanoi (in Vietnamese).
- [7] V.M. Giang (2006), *Brief History of Southern Vietnam*, The Gioi Publisher, Hanoi, 152pp (in Vietnamese).
- [8] V.M. Giang, N. Viet (2017), *Southern Region, Volume 2, From Its Origins to The 7th Century*, National Political Publishing House, Hanoi, 296pp (in Vietnamese).
- [9] P.Y. Manguin (2009), "The archaeology of Fu Nan in the Mekong river delta: The Oc Eo culture of Vietnam", *Arts of Ancient Vietnam - From River Plain to Open Sea*, Yale University Press, pp.103-118.
- [10] M. Vickery (2003-2004), "Funan reviewed: Deconstructing the ancients", *Bulletin of The French School of The Far East*, **90/91**, pp.101-143, DOI: 10.3406/befeo.2003.3609.
- [11] G. Coedès (1944), *Ancient History of States Hindus from the Far East*, Imprimerie d'ExtrêmeOrient, 366pp (in French).
- [12] K.R. Hall (1985), *Maritime Trade and State Development in Early Southeast Asia*, University of Hawaii Press, DOI: 10.2307/j.ctv9zckps.
- [13] O.W. Wolters (1999), *History, Culture and Region in Southeast Asian Perspectives*, Cornell University Press, 275pp.
- [14] T.V. Giau (1987), *Ho Chi Minh City Cultural Address*, **1**, Ho Chi Minh City General Publishing, 730pp (in Vietnamese).
- [15] K.R. Hall (1982), "The 'Indianization' of Funan: An economic history of southeast Asia's first state", *Journal of Southeast Asian Studies*, **13(1)**, pp.81-106, DOI: 10.1017/S0022463400014004.
- [16] K. Tai, Z. Ying (420-479), *Biography of Funan* (Khang Thai, Chu Ung: Phu Nam Truyen, Trung Quoc co tich), Baidu Open Encyclopedia (in Chinese).
- [17] L. Shu (635), *Book of Lian* (in Chinese) (Dieu Tu Liem: Luong Thu).
- [18] D.C.W. Sanderson, P. Bishop, M.T. Stark, et al. (2003), "Luminescence dating of anthropogenically reset canal sediments from Angkor Borei, Mekong delta, Cambodia", *Quaternary Science Reviews*, **22**, pp.1111-1121, DOI: 10.1016/S0277-3791(03)00055-6.
- [19] L. Yanshou (2021), *Southern History*, **78**, *Biographies*, **68**, *Funan Kingdom*, Tianya Knowledge Base, (Ly Dien Tho: Nam Su, book 78, Liet Truyen 68 Phu Nam Quoc), Thien Nhai Tri Thuc Kho), <http://book.sbk8.com/>, accessed 20 September 2021 (in Chinese).
- [20] D. O'Reilly, A.V.D. Driesch, V. Voeun (2006), "Archaeology and archaeozoology of Phum Snay: A late prehistoric cemetery in Northwestern Cambodia", *Asian Perspectives*, **45(2)**, pp.188-211, DOI: 10.1353/asi.2006.0024.
- [21] Y. Yoshinori (2007), *The Preliminary Report for The Excavation in Phum Snay*, International Research Center for Japanese Studies, 73pp.
- [22] K. Tai, Z. Ying (420-479), *Biography of Funan*, Baidu Open Encyclopedia (in Chinese).
- [23] Angiang Department of Culture and Information (1984), *Oc Eo Culture and Ancient Cultures in The Mekong Delta*, 280pp (in Vietnamese).
- [24] C. Higham (2002), *Early Cultures of Mainland Southeast Asia*, Art Media Resources Ltd, 375pp.
- [25] C. Higham, A. Kijngam, S. Talbot (2007), *The Origins of The Civilization of Angkor Volume 2: The Excavation of Noen U-Loke and Non Muang Kao*, Fine Arts Department of Thailand, 632pp.
- [26] O. Xiu, S. Qi (2017), *New Book of Tang* (Au Duong Tu, Tong Ky: Tan Duong Thu), Zhonghua Book Company, 6700pp (in Chinese).

From the policy of “Ngu binh u nong” in the monarchy period to the military farm model during the 1956-1960 period in North Vietnam

Thi Vuong Pham*

*Institute of History, Vietnam Academy of Social Sciences,
38 Hang Chuoi Street, Pham Dinh Ho Ward, Hai Ba Trung District, Hanoi, Vietnam*

Received 18 November 2021; revised 7 February 2022; accepted 15 February 2022

Abstract:

Currently, Vietnam has become deeply integrated into the global economy and new requirements for economic development and defence consolidation have emerged. Economy and defence are closely related, specifically, the stronger the economy, the stronger the defence potential. Military forces involved in production have not only economic significance but also national defence significance. In fact, military units and enterprises make substantial contributions to the economic development of the country. This article studies the military art of Vietnam from the times of the monarchy to modern history. While previous studies on Vietnamese military art have examined the policy of “Ngu binh u nong”¹, this study further clarifies Vietnam's military policy throughout the nation's history. This work suggests that the ancestors' policy of “Ngu binh u nong” was inherited and developed by the Communist Party of Vietnam not only as military organization, but as a strategy of economic development that combines with national defence, a national governance policy, as well as a national defence strategy for Vietnam.

Keywords: military farm, “Ngu binh u nong”, Northern Vietnam.

Classification number: 8.1

1. Introduction

In the history of nation building and defence, the Vietnamese people have experienced many major struggles with other countries ranging from the victory over the Southern Han invaders (938), the two defeats against the Song (981 and 1075-1077), the three victories over the Yuan - Mongol army (1258, 1285 and 1287-1288), and the Ming invaders (1418-1427) to the August Revolution (1945), the Indochina War (1945-1954), and the American War (1954-1975). There have been several studies on Vietnam's military art to “explain” why such a small nation, without a decent army, could fight and defeat any invaders at all. Among

them are studies on the policy of “Ngu binh u nong” during the monarchy period [1-9]. The authors/researchers of those works analysed the content of “Ngu binh u nong”, including how to recruit soldiers and how to organize (divide sessions, practice time), as well as pointing out the impacts of the policy implementation of “Ngu binh u nong” for dynasties. However, studies are relatively limited on military participation in real estate in modern history or the inheritance of the policy of “Ngu binh u nong” in the monarchy with the strategy of economic development combined with national defence [10-11]. In this study, the author analyses not only the policy of “Ngu binh u nong” during the monarchy period, but also its employment as

*Email: vuonghn82@gmail.com

¹as “soldiers billeted in farms” or “servicemen billeted in farms”.

a military farm model and a strategic combination between economic development and national defence of Vietnam in modern times. Based on documents from the National Archives Centre III, this article analyses the model of military farms in the North after 1954 to determine the inheritance and development of the country's political and national defence policies from the “Ngu binh u nong” strategy. This is a prominent contribution of research as it analyses contents that previous studies scarcely mention.

2. “Ngu binh u nong” in the monarchy period

“Ngu binh u nong” means sending “soldiers” to work in local agriculture for a definite period; it is a policy that combined building military forces with agricultural production in the monarchy period, most notably under the Ly - Tran - the early Le (XV century).

Under the Dinh (968-980) and Anterior Le (980-1009), Dinh Tien Hoang and Le Dai Hanh both instituted military service for all young men. But only from the Ly dynasty onwards were there clear records of the implementation of the “Ngu binh u nong” in military regulations. The book *Viet su tieu an* (Model cases from Viet history) records the use of troops by King Ly Thanh Tong as follows: “Soldiers of the Ly dynasty... once a month, were called to service; after their service expired, they returned to their hometown to work in the fields, without a salary” [12]. In *Lich trieu hien chuong loai chi* (Categorized records of the institutions of successive dynasties), historian Phan Huy Chu noted the following about army organization of the Ly and Tran dynasties: In the Ly and Tran dynasties, military titles were somewhat more detailed... There were official guards in the citadel, other troops remained unchanged: in time of peace, they returned to work in the fields, in time of war, they were called to service. Therefore, the number of soldiers was always assured without spending too much on them, and so they were even more eager

to fight against the enemy. The victories over the Champa army and the Song army (Ly Thai Tong defeated the Champa army, Nhan Tong defeated the Song army), and two victories over the Yuan army (Tran Nhan Tong) is enough to tell the power of these dynasties [13].

Regarding the supplies for soldiers under feudal dynasties, historian Phan Huy Chu wrote: “During the Ly dynasty... local soldiers had no salary. They were in service for a certain period, and were sent home when this period ended to cultivate crops and supported themselves. The Tran dynasty followed the military regulations of the Ly dynasty... soldiers shifted between military service and working in the fields in order to save money... It was generally the same in the early Le and from the time of Hong Duc, this would not change” [13].

Thus, it can be understood that under the Ly dynasty the army force was divided into two types: the imperial army (also known as the internal army, the army in the capital, the royal army) and the local army (also known as the external army). There were also militia forces (“huong binh” in the plains and “tho binh” in the mountains).

Regarding the method of recruiting and organizing soldiers, to manage the country, the royal court conducted civil status registration and personnel inventory according to which military ranks and soldier recruitment were determined. Specifically, under the Ly dynasty and at the beginning of spring, commune officials had to report the civil status of their communes by declaring the number of people and grouping them into the following classes: the king's relatives (ton that), civil mandarins, military mandarins, soldiers, miscellaneous officials (tap luu), man in adulthood, aged 16 or 18 or older depending on the time of each monarch (hoang nam), old man (long lao), the disabled, and the displaced [7]. The royal court strictly controlled the number of young men in the country because it was this human resource that would carry out military service.

By controlling the number of people in the country, the royal court stipulated that all people who reached adulthood must carry out military service. According to *Lich trieu hien chuong loi chi* (Categorised records of the institutions of successive dynasties): "It was regulated that those who were elected would be sent to the army, those who were underqualified would have their names recorded in the book. They would be called out when needed and the length of service may not be fixed" [13]. If it was a time of peace, the royal court selected just a few soldiers to add to the army to guard and practice. The remaining soldiers were registered in the military book and would be called to join the army when needed. Following the policy of "Ngu binh u nong", the royal court sent most of the soldiers to work in the fields and only a small number of them were separated from agricultural production.

During the Ly dynasty, the royal army soldiers were given 10 bundles of rice each year. On the 7th day of the first month, on Khai Ha ceremony, each soldier was given three "tien" (money unit) and a piece of cloth... But the local army do not have a salary, they only did their service in rotation. At the end of their service period, they could go home to cultivate, grow their own crops and support themselves [13].

With the policy of "Ngu binh u nong", the royal army was responsible for protecting the capital and the king and received a salary, while the vast majority of soldiers - from those who guarded the citadel gates to the local troops - took turns with some being on guard duty and training for a certain period of time and others being assigned to agricultural production.

In the Tran dynasty, the royal court continued the policy of sending soldiers to work in the fields. "The Tran dynasty, following the Ly dynasty's military regulations, royal guards were given annual

allowances, the amount of which is unknown. As for the remaining soldiers, they took turns to work in the fields, self-supported". During the reign of the early Le, "after Le Thai To finished pacifying the country, he divided the land to the army soldiers. They were divided into five sessions, one stayed in regular service and the other four worked in the fields. So the military regulations in the early Le followed that of the Ly and Tran dynasties, not providing allowance for all soldiers. From the time of Hong Duc, these regulations remained unchanged" [13].

Continuing the policy of soldiers participating in agricultural production, the Mac dynasty carried out "loc dien"² and provided fields for local soldiers to cultivate. At the end of the 18th century and the beginning of the 19th century, when the Nguyen - Tay Son war took place, the policy of "Ngu binh u nong" was applied by Nguyen Anh and often mobilised troops for agricultural production in periods when they did not have to fight to create food sources. King Gia Long often ordered his troops to reclaim land, make new fields, and set up food production camps to both supply food for troops and store food.

It can be said that, under the monarchy, "Ngu binh u nong" was both a military organization and a military line. "Ngu binh u nong" became a military and defence strategy implemented by all dynasties. Although each dynasty had its own ideas, developments, and unique characteristics when implementing the "Ngu binh u nong" policy to suit the historical conditions of each dynasty, in general, military service was required for all young men and troops took turns to participate in agricultural production or all troops participated in agricultural production when not fighting an

²The fields which were granted to soldiers based on their accomplishments and contributions.

enemy. Taking its conception from the Dinh and - Anterior Le and being developed into a military system from the Ly dynasties, the “Ngu binh u nong” policy continued to be inherited and perfected by the following dynasties. Its core concept was to combine national defence with economic development; with national defence protecting the economy and economic development supporting national defence. “Ngu binh u nong” was not only a military organization but also “a policy of governing the country and a plan to defend the country” [7] applied by Vietnamese monarchy dynasties.

In 1858, the French - Spanish coalition attacked the Da Nang estuary, opening the way for Western colonial rule in Vietnam. In 1884, the Nguyen dynasty had to sign the Treaty of Patenotre with France, recognizing the French protectorate. From 1884-1930, Vietnam had many individuals and parties were born to fight against French protection, most notably the establishment of the Communist Party of Vietnam (February 1930).

3. Military farm model in North Vietnam during 1956-1960 period

In modern history, under the leadership of the Communist Party of Vietnam³ (1930-1945), the August Revolution was successful and on September 2nd, 1945, the Democratic Republic of Vietnam was born. However, on September 23rd, 1945, the French returned to Vietnam. From here, Vietnam began a 9-year-long resistance war, the Indochina War (1945-1954) and ended with the Dien Bien Phu victory on May 7th, 1954. The Geneva Agreement (July 21, 1954) was then signed, ending in the Indochina War. Since 1954, the country’s situation has significantly changed: the North was at peace again and the South

continued the national and democratic revolution to complete the cause of national reunification.

After the liberation day, the North had a very large army that had participated in the 9-year resistance war against the French. To reduce the “burden” on the country after the war, the military force was reorganized to reduce the number of soldiers. Moreover, in peacetime, there is no need for such a large army. The Party Central Committee then decided to transfer a part of the army force to do production tasks, build military farms, and “advance troops to the mountains and forests, reclaim and build farms, forming new economic zones, contributing to the cause of border construction, national defence and realization of the Party's ethnic policy” [14].

In July 1956, the Ministry of National Defence assigned the General Military Commission to establish the Department of Military Farm to start researching, investigating, and surveying the land in preparation to deploy the construction of the military farm. The military farm was built according to the model of a state-owned farm. At the beginning of 1957, the Department of Military Farm built four pilot farms: Yen Giang farm (Thanh Hoa province), Son Ha farm (Ninh Binh province), An Khanh farm (Ha Dong), and Ba Vi farm (Son Tay). From 1958, the General Military Commission transferred most troops to production. By 1960, the Department of Military Farm had built 35 military farms and one salt field (Quynh Hoan), four fishing teams (Dong Hoi, Cua Hoi, Lach Quan, Ninh Co), one blast furnace, and 58 processing facilities [15]. The locations for construction of military farms were mainly in the midland and mountainous areas, and mostly in the northwest, Viet Bac, and Zone IV, including areas along the western border and along the coast stretching from the northwest to Vinh Linh (Quang Tri). These farms

³In 1951, changed to Vietnam Labour Party.

were distributed along the 59th and 21st roads in the southeast - northwest direction, in line with the nation's economic, social, political, and national defence strategies⁴.

Regarding the transfer of troops to production, in 1957, the General Military Commission sent about 2,000 troops [16] to reclaim land and build four pilot military farms in Thanh Hoa, Ninh Binh, Ha Dong, and Son Tay. In 1958, the transfer of troops to production was further promoted. Instead of moving small squads as in 1957, in 1958, the General Military Commission moved the whole unit to production. The General Military Commission assigned four Military regions (including Northwest Military region, Viet Bac Military region, Huu Ngan Military region, and IV Military region) and three Divisions (305, 330 and 338) to direct the transfer of soldiers to production team and the building of military farms. In total, 17 regiments and equivalent units as well as 14 battalions and equivalent units were transferred. By the end of 1958, the number of people transferred to production was 26,831, an increase of more than 10 times compared to 1957 [17]. By the end of 1959, the General Military Commission had transferred 31,182 soldiers⁵ of which about 4,000 were officers [17]. In 1960, the General Military

Commission transferred 2,300 more soldiers. After three years of transferring troops to production (1958-1960), the General Military Commission had organized and sent 29,605 soldiers to reclaim and build military farms⁶ [18].

Regarding production, the military farm was organised according to the model of a state-owned farm. Military farms were under the management of the Ministry of National Defence. The military force that moved to production kept the number of that unit. Regarding organization, military farms kept the model of an army unit, that is, regiment, battalion, company, platoon, and squad. Companies and platoons are production units. They were divided into still smaller groups of about 10-15 people. Soldiers who switch to production not only had to continue their education and train professional skills in production, but also had to attend military training every year according to the regulations for reserve troops [16]. This military force regularly attended Party meetings (12 times a year), continued education (officers 26 days a year, soldiers 13 days), trained in expertise and farming techniques, and had to regularly attend military training. According to [19], Article 6 of "Some necessary regimes for transferring soldiers to production" specifically stipulates that: "the required learning activities are arranged weekly and monthly outside production hours, focusing on political and professional training...; party meetings are arranged in the last Saturday afternoon of the month, 4 hours a month, taken from two evenings, are for Party group activities; 6 hours per week, in the early morning, noon or evening, for learning; other activities such as listening to news, policies, professional training, trade unions, youth labour unions, clubs..., are arranged in the evenings;

⁴In the Northwest area, military farms were concentrated in Yen Bai, Son La and Lai Chau provinces (including present-day Dien Bien province) along the Vietnam - Laos border. In the Viet Bac area, military farms were concentrated in Tuyen Quang and Thai Nguyen provinces. In the coastal area, there were Rang Dong farm (Nam Dinh) and Binh Minh farm (Ninh Binh). In the Military Zone IV area, military farms were concentrated in the provinces of Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, and Vinh Linh (Quang Tri) along the Vietnam - Laos border. The military farms were in the area along the roads 59 and 21, concentrated in Phu Tho, Hoa Binh, Son Tay and Ha Dong.

⁵The Northwest area had about 5,000 soldiers; Viet Bac about 2,000 soldiers; Phu Tho about 4,000 soldiers; Hoa Binh and Son Tay about 5,000 soldiers, the upper part of Thanh Hoa about 5,500 soldiers, the upland of Nghe An about 5,000 soldiers, the border line about 2,000 soldiers, the coastal area about 2,000 soldiers, and other areas...

⁶The number of soldiers who switched to production decreased in 1959 because the General Military Commission brought several soldiers back to the army [18].

30 minutes per day for reading newspaper after dinner; political studies can be conducted in production hours but not as a regular basis”.

The leadership apparatus of each military farm consisted of a government organization and a Party organization. The party leads politically and the government directs administratively. Regarding administrative organization, the Board of Directors of the farm included the Director and Deputy Director who directly directed all aspects of production. Assisting the Board of Directors, there were specialized departments such as: Cultivation Department, Animal Husbandry Department, Basic Construction Department, Financial Planning Department, Administration Department, and Labour and Salary Department. In terms of Party organization, the Party Committee was the highest governing body of the farm. Each farm has a Party Committee attached to the Military Zone or Division under which there was also a Battalion Party Committee and cell. Besides, the farm also had mass organizations such as Trade Union, Youth Union..., which were directly led by the Party Committee.

Military farms also switched to the model of state-owned farms, shifting the military regime to workers' mode and no longer holding the model of a military unit. On October 1st, 1960, the Ministry of State-owned Farm was established, merging three types of agricultural production: military farms, state farms, and Southern agricultural production federations. Since then, military farms were no longer under the management of the Ministry of National Defence but directly under the Ministry of Agriculture and their production and business followed the state-owned farms⁷. Military farms

also changed to the model of state-owned farms, no longer army units, and military soldiers became workers.

4. Discussion

It can be said that throughout the nation's history, “Ngu binh u nong” was still a “policy of national governance and a strategy of national defence.” In each historical period, the way of “sending soldiers to agricultural production” had different variations, but its essence was basically the same. Soldiers were “hidden” in production activities and directly involved in production. They were both soldiers and producers (farmers). Basically, the military farms in the twentieth century were also a form of “sending soldiers to agriculture production” from the monarchy period. In the monarchy period, the military forces were sent to agricultural production in rotations while in modern history, they switched to agricultural production. The concept of “Ngu binh u nong” in the monarchy or the military farms in North Vietnam in the years 1955-1960 both have great significance.

Firstly, “Ngu binh u nong” and the military farm are a combination of economic development and national defence. Military and economic issues have always been a problem for every government. The policy of “Ngu binh u nong”, as well as the military farms, are a harmonious combination between national defence and economic development between military and economy. Under the monarchy, from a defence perspective, the government maintains a large army “sent” in agriculture. Although the army was so large, the royal court did not have to bear the burden of supplying food to the army. Thanks to the policy of “Ngu binh u nong”, the soldiers were sent to the locality for rotational agricultural production to be self-sufficient. From an economic perspective,

⁷In January 1961, after being handed over to the Ministry of Agriculture, 35 military farms were rearranged to 29 state-owned farms.

if the government must maintain a powerful army, the need for food production and storage is equally important. The country also needs a huge human resource to develop production and make the country rich and strong. Thanks to the policy of “Ngu binh u nong”, the royal court always had a human resource that was regularly involved in production. Thus, they could have a powerful and large army while production was maintained.

The establishment of military farms in the North after 1955 was also a combination of national defence and economic development. A large army was sent to reclaim land and build military farms, which are agricultural production facilities owned by the State. Military farms were not only economic bases for agricultural production, but also national defence establishments of the North. The military farm network stretched from the Northwest to Vinh Linh with a large army force. The Northwest region had six farms with 5,482 soldiers, being located along the Vietnam - Laos border. The Viet Bac region had five farms located to the east and south of the base area with 1,287 soldiers. Son Tay, Phu Tho, Hoa Binh, Ha Dong, Ha Nam, and Ninh Binh regions had seven farms located along road 59 and road 21 in the southeast - northwest direction with 6,055 soldiers. Thanh Hoa had two farms along the southwest border of Vietnam - Laos with 3,362 soldiers. Military Region IV had seven farms from Phu Quy to the front line with 4,465 soldiers [17]. The military farms became a “fortress” to protect the socialist North.

Secondly, “Ngu binh u nong” helps reduce the burden of “raising troops” in peacetime. Building a powerful military force is very necessary and indispensable for every government, especially in wartime when the government must mobilize a large army force. Then, all human and material resources were mobilized to prepare for the

resistance war. But in peacetime, a large army becomes “pressure” for the government. Therefore, the question is: How can a government maintain a large and powerful army and at the same time reduce the burden of raising the army and develop the economy in peacetime? Adopting the policy of “Ngu binh u nong”, which is sending troops to alternate agricultural production as in the monarchy period or building military farms, transferring the army to do production tasks in the North during the years 1955-1960, both can help reducing the economic burden on the government. With soldiers directly engaged in production and self-sufficient in food, the government reduces the pressure of raising troops.

Thirdly, it is more flexible to switch from peacetime to wartime when needed, and vice versa, the army can be actively involved in production and economic development during peacetime. With the policy of “Ngu binh u nong”, the royal court could quickly switch from peacetime to wartime condition when needed. When the country had to fight a war, those troops sent to the countryside for production were mobilized back to the army to participate in the fight against the enemy. It was proved in history. For example, under the Ly dynasty, in peacetime, the royal court only provided food to support internal troops (the imperial army). Compared to the standing army that was sent to agricultural production, the number of these internal soldiers was quite small. But in the resistance war against the Song, Ly Thuong Kiet mobilized about 100,000 soldiers from the military force sent from agriculture to fight against Song’s army. Not to mention, the military force stayed to protect the capital, the border area, and other key positions. During the Tran dynasty, military forces were mobilized back into the army when there was a war against Yuan - Mongol’s

army. During the second resistance war against the Yuan (in 1285), the royal court mobilized more than 20,000 soldiers. In the early Lê, when there was a war, the royal court mobilized 26,000-30,000 soldiers [7].

In the 20th century, when the Indochina War ended, and the North was at peace again, the Party and State sent a large army to participate in agricultural production on military farms. These military farms then were both economic and a national defence bases with both combat and producing functions, i.e., a fighting force in place with the ability to provide logistics on the spot. After The United States of America decided to escalate its military intervention in South Vietnam, farm workers, including soldiers who turned to production, were sent back to the battlefields of the south to fight. This was reflected in the change in the labour force. During 1955-1960, the labour force of military farms was mainly male soldiers, but, since 1961, because male soldiers on military farms were sent to the southern battlefield, female workers made up the majority. By 1968, female workers in military farms accounted for a high proportion: female workers of Viet Lam farm accounted for 63.5% of the total number of employees; Thang Muoi farm, 66.1%; Nghia Lo farm, 72.7%; Xuan Mai farm, 63.2%; Ba Vi farm, 61.4%; Van Linh farm, 61.2%; and An Khanh farm, 60%⁸. This also means that more and more male workers on the farms were being sent to the battlefield in the South. During the decade of 1965-1975, tens of thousands of farm workers were sent to the battlefields of the South. More

than 10,000 officials and farm workers joined the army, accounting for 1/6 of the force of officials and workers and nearly half of the youth force on the farm [15]. Every year, the young men in state-owned farms participated in recruitment campaigns. In peacetime, they were farm workers, but when the country was at war, they became warriors in the battlefield.

Fourthly, the Vietnamese army is a people's army, an army of the people. Under the monarchy, the royal court made all young men soldiers, and the army was hidden among the people (peasants). In the new era - Ho Chi Minh era, this character was more evident. The powerful, "invincible and victorious" military force was formed initially from the people's self-defence force and the people's guerrilla groups and gradually developed into a force of three armies: the main army, the local army, and the militia and self-defence force. The August Revolution (1945) was a victory of the people who rose to seize power. After 1945, the People's Army force became more and more mature and strong. With the motto "resistance war, national construction", "every citizen is a soldier, every village is a fortress", the Vietnamese people continued to defeat the French colonialists and then the American imperialists, making the General offensive and uprising in the spring of 1975. The country was independent and reunified.

The Party always associated the task of building socialism with defending socialism, and the task of national building with national defence, which means that economic development was in combination with national defence. In March 1976, the Politburo issued a *Resolution on the issue of sending troops to do the task of economic construction*: "In the coming time, we must combine military service with labour service throughout the country... On the other hand, in the

⁸The percentage of female workers in state-owned farms in general is increasingly high. In 1960, the female labour rate was 18.8%; in 1961 was 29.4%; in 1962 was 32.8%; in 1963 was 34.1%; in 1964 was 36.5%; in 1965 was 40%; in 1966/1967 was 47.2%; In 1968/1969 was 52.6% and in 1970 was 53.2% [20, 21].

context that our country's economy, which was already poor and backward, has been severely damaged by 30 years of continuous war, and all our human and material resources are now mobilized to restore and develop the country's economy, to heal the wounds of war and build a rich and strong country, it is even more an essential and urgent requirement that the army does the task of economic development for the country" [22].

Many economic groups under the Ministry of Defence were formed like the 15th Army in the Central Highlands and the 16th Army in the Southeast. While carrying out strategic economic tasks in combination with national defence in the current period, many national defence economic zones were established and performed three functions: combat, production, and work. In the monarchy, the royal court implemented the policy of "Ngu binh u nong", requiring military service for all young men and sending soldiers to agricultural production in rotations. Later, in modern history, the Party advocated building a people's army and all young men had to serve in the military in which the task of economic development was combined. In the 21st century, "Soldiers sent to agricultural production" is the image of soldiers engaged in economic activities.

5. Conclusions

Currently, Vietnam has become deeply integrated into the global economy and new requirements for economic development and defence consolidation have emerged. Economy and defence are closely related, specifically, the stronger the economy, the stronger the defence potential. Military forces involved in production have not only economic significance but also national defence significance. In fact, military units and enterprises make substantial contributions

to the economic development of the country. For example, many military units have developed into spearhead economic sectors, and many military enterprises have become leading brands of the current economy such as: Military Industry - Telecommunications Group (Viettel), General Saigon Newport Company, Vietnam Helicopter Corporation, and Military Commercial Joint Stock Bank (MB) to name a few.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] P.H. Le (1976), "Exploring the strategies of defending the country during the Ly, Tran and Le dynasties", *People's Army Newspaper*, **12**, pp.72-84 (in Vietnamese).
- [2] V. Tan (1976), "National construction goes hand in hand with national defence, a rule of existence and development of the Vietnamese nation", *People's Army Newspaper*, **9**, pp.37-46 (in Vietnamese).
- [3] T. Long (1976a), "Dai Viet strengthening the defence", *People's Army Newspaper*, **5**, pp.72-86 (in Vietnamese).
- [4] T. Long (1976b), "Building a standing army", *People's Army Newspaper*, **2**, pp.64-69 (in Vietnamese).
- [5] T.Q. Vuong (1977), "The policy of 'Ngu binh u nong' and the issue of combining economic development with national defence", *People's Army Newspaper*, **3**, pp.65-71 (in Vietnamese).
- [6] P.N. Phung (1977), "Some features and rules of the war to defend the Fatherland in the national history", *People's Army Newspaper*, **5**, pp.83-89 (in Vietnamese).
- [7] N.A. Dung (1981), *Policy of 'Ngu binh u nong' in the Ly - Tran - The Early Le (XI-XV Centuries)*, Social Sciences Publishing House, Hanoi, 210pp (in Vietnamese).

[8] H.D. Bien (2006), "Contributing to understanding how to divide the session in the policy of 'Ngu binh u nong' during the Le Thanh Tong period (1460-1497)", *Military History Newspaper*, **169**, pp.27-30 (in Vietnamese).

[9] N.T. Trang (2014), "From the policy of 'Ngu binh u nong' to the strategy of combining economic development with national defence", *Military History Newspaper*, **276**, pp.82-85 (in Vietnamese).

[10] T.H. Nam (2006), "Army Farms", *Journal of Military History*, **(6)**, pp.10-17 (in Vietnamese).

[11] L.N. Thang (1999), "Military farm, a post-war economic model", *Journal of Military History*, **(6)**, pp.13-17 (in Vietnamese).

[12] N.G.V. Phai, N.P.N.T. Sy (1960), *Viet Su Tieu An (Vietnamese History)*, Asian Culture Publishing, Saigon (in Vietnamese).

[13] P.H. Chu (2014), *Lich Trieu Hien Chuong Loai Chi (Regulations of Successive Dynasties by Subject-matter)*, **Volume IV**, History Publishing House, Hanoi (in Vietnamese).

[14] Department of Military Farms, *Draft Report Summarizing 3 Years of Transferring Troops to Production*, file no. 6, National Archives Centre III (in Vietnamese).

[15] Ministry of Agricultural Farms, *Summary Report of The 4-year Emulation in The Anti-American National Salvation Resistance*, file no. 68, National Archives Centre III (in Vietnamese).

[16] Department of Military Farms, *Military Farm Construction Plan 1958*, file no. 170, National Archives Centre III (in Vietnamese).

[17] Ministry of Agricultural Farms, *Summary Report of 3 Years of Transferring Troops to Production*, file no. 103, National Archives Centre III (in Vietnamese).

[18] Department of Military Farms, *Working Situation of The Past Two Years (1958-1959) and Tasks in 1960*, file no. 86, National Archives Centre III (in Vietnamese).

[19] Department of Military Farms, *Some Directions on Regimes and Policies for Production Troops*, file no. 167, National Archives Centre III (in Vietnamese).

[20] Ministry of Agricultural Farms, *Summary of 4-year Auxiliary Work in The Anti-American National Salvation Resistance and 2 Years of Implementation of Resolutions 152, 153 and 31 in The State-owned Agricultural Sector*, file no. 83, National Archives Centre III (in Vietnamese).

[21] Ministry of Agricultural Farms, *Report on The Situation of Female Workers in The State Agricultural Sector*, file no. 167, National Archives Centre III (in Vietnamese).

[22] Communist Party of Vietnam (2004), *Communist Party Document*, episode 37, National Political Publishing House, Hanoi, 401pp (in Vietnamese).

The repatriation of Japanese in Vietnam from 1954 to 1960

Thi Hong Luong*

*Institute of History, Vietnam Academy of Social Sciences,
38 Hang Chuoi Street, Pham Dinh Ho Ward, Hai Ba Trung District, Hanoi, Vietnam*

Received 1 July 2022; revised 15 September 2022; accepted 28 September 2022

Abstract:

The Japanese military presence in Vietnam during the Second World War is well known among academia and has left traces in the history of Vietnam, however, the impacts of the remaining Japanese in Vietnam since the war ended has been somewhat forgotten on an individual and collective level. It is a common thought that there was only a Chinese presence in Vietnam during the 1950s and 1960s, but the real picture was immensely more complex than that. During the First Indochina War, many Japanese and Westerners (German, Austrian, French, Greek, etc.) defected and stood in the same line with the Vietnamese people during the struggle against the French invaders. These people became known as “new Vietnamese citizens” and joined hands with the Vietnamese people to build and defend the newly established Democratic Republic of Vietnam (DRV). After the end of the First Indochina War in 1954, according to the wishes of the Japanese, the Vietnamese government created policies for favourable conditions for them to be repatriated to their fatherland. Drawing on untapped documents at the Vietnamese National Archives Center III, this article contributes to clarifying the history of the Japanese soldiers that remained in Vietnam after the end of the Second World War.

Keywords: Japanese, the national resistance war, Vietnamese.

Classification number: 8.1

1. Introduction

In mid-August 1945, as soon as the Japanese emperor announced their surrender to the Allies, the Vietnamese national uprising led by Viet Minh quickly and successfully took place throughout the country. The revolutionary government was established by the Provisional Government of the DRV and headed by Ho Chi Minh. The DRV was proclaimed on September 2, 1945. At that time, it was estimated that 97,000 Japanese troops and civilians were still in Indochina. Until September and October 1945, about 48,000 soldiers and 2,000 Japanese civilians remained north of the 16th parallel of Vietnam [1]. According to the

ceasefire, Japanese troops were disarmed and left for Japan from the ports of Hai Phong and Vung Tau. From April to August 1946, groups of Japanese soldiers stationed from the 16th parallel northward returned to Japan from Haiphong port. About 30,500 Japanese soldiers were repatriated through Hai Phong on April 29, 1946, and 1,500 civilians were deported shortly thereafter. At the same time, groups south of the 16th parallel under British military control left Vietnam from the Vung Tau port [1].

Taking advantage of the negligence of Chiang Kai-shek and British troops, many Japanese soldiers defected from the concentration camp

*Email: hongflower@gmail.com

and did not leave Vietnam. There are numerous reasons that could explain why these Japanese soldiers did not return to their homeland after the war ended, however, three main motives can be established: 1) These failed soldiers were pessimistic about the future of Japan under U.S. military occupation; 2) The Japanese soldiers had a fear of being mistreated as prisoners of war or would be prosecuted as war criminals; 3) Some of them had a relationship with Vietnamese girlfriends [1].

The number of Japanese soldiers remaining in Vietnam as of December 1946 was also not accurate because of the turbulent context at that time. However, according to Japanese statistics, about 800 Japanese soldiers remained in Indochina [2] and they had no intention of returning to Japan. It was estimated that the number of Japanese soldiers who deserted and remained in Vietnam by the end of 1946 was 800 of which about 600 joined the Viet Minh and “about half of them died in Vietnamese fatherland” [3]. Up until now, there have been 160 Japanese people who joined the Vietnamese people's struggle to fight against the French colonists [3]. Not all Japanese deserters joined the Viet Minh nor were they ready to join the Viet Minh immediately after defecting. Their act of desertion was spontaneous, unorganized, and not owing to any group or organization.

There are some studies regarding the Japanese army involved in Vietnam during the Second World War, however, the Japanese soldiers in Vietnam during the period of 1954 and 1960 were never fully clarified in Vietnamese academia. According to the 2002 publication of Belated Asian Allies: *The technical and military contributions of Japanese deserters (1945-1950)* by Christopher Goscha, there were a number of Japanese troops remaining in Vietnam after the

Second World War. Goscha also emphasised the contributions of Japanese soldiers to the service of the DRV during the war against the French in terms of helping the transformation to a modern military as well as technological and economic development. *Etrangers in Indochinese colonial society*: The situation of Japanese migrants written by Roustan Frédéric in 2010 introduces the concept of étranger or “foreigners” in French Indochina by focusing on Japanese migrants in Indochinese society between 1882 and 1952. This is a notable study; however, it refers to Japanese migrants in Indochina in general and does not focus on the Vietnamese community as compared to this research. Hong Hoang is the first Vietnamese scholar to point out the contributions of Japanese soldiers to the national resistance war in the 2008 paper entitled *The Japanese “new Vietnamese” in Vietnam’s anti-French war (1945-1954)*. Based on sources from Vietnamese archives, Hong managed to produce an incomplete list of names of the Japanese or “new Vietnamese” with their contributions to the Vietnamese struggle for independence from 1945 to 1954. Drawing on Japanese materials, Minh Vu Vo’s 2019 paper titled *Repatriation of Japanese in Vietnam after World War II* focuses on the disarmament and repatriation policies for the Japanese army and civilians in Vietnam. Vu also analyses the differences in this process between the North and South of Vietnam. In *Last Japanese overseas in Vietnam repatriated after 1954*, published in 2005, Quang Hai Dinh illustrates the journey of the last Japanese soldiers that returned to Japan in the 1960s.

All these studies affirm that the presence of Japanese soldiers in Vietnam after the Second World War as well as their hard work and bloody contributions to the Vietnamese resistance war. However, these historical facts have not yet been

fully restored. This paper analyses the DRV's policies as well as provides a detailed account of Japanese living in Vietnam after August 1945 and aims to contribute to a complete understanding of the history of the First Indochina War, the solidarity policies of the Vietnamese, as well as a historical mark in Vietnamese and Japanese relations.

2. Becoming new citizens

At the time, the newly established DRV faced many challenges. The country was devastated after the Great Famine of 1945 afflicting the Northern region and leaving behind between one to two million victims. The flood in August 1945 broke dikes in nine Northern provinces causing a third of the cultivated areas to be severely damaged. The damage triggered by this flood was estimated to cost 13 million VND [4]. Three provinces in North-Central Vietnam lost about half of their crops. After the flood, a prolonged drought made 50% of the land area in North Vietnam uncultivable [5]. The resulting famine threatened the new government. Moreover, the finances of the revolutionary State were nearly zero because the national budget at that time was only 1,230,000 VND of which more than half was depleted [6]. The greatest threat to the DRV government at that time was the determination of the French to re-occupy their old colonies. In the North, Chiang Kai-shek's forces arrived in massive numbers to take the Japanese surrender in Hanoi as well as most cities and towns from the Vietnam - China border to the sixteenth parallel. The political situation in Southern Vietnam was more serious. On September 13, 1945, following the Potsdam agreement, British-Indian soldiers arrived in Saigon to disarm Japanese troops. With the backing of the British command, nearly 2,000 French troops were released [7]. In addition to the forces of Chiang Kai-shek and the British

and French forces, there were still about 5,000 disarmed Japanese troops in Vietnam at this time [8]. On September 23, 1945, a clash broke out in Saigon marking the return of French colonial rule in Vietnam. Meanwhile, the DRV army was in the process of construction and had not yet received much training. Most commanders lacked military knowledge, combat experience, as well as weapons.

The presence of Japanese soldiers in Vietnam at that time was quite strange, making Vietnamese local officials utterly confused and unsure of how to handle the situation. In December 1945, Le Van Hien was the special representative of the DRV in the Central and Southern regions, then was later appointed Minister of Finance of the DRV. He proposed a solution that was accepted by the DRV [9]. Following that, the government accepted Japanese soldiers who remained in Vietnam and desired to use their technical knowledge and skills to contribute to the newly established regime. Hundreds of Japanese, instead of being indiscriminately handled by local officials, lived and worked equally in military units and government agencies of the DRV with the common name "new Vietnamese" as coined by President Ho Chi Minh.

The most prominent activity of the "new Vietnamese" was military training. Indeed, the "new Vietnamese" played an important role in running the Infantry of Academy in Quang Ngai, which was one of the first schools to train regular military officers in Vietnam. The school had eleven Japanese military training teachers including four military instructors for four companies, namely, Tanimoto Kikuo - Dong Hung, Mitsunobu Nakahara - Minh Ngoc, Igari Kazumasa - Phan Lai, and Kamo Tokuji - Phan Hue. There were four teaching assistants, namely, Aoyama Hiroshi, Onishi Suegami, Namada

Suegami, and Minegishi Sadai. The training team had two Japanese: Ishii Taku - Nguyen Van Thong and Sato - Minh Tam. The military doctor was Kisei Fujio - Le Trung. The Japanese teachers' lectures were compiled according to Japanese military books [3]. Of the 46 Japanese officers joining Viet Minh in the Southern part of central Vietnam in 1948, there were 36 working as military instructors, which accounts for 78% of the total [1].

The use of Japanese soldiers as military instructors for cadres and soldiers of the Vietnam People's Army during the early period of the resistance war against the French proved to be an appropriate and effective policy. These "new Vietnamese" played an important role in promoting the abilities of the Vietnamese army. The military support of these Japanese soldiers was the greatest contribution to the fight against the French colonists together with the Vietnamese people.

The "new Vietnamese" also directly participated in major campaigns and fought on the frontlines. Some of them became senior officers in the Vietnamese army such as Major Ishii Takuo who became a colonel in the Vietnam People's Army. He served as the leader of the Infantry of Academy of Quang Ngai and later served as "chief advisor" of the Viet Minh armed forces in South Vietnam. Colonel Mukayama, a former member of the Imperial Japanese Army, later became an advisor to General Vo Nguyen Giap. There were at least 41 Japanese who participated in major campaigns or fought on local frontlines such as the Viet Bac Campaign, Border Campaign, and 14th Street Campaign. Some "new Vietnamese" were brave warriors and were admired by Vietnamese soldiers. Indeed, many "new Vietnamese" were awarded medals by the Government and Vietnam People's Army.

Four of these individuals were members of the Vietnamese Labour Party (another name of the Vietnamese Communist Party): Yutumi Suchio - Nguyen Duc Hong (in 1949), Tsuchiyo Tuchtami - Nguyen Van Dong (in 1949), Yoshida Tamio - Phan Tien Bo (in 1950), and Iwai Koshiro - Nguyen Van Sau (in 1952).

Besides, the "new Vietnamese" also helped Vietnam in other fields such as finance, currency, medicine, resource exploitation, printing, meteorology, etc. Several Japanese financial experts also advised the DRV in managing the government's banking and monetary policies, which was one of the most pressing problems faced by the Viet Minh during the struggle. Some "new Vietnamese" worked at the printing agency under the Ministry of Finance. One notable individual was Fujita Isamu-Hoang Dinh Tung, a former employee of the Yokohama Bank branch in Hanoi, who helped build a modern financial and monetary system, fabricate money printing paper, and issue banknotes under the direction of Finance Minister Le Van Hien.

3. Returning hometown

During the period from 1954 to 1960, there were a total of five repatriations for Japanese expatriates to return home.

The first repatriation took place in 1954 right after the North was at peace. The Vietnamese government organized the repatriation of 71 Japanese expatriates back home. At this time, Japan and the DRV did not establish official diplomatic relations, so the organizations of the two countries agreed to bring the "new Vietnamese" back home through a third country as an intermediary. At the World Peace Congress in Sweden (taking place from June 19-23, 1954), representatives of the Japan Peace Committee and the Vietnam Peace Committee attending

the congress discussed this issue. The Chinese Red Cross Society agreed to help the Japanese people remaining in Vietnam return home through Chinese territory. In November 1954, the Vietnamese government gathered some of the "new Vietnamese" in Thai Nguyen. After that, these overseas Japanese moved to the Vietnam - China border and then took a train to Nanning and from there to Tianjin as arranged by Chinese officials. They made it back to Japan on November 29, 1954 [10]. This was the first repatriation since the end of the resistance war against the French colonialists. On this first trip, these Japanese were not allowed to bring their wives and children with them.

By the end of 1958, in North Vietnam, there were 37 Japanese including 36 male, one female. Three people claimed to be Taiwanese with Japanese nationality, and one person claimed to be Japanese with a father that was Korean and a mother that was Japanese. Out of the 37 Japanese, 21 were working for state agencies, and 16 were self-employed in the provinces [11]. The majority of the Japanese married Vietnamese women of which 22 were married to the Northerners, one female (Japanese name was Saito Hanako, Vietnamese name was Nguyen Thi Thanh) that married and had two children in Hanoi, three Japanese that married Southerners that remained in the South, and five Japanese that were unmarried [12].

Regarding the issue of Japanese soldiers, the Vietnamese government's policy was to make preparations for them to return to their fatherland and to request the Japanese government to ensure their safety so that they could easily return to Japan. To create favourable conditions for the repatriation of these Japanese expatriates, on October 31, 1958, the Vietnamese Prime Minister organized an investigation into the

difficulties and problems of Japanese expatriates at all agencies and localities where they were working and living. Together with Vietnamese agencies, Japanese friendship organizations actively worked to return the "new Vietnamese" back home. Some notable people involved were Fujita Isamu and Nakahara Mitsunobu, some of the first "new Vietnamese" Japanese that returned home on the first repatriation in November 1954 [10]. On December 11, 1958, a Japanese peace delegation consisting of the Japanese Red Cross Society, the Japan Peace Committee, the Japan - Vietnam Friendship Association, and the Japan - Vietnam Trade Association visited Vietnam. The delegation and the Vietnam Red Cross Society discussed the issue of bringing back the Japanese remaining in Vietnam after the Second World War. On December 28, 1958, the two sides signed the "Joint Communiqué of Peace" [10] agreeing to return the remaining Japanese soldiers in Vietnam back home.

In 1959, the second repatriation of the Japanese - Vietnamese took place. The Vietnamese government stipulated that officials of provinces and agencies would help the repatriated Japanese quickly sell properties that could not be taken with them at an affordable price. If Japanese expatriates were officials, they were entitled to severance allowances and other benefits granted by the agency, which had to be resolved before the overseas Japanese left Vietnam. Each person was entitled to receive a severance allowance and a seniority allowance of at least 20,000 VND with a maximum of one million VND. However, compared to the average living standard in Japan at that time, this amount was not enough to ensure a stable life for Japanese expatriates. Therefore, the Vietnamese government decided to provide an additional allowance of 500,000 VND for each Japanese expatriate who was an

employee of a state agency. Particularly, for those “new Vietnamese” who were members of the Vietnamese Workers’ Party, they would be given an additional 300,000 VND each. For Japanese expatriates who were commoners, they were given 250,000 VND each [13].

Many Japanese expatriates desired to bring their wives and children with them. However, because of the concern of difficulties when returning home at this time, the DRV encouraged the Japanese to return first and then reunite with their wives and children later. The Vietnamese authority worried that if Vietnamese spouses returned to Japan at the same time as their husbands, they would face difficulties such as new languages and lack of jobs and housing. The Ministry of Home Affairs also suggested that Vietnamese officials should analyse these concerns and advise their wives and children not to hurry to leave for Japan. But, for a few cases in which Japanese families earnestly requested their wives and children to return, and there was evidence to ensure their stability in Japan, the Government would intervene to let their wives and children return at the same time. The Provincial Administrative Committee and state agencies specified their opinions together with the application of the overseas Japanese to the Vietnam Red Cross Society.

For Japanese wives and children staying in Vietnam, the Ministry of Home Affairs requested local authorities to find jobs for them. The women’s union was responsible for taking care of the wives and children of Japanese expatriates in terms of material and spiritual matters and to help solve part of their difficulties after their husbands returned home. The Ministry of Home Affairs advocated helping overseas Japanese wives and children as follows:

For overseas Japanese wives and children

who were state officials and employees, the wife (including the case if the wife was a state officer or employee) was granted VND 50,000. Each child was given 25,000 VND.

For the wife and children of Japanese expatriates who were ordinary people, the administration considered their actual situation and gave support with the maximum amount of 30,000 VND for a wife and 15,000 VND for each child.

The administrative committees of the provinces and agencies having Japanese employees returning home would consider and promptly issue them right before their leaving.

For those with meritorious services in the Vietnamese resistance war, in addition to enjoying the benefits of Japanese expatriates when returning home under the specific conditions specified above, there were also the following policies:

Those who were war invalids would receive 6 months of subsistence allowance and 5 years of disability allowance. If they qualified for distribution of warm clothes and blankets, they could receive money.

Those with meritorious services in the resistance war were provided by the State with some necessary items such as clothes and some personal belongings. If they were wounded soldiers after returning to Japan for 5 years, but life was difficult, according to their wishes, Vietnam would find a way to send more money to them [14].

The Ministry of Internal Affairs and agencies also paid attention to solving difficulties for Japanese expatriates because the first expatriation was expected to be conducted around February 20, 1959. However, according to the Japanese Red Cross Society, at the end of March and the

beginning of April 1959, there was only one ship to welcome the Japanese Vietnamese for the second time, so Mr. Nguyen Van Dong who worked for the Meteorological Department and Mr. Tran Ha who worked at a factory could not receive their salary. These Japanese were laid off by the state agency from the beginning of March 1959, but the Japanese ship to pick up the repatriates did not follow the plan thereby affecting their lives. The Vietnamese Red Cross Society proposed to subsidize Mr. Nguyen Van Dong 150 VND and Mr. Tran Ha 100 VND for consumption while waiting for repatriation to Japan. The Ministry of Home Affairs realized that Nguyen Van Dong and Tran Ha could not be repatriated because the Japanese did not have a ship to pick them up and the two Japanese had quit their jobs in a fair and reasonable manner to prepare for repatriation after receiving a call from the Japanese Red Cross Society. These two Japanese expatriates waited for 4 months and they did not receive any salary and allowances. Because this situation was not caused by the two involved parties, the Ministry of Home Affairs paid their salaries and allowances until they returned home in order to protect the interests of these two Japanese expatriates following the personnel policy [15].

The second repatriation occurred on March 4, 1959, with nine Japanese expatriates. They repatriated via the Japanese Red Cross Society, the World Peace Protection Committee of Japan, and the Japan-Vietnam Friendship Association. These also were "new Vietnamese" that made great contributions to the Vietnamese resistance war, namely, Nguyen Van Hien, Phan Tien Bo, Nguyen Van Tam, Nguyen Van Loi, Nguyen Duc Hong, Nguyen Van Phuoc, and Nguyen Nghi.

The third repatriation took place on July 26, 1959, with ten Japanese expatriates with their

wives and children. Among these Japanese, there were four "new Vietnamese" with many achievements: Nguyen Van Dong (Tuchitani Isamu), who was awarded the second-class Labour Medal, a resistance badge, an anniversary of resistance, a certificate of merit from the Vietnam General Confederation of Labour, a certificate of merit from the Inter-regional Administrative Committee IV, and a certificate of merit from the Meteorological Department; Mr. Ho Tam (Mawaki Yoshihiro), who was awarded a certificate of merit for a first-class victory, a glorious family merit certificate, a certificate of wounded soldiers, and a wounded soldier badge; Mr. Tong Van Huan (Hayakawa Seichiro) was awarded a resistance commemoration and certificate, a resistance badge, and a certificate; and Mr. Nguyen Minh Thanh (Takahasi Makoto) who was awarded a certificate of merit from the Vinh Electrical Machine Installation Site, and 3 certificates of merit from the Lao Cai Electric Machine Installation Site.

The fourth repatriation occurred on April 13, 1960, included 12 Japanese expatriates, 11 wives, and 46 children.

The last repatriation occurred on June 16, 1960, with only one Japanese expatriate, his wife, and three children. Thus, by the end of 1960, the last soldiers and civilians in North Vietnam were repatriated with their families to Japan.

These repatriated Japanese had sympathy for the Vietnamese government and contributed to their resistance war as well as nation-building. Therefore, after being repatriated to Japan, they would be good seeds for creating solidarity and friendship between the Vietnamese and Japanese people. They also would be active factors in the movement to fight for democracy and peace in Japan. Vietnam advocated for preserving

and fostering the existing good feelings of the Japanese “new Vietnamese” so that when they returned home, they still retained their good feelings towards Vietnam and could continue to fight for the resistance war in Vietnam [16]. Because of this sympathy, Vietnamese authorities encouraged Japanese soldiers and created the most favourable conditions for them to return to their homeland safely.

4. Conclusions

After the Second World War (1945), there were still a number of Japanese prisoners and soldiers who, for various reasons, remained and lived in North Vietnam. To encourage their support to the Vietnamese resistance war, a “correct and generous policy” was applied. Japanese deserters were able to live and work equally in Vietnamese military units and government agencies with the common name of “new Vietnamese”. Since then, this Japanese community made remarkable contributions to the Vietnamese revolution. In addition to training as Vietnamese military officers or directly participating in combat, the “new Vietnamese” also contributed to many other fields such as finance, medicine, exploitation of resources, or participation in the production of weapons in military factories. Because of their great contribution to the Vietnamese revolution, when these Japanese had a desire to return to their homeland, the Vietnamese government created favourable conditions for their repatriation. However, at this time, the DRV and Japan did not have established official diplomatic relations, so it was difficult to organize the repatriation of these Japanese. Through the efforts of organizations and unions in both Japan and Vietnam, the remaining Japanese expatriates in Vietnam after the Second World War were repatriated. From 1954 to 1960, there

were a total of five repatriations for Japanese expatriates returning home. By 1960, the last Japanese expatriates in North Vietnam, along with their families, returned to their homeland by their wishes. However, it was only since the third repatriation that Japanese soldiers could be allowed to take their wives and children to Japan with them. All of those who repatriated in the first and second repatriation had to leave their spouses in Vietnam. Many Vietnamese wives of these Japanese soldiers could not wait to see their husbands again. In many cases, when they were finally able to communicate with each other, they were old and sick and unable to return to Vietnam or go to Japan to see their husband/wife/children again. The sadness of this circumstance still remains.

ACKNOWLEDGEMENTS

This research was supported by The Sumitomo Foundation under grant number 208804.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] C.E. Goscha (2002), “Belated Asian allies: The technical and military contributions of Japanese deserters, (1945-50)”, *Companion to The Anti-American Resistance War*, Blackwell Publishing.
- [2] V.K. Nguyen (2019), “Activities of the Japanese 'New Vietnam' in the period 1945-1954”, *Journal of Science and Technology Development*, **3(1)**, pp.55-62 (in Vietnamese).
- [3] H. Hoang (2008), “The contribution of the 'new Vietnam' to the Vietnamese people’s resistance war against the French (1945-1954)”, *The 3rd International Conference on Vietnamese Studies - ICVNS2008* (in Vietnamese).
- [4] The League for the Independence of Vietnam, (1946), “What did the government respond to the flood in the Tokin”, *Cuu Quoc*, **283** (in Vietnamese).

[5] The Government of Vietnam (2008), *History of The Government of Democratic Republic of Vietnam*, **Vol. 1 (1945-1954)**, National Political Publishing House (in Vietnamese).

[6] The State Bank of Vietnam (2016), *History of The State Bank of Vietnam 1951-2016*, Labour Publishing House (in Vietnamese).

[7] Ministry of Foreign Affairs (2005), *Vietnamese Diplomacy: 1945-2000*, National Political Publishing House (in Vietnamese).

[8] Institute of Military History (1994), *The History of Anti-French Resistance War, 1945-1954*, **Vol. 1**, People's Army Publishing House (in Vietnamese).

[9] Ministry of Finance (2010), *Minster Le Van Hien*, Finance Publishing House, 648pp (in Vietnamese).

[10] Vu Ky Nguyen (2021), "People-to-people diplomacy of Japan - Vietnam Democratic Republic (1954-1960)", *Journal of Historical Studies*, **4** (in Vietnamese).

[11] Ministry of Home Affairs (1959a), *Report of Department of Civil Affairs No. 7/DC-DS Dated February 3, 1959, to The Prime Minister*, File No. 14421, National Archive No. 3 (in Vietnamese).

[12] Prime Minister's Office (1960), *List of Japanese Expatriates with Applications to Return Home*, File No. 14421, National Archive No. 3 (in Vietnamese).

[13] Ministry of Home Affairs (1959b), *Report of The Department of Civil Affairs No. 20/DC-DS Dated February 20, 1959, to The Prime Minister*, File No. 14421, National Archive No. 3 (in Vietnamese).

[14] Q.H. Dinh (2002), "The last Japanese expatriates in Vietnam repatriated after 1954", *Journal of Historical Studies*, **325**, pp.63-67 (in Vietnamese).

[15] Ministry of Home Affairs (1959c), *Report of The Department of Civil Affairs, No. 1919-DC-DS T.Y Dated June 20, 1959 on The Salary and Allowances of Japanese Expatriates When Preparing to Return Home*, File No. 4072, National Archive No. 3 (in Vietnamese).

[16] Ministry of Home Affairs (1959d), *Report of The Department of Civil Affairs, No. 10/DC-T.Y Dated February 7, 1959, on The Preparation for Repatriation of Japanese Expatriates*, File No. 4072, National Archive No. 3 (in Vietnamese).

Vietnamese studies training programs in Vietnam in the context of international integration: Reality and development orientation

Thi Thu Hoai Nguyen*

Hanoi National University of Education, 136 Xuan Thuy Street, Dich Vong Hau Ward, Cau Giay District, Hanoi, Vietnam

Received 27 December 2021; revised 28 February 2022; accepted 15 March 2022

Abstract:

Vietnamese studies was launched as a training program in Vietnam in the last decade of the twentieth century at Da Lat University. Since 1994, Vietnamese studies has gradually become established as a highly applicable science in the context of international integration. After nearly 30 years, dozens of international and national seminars on research and training orientation have been organised to evaluate early achievements as well as shortcomings and limitations that need to be addressed. This study is based on an analysis of the development process to find answers to the fundamental problems of Vietnam so it can thereby perform its roles and missions well under the current context of international integration. Vietnamese studies is a subject built on general knowledge about Vietnam's geography, history, literature, people, and culture. This paper is aimed to answer what distinguishes Vietnamese studies from other social sciences and humanities disciplines; how should interdisciplinarity, rather than a mere addition to forming general knowledge, be clearly understood to carry out the true nature; and how should the Vietnamese studies training program organization be designed to meet the new requirements set by the integration context. To achieve the research objectives mentioned above, the historical - documentary method, and observation - interview method were used in this paper.

Keywords: current situation, development, international integration, mission, Vietnamese studies.

Classification number: 10

1. Introduction

Globally speaking, Vietnamese studies were born within the framework of area studies and are a science that generally studies and evaluates Vietnam. Scholars may come from a wide variety of disciplines like history, geography, languages, and political economy; however, their studies are often interdisciplinary and form general, comprehensive knowledge about Vietnam. These studies aim to provide a comprehensive and general understanding and find out specific and unique factors about the country and people of Vietnam.

In the twentieth century, Vietnamese studies

developed into a major field of study in colleges across many countries such as the US, Russia, Germany, Korea, Japan, Australia, and China. The focal issues to be studied were the Anti-American resistance war, from the war for independence, the war in South Vietnam, and the US sabotage of the construction of socialism in North Vietnam, as well as the Southwest border war and the Northern border war. The topic of socialism construction and the "Doi Moi" issue in Vietnam were also studied. By the 1990s, the research themes expanded to economic and social issues.

However, since Vietnam has deeply integrated into international life, developed rapidly in economy and trade, and opened itself to the world

*Email: thuhoai.nguyen@hnue.edu.vn

market, the research has become more diversified. In recent years, research topics on Vietnam have mainly focused on political institution reform, foreign policy, socio-economic reform, sovereignty protection, sea and island issues, religion, belief, development, poverty eradication, and environment, to name a few. An overview of this issue was analysed, evaluated, and commented on by V.M. Giang (2008) [1]. The study provides an overview of Vietnamese studies in a broad range of countries around the world including Russia and Eastern Europe, Southeast Asia, Korea, Japan, Australia, China, and the United States.

D.G. Marr (1981) [2], as well as C. Borri, et al. (2011) [3], discussed Vietnam's post-war society, where colonialism and the two resistance wars left an imprint on every aspect. In the book "The Ethnography of Vietnam's Central Highlander: A Historical Contextualization, 1850-1900", O. Salemink (2003) [4] sketches out the colonial society of Vietnam under the anthropologist perspectives and how colonialists established power in the context of local ethnography in the Central Highlands. Indigenous populations of the Central Highlands of Vietnam were often centred in colonialization and social transformation analyses.

Contemporary studies of international scholars on Vietnam present a wide variety of aspects. A.L. Vuving (2008) [5] examines the country's challenges and opportunities after being a member of the World Trade Organization. Such an event is evidence of Vietnam's new development towards becoming closer to the world. M. Sidel (1992) [6] gave a detailed analysis of the legal structure in Vietnam and how it has been transformed toward the socialist-oriented model developed by the Communist Party of Vietnam.

M. DiGregorio, et al (2007) [7] presented anthropologists' perspectives on the spiritual life of Vietnamese people. C. Annear, et al. (2018) [8] introduced Vietnam's cuisine and argues whether there is a unified Vietnamese gastronomy, or if it differs between regions and cultures.

After the significant contributions of international scholars to Vietnam in the twentieth century, the twenty-first century has witnessed the rapid growth of generations of domestic and overseas Vietnamese scholars. The trend of collaborative research is also increasingly popular, which allows the issues to be further examined from different perspectives, and thus Vietnam Studies flourished in many countries such as Japan, Korea, China, the US, and Australia.

Regarding South Korea, the Korean Association of Vietnamese Studies (KAVS) and the Vietnamese Studies Review in Korea have been the premise for future academic success in Vietnamese studies. In China, Vietnamese studies began to receive more attention from the early years of the 21st century. Centres for Vietnamese studies have been opened at universities, academies, and research institutes. These include the Centre for Vietnamese Studies (Zhejiang University, Southwest Jiaotong University, National University of Kaohsiung, Guangxi Normal University) and the Vietnamese Studies Department (under the Yunnan Institute of Science and Technology and Academy of History - Zhengzhou University). The main areas of interest for research are ethnology, Vietnam in relation with China and Southeast Asia, Vietnam's economy, Vietnamese language, and Vietnamese literature. The Journal of Vietnamese Studies of the Research Association of Vietnam publishes research on Vietnamese history and contemporary Vietnam in the US. In Australia, Vietnam Update Workshops updating Vietnamese cultural and social issues have been held since 2011.

Domestically, international conferences on Vietnamese studies organised by Vietnam National University, Hanoi in collaboration with the Vietnam Academy of Social Sciences since 1998 have discussed many oriented issues for researching, training, and developing Vietnamese studies to meet the emerging requirements. Multilateral cooperation projects in research are also increasing [9]. The Faculty of Vietnamese Studies collaborated with the Faculty of Vietnamese

Studies and Language of the University of Social Sciences and Humanities - Vietnam National University, Hanoi to organize the first conference on researching and teaching Vietnamese language and Vietnamese studies in 2008. The conference, which was held in Phan Rang city (Ninh Thuan province), drew both domestic and international scholars. In the following years, the Faculty of Vietnamese Studies held an annual inter-faculty or inter-university academic conference on Vietnamese studies (in collaboration with the Faculty of Vietnamese Studies and Language, University of Social Sciences and Humanities - Vietnam National University, Hanoi, and the Faculty of Vietnamese Studies, Hue University of Foreign Languages). The first international conference on Vietnamese studies was officially held in 2013 by the University of Social Sciences and Humanities - Vietnam National University, Ho Chi Minh city. Since then, the international conference on Vietnam studies, which is held every two years, has developed into a gathering place for academics from all over the globe. The fifth conference on researching and teaching Vietnamese language and Vietnamese studies was the most recent conference.

In Vietnam, the first BA program in Vietnamese studies was launched in 1994. A survey result showed that foreigners who choose to study this major have some characteristics as follows: i) Need to develop the capacity to use Vietnamese to perform jobs related to Vietnam; and/or ii) Have the need to understand Vietnamese culture to facilitate their interaction and living in Vietnam. Vietnamese people who pursue Vietnamese studies have some essential characteristics as follows: i) Have a tendency to social sciences but do not delve into a particular field; ii) Expect to have open job opportunities because this is a new major with diverse job positions (tour guide, press - media, employees in companies with foreign elements, and a few geared towards teaching Vietnamese culture, Vietnamese studies from high school to university) [10]; and/or iii) Seeking opportunities to exchange with overseas training institutions.

Foreigners and the Vietnamese, through their different fields of works, contribute to spanning Vietnam and the world. Therefore, if the training is well organised, Vietnamese students will be a vital nucleus to "connect", promote the image, and spread the unique values of Vietnamese culture to the world, which all contribute to enhancing the position and soft power of Vietnamese culture. This makes an essential contribution to the country's goal of cultural, social, and other integration to "complement the values and progress of world culture and civilization, enrich the national culture and promote social progress... towards narrowing the development gap with the region and the world in these fields"¹.

2. Research purpose

It is evident that, although it has only been established for a short time, this training major has achieved some achievements: i) Regarding output: a bachelor's degree holder in Vietnamese studies can find jobs in diverse positions and fields of work; ii) The training program and training organization has gradually become stable and professional, and iii) The teaching contingent is increasing as the research and teaching capacity has been improved toward specialization and professionalism. However, the reality of teaching and researching Vietnamese studies points to the fact that there are unsolved challenges, which lead to confusion in program building and training organization. Therefore, this paper aims to discuss issues that are considered challenges to the development of Vietnamese studies in the current context of deep international integration.

3. Research question

The question is, where is Vietnamese studies after nearly 30 years of training and issues that can be considered the "core" of a science? Ordinarily, Vietnamese studies is mainly built based on general knowledge about Vietnam's geography, history, literature, people, and culture, so, after

¹Decision No. 40/QĐ-TTg, dated January 7th, 2016 of the Prime Minister approving the master strategy for international integration to 2020, vision to 2030.

all, what distinguishes Vietnamese studies from other social sciences and humanities disciplines? How should interdisciplinarity, rather than a mere addition to forming general knowledge, be clearly understood to carry out the true nature? To achieve the goals and mission, especially in the current context of international integration, how should the Vietnamese studies training program organization be done?

4. Methodology

To achieve the above research objectives, we used the following research methods:

First, the historical-documentary method was used in analysing the contents related to the perception of the Vietnam Studies major, training programs, and studies on the organization of training in Vietnamese studies of domestic education and training institutions.

The observation, i.e., in-depth interview method, was used to collect information and consult experts to have more grounds to assess the current situation and propose the development direction of the major.

5. Results

5.1. Continuing to discuss the definition and mission of Vietnamese studies

Despite its recent formation and development, Vietnamese studies has experienced ups and downs and gradually grounded. Besides the favourable conditions for development, Vietnamese studies have faced a number of challenges, i.e., quality assurance, post-graduated employment, or research capability.

The social context with the development reality of industry poses many problems for us to think about, including the need to re-establish a definition of Vietnamese studies from which to have a basis for building and updating training programs, renovating training organizations to create highlights, and form the significant difference from other humanities and social sciences majors.

The concept of Vietnamese studies and its position, role, and mission have been mentioned by many forums. Regular international conferences

co-organised every four years by the Vietnam Academy of Social Sciences and Vietnam National University, Hanoi since 1998, and international conferences on research and teaching in Vietnamese studies organised by University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh city, as well as national and international conferences organised by Vietnamese studies training institutions have paid attention to this issue. Accordingly, "Vietnamese studies" is identified as a science about the country and people of Vietnam, a science studying Vietnam in an interdisciplinary and regional approach that has matured and changed to adapt to different historical periods [11]; Vietnamese studies deals with issues of cultural identity, acculturation, and diffusion [12]. "Identity" and "country and people of Vietnam" are essential keywords of Vietnamese studies. So, we will see where Vietnam's identity and people are most clearly expressed, which is certainly not limited to national borders. It requires an open posture, comparing the region and the world, and looking out to the world to understand Vietnam.

It has been shown in research that, "Vietnamese studies" has both broad and narrow meanings. Broad meanings refer to the study of Vietnam as specialized studies such as philosophy, religion, history, politics, economy, culture, art, language, and other natural and social sciences, which means that all studies whose subject is Vietnam belong to Vietnamese studies [11]. In the narrow sense, "Vietnamese studies" is understood as studies about the Vietnamese language and Vietnamese culture, with its constituent elements, and the relationship between traditional and contemporary cultures. Thus, it is understandable that Vietnamese studies include studies whose subject is Vietnam. However, the question that should be discussed here is: What is the purpose of the study? It is certainly not possible to solve a problem in the direction of a major in History, Literature, and Culture Studies. It must be directed to another purpose, possibly from specialized knowledge. Vietnamese studies will expand in an interdisciplinary direction to achieve

a comprehensive and integrated knowledge system about Vietnam to solve the problem of contemporary life.

In the process of formation and development, Vietnam Studies in Vietnam was born when Vietnam actively integrated into the international economy to accelerate industrialisation and promote trade outside Vietnam's territory. Deeply integrating into economic unions and organizations and attracting investment from developed countries are essential goals of Vietnam today. To achieve these goals, integrating economically, promoting cultural exchanges to enhance mutual understanding and trust, thereby sharing benefits brought about by globalisation, making practical contributions to the development of international cooperation in many fields² are all top priorities. Therefore, it can be explained that Vietnamese studies are entirely different from specialized studies such as Vietnamese language studies, geography, history, economics, and other specialized research areas about Vietnam. This field of science aims to increase a comprehensive understanding of Vietnam with the world. Accordingly, bachelor's, master's, and doctoral degrees in Vietnamese studies will become a vital force that forms the "bridge" between Vietnam and the world. The knowledge about Vietnam that this force will be an essential reference for making investment and development policies for Vietnam. However, regarding the current regulations and progress on enrolment and training, Vietnamese studies still has a long way to go to meet social needs. This is the opinion raised by a number of grassroots-level managerial officers when answering our interview: "Indeed, learners have not reached the expectations. The reasons for this, in my opinion, lies in two issues: the low-quality input, and the education and training have not fully based on learners' capability, which leads to insufficient results of education" (male, 66, Hanoi National University of Education).

²Communist Party of Vietnam Online Newspaper (2021), "Vietnam's foreign policy of the 13th Party Congress inherits, develops and perfects the foreign policy of the reform period (*)", <http://dangcongsan.vn/thoi-su/duong-loi-doi-ngoai-dai-hoi-dang-xiii-ke-thua-phat-trien-va-hoan-thien-duong-loi-doi-ngoai-thoi-ky-doi-moi-598434.html>, accessed 15 July 2021 (in Vietnamese).

Therefore, it can be seen from the context of origin, goals, and missions, Vietnamese studies makes a big difference compared to other sciences. For example, 1) Form and develop for learners general knowledge about Vietnam as a historical-cultural, social, geostrategic space in relation to the region and the world; 2) Form and develop analytical capacity, ability to interpret the dialectical relationship between tradition and contemporaneity; between the appearance and characteristics of Vietnam's culture and society with its constituent elements; 3) With integrated and interdisciplinary thinking, a system of primary, modern, and general knowledge about the country and people of Vietnam help learners with development guidelines, investment policies, and to identify the critical factors for promoting the country's image.

From theoretical and practical aspects as analysed above, we define Vietnamese studies as a science that studies the country and people of Vietnam. Through research, evaluation, and systematization to shape general knowledge, Vietnamese studies clarify geographical space, politics, history-culture, economy-society, security-defence, and Vietnam's position in relations with the region and the world. The knowledge system acquired from Vietnam studies is the scientific basis for positioning Vietnam in its past, present, and future movement trends, identifying the unique values of the Vietnamese nation, building and promoting the country's image, and seeking and promoting resources for national security and development goals.

Vietnamese studies at domestic training institutions have two programs: Vietnamese and foreigners can enrol in regular study courses under the annual system or the credit-based system ranging from 125 to 130 credits in four years. Besides, the cooperation of Vietnamese studies training institutions in Vietnam with universities and academies specialising in Vietnamese, Southeast Asian, or Asian languages has also achieved many results. Currently, the 2+2, 1+3, and 3+1 forms are the most popular in training cooperation.

5.2. Achievements and problems raised in the training of Vietnamese studies in Vietnam

Achievements after nearly 30 years of training in Vietnamese studies are shown in the following aspects:

i) Many bachelors and masters in Vietnamese studies have been trained. On average, 5,000-10,000 bachelors in Vietnamese studies are trained each year [4].

ii) The training program has been improved. The long-standing training institutions have made many improvements to the training program with many different versions, based on assessing the needs of the labour market and the needs of learners³.

iii) Vietnamese studies' international exchanges and cooperation have expanded, and training and research have increased.

iv) The output of bachelor's and master's degrees in Vietnamese studies is relatively wide, meeting many job positions such as tour guide, press-media editor; teacher in Vietnamese studies and culture; cultural and tourism management specialists; office staff, and teachers of Vietnamese language and Vietnamese culture to foreigners.

In addition to the achieved results, the Vietnamese studies training organizations in Vietnam still has many difficulties that need to be quickly resolved. Many international and national conferences have discussed, evaluated, and proposed solutions to these problems and backlogs over the past two decades. In summary, according to us, there are concerning problems in the organization of training in Vietnamese studies as follows:

i) The lack of consistent training programs between institutions leads to an inconsistency in the perception of the major. Some universities are inclined towards "traditional Vietnamese studies" to provide knowledge about Vietnam, focusing

mainly on natural characteristics, history, culture, and the Vietnamese language⁴. Some institutions are language-culture and tourism-oriented⁵ focusing on teaching the Vietnamese language, cultural, and tourism. Some institutions focus on training tour guides.

ii) The training method is mainly academic and does not focus on international cooperation, which is a mandatory requirement of Vietnamese studies, especially in the current integration context. However, according to our observations, international cooperation in training is currently only one way, mainly foreign training institutions send their students to Vietnam to study. The two-way "exchange" in training cooperation has not taken place. The main reasons, in our opinion, are due to the limitation of financial resources and foreign language ability of learners.

iii) Foreign languages are not considered an essential criterion in the output standard for Vietnamese students. The reason is partly from the low quality of the entrance exam, so the training institutions have not raised the output standard of students' foreign language ability.

6. Discussion and suggestion

6.1. It is necessary to clarify the difference between Vietnamese studies and other social sciences to build objectives, output standards, and training programs.

Through the survey of Vietnamese training programs from college, university, and master's and doctoral levels, we can see that Vietnamese studies contains knowledge of many different sciences, namely, at least a mixture of five social sciences (Linguistics, History, Geography, Literature, and Tourism). So, what distinguishes Vietnamese studies from other humanities and social sciences

³Shown in different versions of training program of Hanoi National University of Education, University of Social Sciences and Humanities, Vietnam National University, Hanoi and many other training institutions.

⁴See also Training programs of University of Social Sciences and Humanities, Vietnam National University, Hanoi, Hanoi National University of Education (program version from the academic year 2019-2020).

⁵See also Training programs of Hanoi National University of Education (from the academic year 2018-2019 and earlier).

majors? As the definition established above, once again, it can be confirmed that Vietnamese studies primarily needs to make a difference from other sciences in the following contents: 1) To form and develop learners' general knowledge about Vietnam as a historical, cultural, social, geostrategic space in relation to the region and the world; 2) To form and develop analytical capacity, ability to interpret the dialectical relationship between tradition and contemporaneity; between the appearance and characteristics of Vietnam's culture and society with its constituent elements; 3) With integrated and interdisciplinary thinking, a system of primary, modern and general knowledge about the country and people of Vietnam helps learners to advise on development guidelines, investment policies, identify the critical factors for promoting the country's image. Vietnamese studies require that the identification, analysis, and assessment of Vietnam's problems be integrated, interdisciplinary in relation to the world. This is an essential and comprehensive knowledge system for making investment and development policies for Vietnam.

According to such determination of the mission and characteristics of the major, a question arises: which job position is a graduate of Vietnamese studies well suited for? Which job position do Vietnamese studies graduates perform better than others? In our opinion, a bachelor's degree in Vietnamese studies can meet the following job positions: i) Experts on Vietnam in organizations with foreign elements or consultants on development policies in Vietnam; ii) Vietnamese language and culture teachers for foreigners; iii) Socio-cultural experts from commune-level and upwards; and iv) Tour guides. Although the job positions are very open in the recruitment mechanism of ministries, educational institutions, or any other administrative and non-business units, graduates of Vietnamese studies are not included in the list of qualifications prioritized for recruitment. This issue has a negative impact on the job opportunities of learners, especially excellent learners. Therefore, at the university level, institutions cannot attract them.

6.2. How should the output standards, training programs, and training organizations be improved to meet the requirements?

From the previously mentioned concept of Vietnamese studies, it is believed that a bachelor's, master's, or doctoral degree in Vietnamese studies must have the following competencies:

i) Understand the country, people, and culture of Vietnam comprehensively, especially contemporary Vietnamese issues, interpret socio-cultural issues from their constituent elements.

ii) Appreciate Vietnamese culture, respect the diversity of world culture.

iii) Be proficient in at least one foreign language, have good communication skills in a multicultural environment.

In order to meet the training objectives and output standards of the major, the training program needs to be built with the basic knowledge and skill standards of i) The appearance and characteristics of Vietnamese culture in which it is necessary to draw out the fundamental cultural values that carry the core ideology of the nation; ii) Economic - cultural - social issues of contemporary Vietnam; iii) Skills in using Vietnamese language, foreign languages and information technology; and iv) Communication skills in a multicultural environment. According to our survey⁶, current bachelor's degree programs in Vietnamese studies do not meet the requirements of the output standards according to the above concept. The most common issue is that the program lacks focus and spreads over too many objectives leading to a failure to build the major's identity. The second phenomenon is that the number of credits for foreign languages is small, the output standards for foreign languages are low (commonly level B1), and there is no focus on communication skills in professional activities.

⁶We studied the bachelor's degree programs in Vietnamese studies of Hanoi National University of Education, University of Social Sciences and Humanities, Vietnam National University, Hanoi and University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh city.

When organising the teaching of Vietnamese studies, attention should be paid to i) Enhance reality and practice; ii) Seek opportunities for cooperation in training with foreign countries; iii) Focus on developing communication and behavioural skills, especially in a multicultural environment; and iv) Focus on developing skills in using Vietnamese and foreign languages.

It is believed that training in Vietnamese studies must be similar to the training for foreign language students, i.e., it is necessary to immerse learners in an efficient environment, especially the international integration environment. Accordingly, the coordination with domestic organizations and enterprises, increasing practice and, especially, enhancing exchange and cooperation in training, should be considered a mandatory requirement. It is possible to consider that the training cooperation capacity will become a mandatory criterion for enrolment.

6.3. So, what are the entrance requirements for students enrolling in Vietnamese studies?

With the above analysis, in our opinion, in order to build human resources in Vietnamese studies that meet the requirements of the major in the context of international integration, the enrolment criteria also need to be researched and analysed to ensure the excellent implementation of the established output standards:

Regarding international students, it is necessary to improve measures to attract learners by improving the training program, improving the teaching model towards flexibility, strengthening cooperation in training to create the most favourable conditions for learners, and implementing a blended teaching model between face-to-face and online learning. The training organization should strengthen the language and cultural exchange activities between international students and Vietnamese students by organising language and cultural exchange clubs; organising contests to improve the ability to use the Vietnamese language and improve understanding about Vietnam and the world; and enhancing and increasing practical activities. By analysing training programs of Vietnamese language or

Southeast Asian Area Studies majors at universities and institutes in Korea, China, and Japan - the countries with the most significant number of international students studying Vietnamese studies today - we recognise some points that need attention in developing training programs: 1) *Enrich the knowledge of elective courses*; 2) *Focus on the knowledge that can be linked with training programs of foreign educational institutions*; and 3) *Enhance Vietnamese language skills*. A training program that ensures these factors will increase its ability to attract learners and training institutions and find more cooperation in training along the direction of 3+1, 2+2, or even 1+3. On the other hand, courses such as Marxist-Leninist Philosophy are also challenging for international students. So, is it possible to flexibly apply the test-evaluation method by using the self-study style in the native language or English?

Regarding Vietnamese students, it is necessary to gradually improve the enrolment criteria and avoid quantity-focused enrolment in some education agencies. Besides, it is also necessary to have a policy to recruit human resources in Vietnamese studies for specific professions. In training, there should be a mechanism for cooperation and academic exchange. Careful selection, even prioritizing the selection of a second degree, is an issue to be further discussed.

6.4. Do the learning materials and teaching models meet the requirements of current training practice?

Textbooks and teaching materials are issues that need proper attention and investment. Our survey points out that the number of textbooks and specialised materials for Vietnamese studies is insufficient and causes great training difficulties, especially for foreigners. The survey results show that: i) textbooks and materials for developing skills in using Vietnamese account for the most significant number, which can meet the primary need of direct teaching; ii) textbooks and reference materials for specialised knowledge are almost non-existent; iii) lectures and learning materials for online training have not been systematically developed.

Under the impact of the fourth scientific and technological revolution, along with the transformation of the economy, society, and other fields, education-training is facing unprecedented challenges. To meet the requirements of reality and gradually integrate with international education, the blended learning model has been researched and applied in recent years, mainly at the university level. We believe that, with Vietnamese studies, building a blended teaching model will create essential advantages and overcome difficulties in the initial language, economic, and cultural barriers for foreigners and contribute to promoting learning activities and creating better learning motivation, thereby forming skills and flexible thinking - an essential requirement for students of Vietnamese studies. In the context of the current COVID-19 impact, building a blended teaching model for Vietnamese studies will undoubtedly play an essential part in promoting training cooperation with foreign countries. Therefore, textbooks, teaching materials, and electronic lesson plans can be considered gaps that need appropriate investment in the current context.

6.5. Teaching staff

As the most critical factor determining the quality of education, the teacher has the role of orienting and guiding students to grasp knowledge and shape their personality and ideology. Being a new major in Vietnam, the current teaching staff of Vietnamese studies in training institutions can be considered the second generation after the founding generation, so they are a younger generation, both in professional career and seniority. Advantageously, they have been exposed to modern and up-to-date education in the current context of rapid educational integration, and they directly participate in developing or updating training programs after Resolution No. 29-NQ/TW dated November 4th, 2013, of the 8th Plenum of the 11th Party Congress on fundamental and comprehensive innovation in education and training. However, there is a big challenge regarding significant knowledge and training organization experience because lecturers teaching Vietnamese studies require integrated thinking and highly practical experience. Therefore, developing

the teaching staff of Vietnamese studies is an important issue that needs attention. The teaching staff of Vietnamese studies is mainly recruited from language, geography, history fields. The essential requirement of the major is to expand knowledge in an interdisciplinary direction; however, lecturers-mostly young lecturers from specialized majors-are facing the challenge of pursuing their professional careers to meet the requirements for consideration and recognition of professors and associate professors titles. Meanwhile, Vietnamese studies is currently not enlisted to consider professor and associate professor titles in the State Council of Professors⁷. Therefore, improving human resources is one of the most urgent requirements of the major with specific jobs including i) having a specific mechanism in assigning topics for training development; ii) considering including Vietnamese studies in the list for consideration of professor and associate professor titles; iii) create a specific mechanism for lecturers to have conditions to expand cooperation with external parties such as improving their ability to use foreign languages and participating in national and international conferences.

7. Conclusions

As an independent science, Vietnamese studies, like other majors, needs to have its own knowledge system, training objectives, and training programs that meet the mission and output standards. It would be ideal if this major is based on knowledge of history, literature, and ideology of Vietnam, especially the features that have been summarised in the historical process of the nation. At the same time, this major should have identified unique characteristics from the concept to the knowledge system to be achieved, as well as research methods and training organizations. Through the above analysis and discussion, we see that a new era is opening with many opportunities and challenges for training in Vietnamese studies. We

⁷State Council for Professorship (2021), *Decision No 26/QĐ-HDGSNN Dated November 8, 2021 of The Chairman of The State Council for Professorship on The List of Accredited Journals of Science in 2021* (in Vietnamese).

believe in its development, especially if existing problems are resolved quickly and appropriately. Modernizing the program by carefully selecting investment policies to develop the team, connect and expand the global Vietnamese studies network, and using overseas Vietnamese to spread the image of Vietnam to the world, are the can-be-done activities if there are support policies from the state management, relevant ministries, and agencies.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] V.M. Giang (2008), *Situation of Vietnam Studies in Some Countries Around The World*, 3rd International Conference on Vietnamese Studies, Vietnam National University, Hanoi.
- [2] D.G. Marr (1981), *Vietnamese Tradition on Trial, 1920-1945*, University of California Press, 468pp.
- [3] C. Borri, S. Baron (2011), *Views of Seventeenth-Century Vietnam*, Southeast Asia Program Publications, 290pp.
- [4] O. Salemink (2003), *The Ethnography of Vietnam's Central Highlander: A Historical Contestualization, 1850-1900*, University of Hawaii Press, 368pp.
- [5] A.L. Vuving (2008), "Vietnam: Arriving in the world - and at a crossroads", *Southeast Asian Affairs, ISEAS - Yusof Ishak Institute*, pp.375-393, DOI: 10.1353/saa.0.0012.
- [6] M. Sidel (1992), "Law reform in Vietnam: The complex transition from socialism and Soviet models in legal scholarship and training", *UCLA Pacific Basin Law Journal*, 11(2), pp.221-259, DOI: 10.5070/P8112022040.

[7] M. DiGregorio, O. Salemink (2007), "Living with the dead: The politics of ritual and remembrance in contemporary Vietnam", *Journal of Southeast Asian Studies*, 38(3), pp.433-440, DOI: 10.1017/S0022463407000355.

[8] C. Annear, J. Harris (2018), "Cooking up the culinary nation or savoring its regions? Teaching food studies in Vietnam", *ASIA Network Exchange: A Journal for Asian Studies in The Liberal Arts*, 25(1), pp.115-148, DOI: 10.16995/ane.266.

[9] T.T.H. Nguyen (2020a), "Organization of teaching Vietnamese studies subject in high schools - Reflections from the reality of the Vinschool education system", *Proceedings of The International Scientific Conference: Vietnamese Studies, Research Orientation, and Training*, Vietnam National University, Hanoi, 8pp (in Vietnamese).

[10] T.H.H. Nguyen (2020b), "Fulfillment of the bachelor's training program in Vietnamese studies to the output standards and employment positions in educational practice for the period 2010-2020, with a vision to 2020-2030", *Proceedings of The International Scientific Conference: Today's Vietnamese Studies*, Vietnam National University, Hanoi, 16pp (in Vietnamese).

[11] Q.N. Nguyen (2020), "Professor Phan Huy Le with the career of building and developing modern Vietnamese studies", *Proceedings of The International Scientific Conference: Vietnamese Studies, Research Orientation, and Training*, Vietnam National University, Hanoi, 13pp (in Vietnamese).

[12] H.B. Le (2020), "Vietnamese studies in cultural deconstruction and inter-symbolism", *Proceedings of The International Scientific Conference: Vietnamese Studies, Research Orientation, and Training*, Vietnam National University, Hanoi, 11pp (in Vietnamese).

Differences in knowledge expression in teaching Vietnamese literature for international students

Thi Thanh Tam Le*

*Faculty of Vietnamese Studies and Language, University of Social Sciences and Humanities, Vietnam National University - Hanoi,
336 Nguyen Trai Street, Thanh Xuan Trung Ward, Thanh Xuan District, Hanoi, Vietnam*

Received 22 August 2022; revised 26 October 2022; accepted 15 November 2022

Abstract:

The article focuses on eight differences in the process of academic interpretation of Vietnamese literature for international students as opposed to teaching Vietnamese students. The first is to explain the course outline in detail and with simple vocabulary, the second is to classify students into cultural areas and develop a strategy for softening lectures on culture, third is to quantify Vietnamese vocabulary (literary terms) in a lesson, fourth is to thoroughly apply cultural and literary comparisons in teaching and learning, fifth is to respect the initiative and creative spirit of international students, sixth is to apply the Kaizen philosophy to encourage students to understand the lesson, seventh is to provide detailed material for each lesson with selected references, and eighth is to pay special attention to linguistic and literary practices inside and outside the classroom. Those eight differences directly affect the teaching method and quality of teachers, as well as the learning efficiency and the participation of foreign students when studying Vietnam, its language, and its literature.

Keywords: academic interpretation, international students, teaching method, Vietnamese literature.

Classification number: 10

1. Introduction

The learning model of international students has certain boundaries compared to Vietnamese students. It is this model that, together with the differences in culture and value conceptualisation, has redefined interactive teaching methods and the way lecturers communicate with students. This, in turn, contributes to the development and adjustment of teaching practices, especially in subjects related to Vietnamese literature.

The differences in method and implementation of lectures on Vietnamese literature between Vietnamese and international students is an issue that has always existed in classes about Vietnamese studies and Vietnamese language. Especially for undergraduate students and multi-national classes, this difference has been observed

and questioned by the author for more than 10 years. We have had the opportunity to participate in teaching Vietnamese literature to students of many disciplines such as linguistics, literature, sociology, history, anthropology, languages, and East Asian civilization since 2006. Through some discussions with learners from many countries and regions around the world, we hypothesize that there should be a system of thinking tools and methods suitable for teaching Vietnamese literature to students. Foreigners, depending on their requirements and learning purposes and corresponding to their living, studying, and working environments, have different ways of thinking and asking questions. The differences discussed in this paper shall be understood as points that deserve profound attention. These differences are not

*Email: tamltt.tiengviet@gmail.com

entirely different points, but quite the opposite; they are listed only to emphasise features that will have the most influence on the effectiveness of teaching (regarding the teacher) and learning (regarding the students). The points outlined below remain fundamental pedagogical principles in the Vietnamese university environment and for Vietnamese students. However, asserting those principles is the difference that shall be emphasised in this paper as well as its implementation in practice and its value when thinking about multicultural classroom models.

As our observation, one of the biggest considerations for Vietnamese teachers who are teaching Vietnamese literature and Vietnamese language to international students coming from countries and cultures around the world is the issue of expression. For foreign students, the teacher needs to express complex subject matters in a simple way, and at the same time, do so in great detail by using seemingly familiar and simple knowledge. If the learners remain on the opposite side of understanding the linguistic meaning of a subject, one can only hope they would be able to reach this side of the shore and appreciate and analyse the literary meanings of a given piece [1].

In the Vietnamese study program for the bachelor's program*, subjects related to Vietnamese literature include *Contemporary Vietnamese literary phenomena*, *Vietnamese literature in the East Asian world*, and *Vietnamese folklore*. The subject that this article deals with is *Vietnamese Literature in the East Asian world*. This is a subject related to medieval literature in Vietnam and other East Asian countries such as China, Japan, and Korea.

The main content of the module *Vietnamese literature in the East Asian world* includes the following basic arguments: An overview of some outstanding features of East Asian literature (China, Japan, Korea), presentation of the present,

descriptions and suggestions of the appearance of Vietnamese literature in the context of East Asia through issues of language system (Chinese culture), cultural symbols, aesthetic conceptions, and human life. This context has given rise to the process of exchange, influence, as well as the formation of the system of Vietnamese classical literary genres: Zen literary phenomenon, Confucian literature, non-Confucian literature, and the disintegration of classical values in the late nineteenth century. Since the twentieth century, Vietnamese literature has had different exchanges and influences compared to the previous periods. This module provides knowledge about the concept of national studies, patriotic literature, promotion of good and punishment of evil, and modern East Asian literary trends and its influence on the creative achievements of Vietnamese people. The theme also creates an open perspective on the influence of some contemporary literary phenomena of East Asia on modern Vietnamese literature.

After completing the module, learners can achieve the following levels of knowledge, skills, and attitudes:

a) Regarding knowledge: Students will understand the position and process of Vietnamese literature from the perspective of comparison with East Asian literature (Vietnam, China, Japan, Korea); they will remember, analyse, and explain some special phenomena in the process of literary exchanges between Vietnam and East Asia.

b) About skills: After finishing the module, students will be able to read deeply, read quickly, and summarise Vietnamese literary knowledge in exchange with East Asian literature; have skills in teamwork, and have proficiency in giving short explanations on Vietnamese literary phenomenon compared with one/several East Asian literary phenomena.

c) In terms of qualities and attitudes: Students will appreciate Vietnamese literature and be conscious of protecting the national literary heritage in the context of East Asia in general; as well as develop the spirit of self-study on the basis of Vietnamese learning from a literary perspective.

*Case study: Faculty of Vietnamese Studies and Language, University of Social Sciences and Humanities, Vietnam National University, Hanoi.

From the above program-building principles, the ultimate goal of Vietnamese literature lectures for international students is to provide the most basic outlines of the Vietnamese literary picture throughout the historical context and to provide linguistic and literary information for learners through Vietnamese so they can understand and analyse several Vietnamese literature phenomena based on their own values and experiences.

The impression that international students receive from Vietnamese literature is a very meaningful fulcrum, which allows the lecturer to use this golden opportunity to explain and renew their own thoughts on national literature. Lectures teaching Vietnamese literature should also aim for a common voice and a cultural connection through literature for foreign students - no matter what literature and historical period about which they are talking. Thus, within this scenario, the main goal is not to train professional philologists, literature researchers, or teachers.

Therefore, the first and foremost goal for foreign students is to understand the language used in literature directly and vividly; only afterwards they should gain specific knowledge about the piece of Vietnamese literature they are currently working on. But that knowledge will not last long if they merely listen and try to save it in their memory. They will not remember many important details in that case, and thus will need a coherent systematisation of the discussed context.

They may not need to memorise every sentence or verse of literature work, but they need to understand *why* an author has become a national symbol. They also need to question how a work can create its own culture around it (like with *The Tale of Kieu*) [2] and need to feel and emotionally understand why a certain folk song can make people cry when they are away from home. This shows, in terms of pedagogy, we cannot fail to notice at least the eight following distinct differences that are discussed in this article.

2. Research methods

An important theory that we choose in this article is J. Dewey's theory [3] of practical and democratic education and some modern Japanese teaching methods [4] (reflection, dialogue). This methodological foundation has helped us create a way of teaching that is relevant to international students by identifying differences.

This research is completed by a system of methods related to language teaching and cultural simulation. We have analysed the courses teaching the Vietnamese language and Vietnamese culture to foreigners (the main audience here is Japanese and Korean students) and surveyed the process of students learning and experiencing Vietnamese from literary works.

The method of systematizing and concretizing Vietnamese teaching tools is applied to clarify the particular direction of this paper. We also use the method of psychoanalysis of learners and evaluate the effectiveness of project-based teaching to design research ideas.

Our studies are conducted in multi-national classrooms and at many different training institutions. At the University of Social Sciences and Humanities, Vietnam National University, Hanoi, we have selected three undergraduate classes of students from different countries: Korea, China, and Cuba in 2015, 2016, and 2018. At the Tokyo University of Foreign Studies, we selected the case study of 2nd-year students (in 2010, 2016, and 2017) of the Vietnamese Faculty.

3. Results and discussion

3.1. The first difference: Explaining the course outline in detail and with simple vocabulary

Usually, the syllabus of a course is sent to the students before or at the first session. The purpose of the outline is to help students visualise their learning process and estimate the amount of knowledge that they must access, analyse, and transform. Reading this outline and listening to a quick introduction by the lecturer is usually no big

deal for Vietnamese students. Meanwhile, for a class of international students, the outline makes up the core of a lesson, including its vocabulary, knowledge scale, and cultural terminology that learners will need to remember to follow the course, as well as understand and accumulate knowledge. While for Vietnamese students, the outline is simply the beginning of the course, foreign students can maximise the efficiency of their studies within the time of the course - and not just at its beginning - if they manage to remember and understand the outline's logic.

The following is an excerpt of the outline for the course Modern Vietnamese Literature:

1. Basic concepts: Western literary trends (Trào lưu văn học phương Tây); The process of literary modernisation (Tiến trình hiện đại hóa văn học); The national language script of Vietnam (chữ Quốc Ngữ); Transitional period/transitional literature (giai đoạn giao thời, văn học giao thời); Romanticism/Romantic literary schools (Chủ nghĩa lãng mạn/Trường phái văn học lãng mạn); Critical Realism (Chủ nghĩa hiện thực phê phán); and Patriotic literature (văn học yêu nước).

2. Social, political, and cultural premises affecting modern Vietnamese literature: French colonial invasion (Cuộc xâm lược của thực dân Pháp); Semi-feudal colonial social system (hệ thống xã hội thuộc địa nửa phong kiến); Revolutionary movements (phong trào Cách mạng); and the increasingly important role of the national script (chữ Quốc Ngữ) as Chinese and Nôm characters gradually lose their advantages.

3. The stages of modern Vietnamese literature:

The period from 1900 to 1930: The transitional period (Giai đoạn giao thời)

Society moved from feudalism to modernity. Vietnam converted from a French colony. Western-influenced writers and literary careers define their place in society, cultural life, and the arts. This is also the period when the press shows its great role in laying the foundation for the modernization of national literature.

The period from 1930 to 1945: The pinnacle of modern literature (Đỉnh cao văn học hiện đại)

The 15 years of this literary period represent important changes in literary history, literary conceptions, and specific literary lines of the era such as: New poetry (formation, characteristics, and roles); the Self-Reliant Literary Association (formation, characteristics, role); and Critical realist fiction (characteristics, achievements). In addition, during this period, literary debate becomes a prominent type of literary activity and thinking dialogue.

The period from 1945 to 1975: War literature (Văn học chiến tranh)

There are two important trends of Vietnamese literature during the war: Northern revolutionary literature and contemporary literature against urban warfare in the South. Of these, northern revolutionary literature is considered as a literary line associated with politics and valuable contributions to the cause of national liberation.

The period from 1975 to 1990: Innovation literature (Văn học Đổi mới)

The Sixth Party Congress changed the overall picture of Vietnamese society in terms of politics, culture, and life of all classes, especially intellectuals and artists. The Spirit of Innovation created new conceptions of literary creation and reception towards creative freedom.

The period from 1990 to present: Contemporary literature (Văn học đương đại)

Social life develops towards globalization; in Vietnam, the creative and perceptive trend of postmodernism and some other international trends of Vietnamese writers and poets has appeared.

Because the outline is compiled for foreigners, the phrases and terms used here are expressed in a minimalist way. The specific explanations of these phrases and terms for students are an inviting way to help foreign students become accustomed to the modern Vietnamese literary context and avoid any fear before the immensity of a new literature

culture that they may not have known until they were studying in Vietnam. The outline also helps them imagine that literature follows a historical process and is thus closely related to historical and modern political issues. In addition, the simplified outline, once explained, can help international students gain a natural sense of comparison with their native literary knowledge.

3.2. The second difference: Classifying students into cultural areas and developing a strategy for “softening” lectures on culture

The classification of students can be based on many different criteria for each class and year. It can be based on the geographical area, history, as well as cultural and geopolitical factors, language, and foreign relations. There are no definite boundaries for this classification, and there is no need to elaborate on it, but the classification within the teacher’s mind will help them gain the tolerance, understanding, and objectivity they require as humanities scientists in accessing and spreading the literature of their own country. A class that includes students from South Korea, the Democratic People’s Republic of Korea, Cambodia, and Cuba will have a different perspective on debating and interpreting knowledge from a class that is mostly Chinese, or from one with students from Russia, Romania, Laos, or other nations. In all these classes, the most important principle is to avoid suggesting issues that cause cognitive conflicts, especially in politics, history, culture, and religion. On the contrary, it is recommended to build an always-connected space; a class-study network so that each student can enjoy more diverse knowledge in the lesson and outside of practice.

Literature classes for foreigners need to become a period and space for learning and sharing the respective subtle differences in the creative journeys of Vietnamese and foreign authors. With that internal categorisation, a strategy of “making soft” element of culture in the lecture is geared towards providing typical knowledge rather than expounding on too broad knowledge, and towards

a lively question-and-answer process of emerging issues when learners listen to lectures or read books rather than one-way instructions on how to think. It is better not to teach them to accept knowledge of other countries’ literature (here, Vietnamese literature), but to teach them to be concerned about the differences, comparisons, and correlations between literary values in the culmination of each region. They should also not be asked to remember knowledge to simply repronounce or repeat it (because that serves no purpose) but to suggest they master the questions they need to ask.

The way of teaching that concerned is an opportunity for teachers and students to have a common voice, open new understandings, and respond to each other in harmony. The teacher-student relationship is not simply one of a guide and transmitter of knowledge on one side, and a receiver of knowledge on the other, but one broad relationship between the various readings of literature and their conceptions of meanings through colourful meetings of representatives of many countries. What they do not know and cannot understand (when approaching Vietnamese literary works) is also valuable material for us to think and understand more about the differences as well as the insurmountable limits of Vietnamese literature towards the interpretations of the world.

3.3. The third difference: Quantifying Vietnamese vocabulary in a lesson

It is crucial that teachers “measure” the number of new and difficult vocabulary words with abstract meanings in a literature class for foreign students. Of course, this is not a problem while teaching Vietnamese students. However, quantifying the words in a lecture or lesson is the criterion and limitation for the lecturer to lead the lesson, because a too great number of words exceeding the allowable threshold would have a significant influence on pedagogical efficiency. If learners must process hundreds of new words in both scientific and art-related terms within three lessons, it is very well possible that they are confused and overloaded, and that is not what

the instructor wants. The interactive process of translating terms, such as by providing English names for typical Vietnamese literary works, is an example of how to quantify vocabulary, which is shown in the following example:

Model 1: Literature terminology (Lesson 1 of the module Modern Vietnamese Literature for foreign students)

Hiện đại: modern

Hiện đại hóa: modernise

Văn học hiện đại: modern literature

Văn xuôi: prose

Thơ tự do: free verse/poetry

Thơ: poetry

Truyện ngắn: short story

Tiểu thuyết: novel

Chủ nghĩa Lãng mạn: Romanticism

Chủ nghĩa Hiện thực phê phán: Criticism - Realism

Giai đoạn văn học: literature period

Trào lưu sáng tác: trend of creation

Tác giả: writer

Tác gia: author

Nhà văn: writer

Nhà thơ: poet

Nhà tiểu thuyết: novelist

Tác phẩm: work

Thực dân Pháp: French colonialism

Đảng Lao động Việt Nam: Vietnamese Labour Party

Văn học chính trị: political literature

Văn học chữ Hán: Sino literature

Văn học quốc ngữ: National-language literature

Chữ quốc ngữ: National language

Quan niệm văn học: view of literature

Ngôn ngữ nghệ thuật: artistic language

Chủ đề: theme of work

Thuộc địa: colony

Bắc bộ: North Vietnam

Nam bộ: South Vietnam

Trung bộ: Central Vietnam

Văn học công khai: public literature

Văn học bí mật: secret literature

Văn học cách mạng: revolutionary literature

Văn học yêu nước: patriotic literature

Văn học trung đại: medieval literature

Giai đoạn giao thời: transitional period

Văn học xã hội chủ nghĩa: Socialism literature

Văn học Đổi mới: Innovation literature

Chủ nghĩa nhân đạo: humanism

Tranh luận văn học/bút chiến: literary debate

Phê bình văn học: literary critic

Tư tưởng cách tân: innovative thought

Tiến trình văn học: process of literature

Báo chí: press

Phóng sự: reportage

Chủ bút: editor-in-chief

Model 2: Literature terminology (Lesson 1 of the module Vietnamese Medieval Literature for foreign students)

Chế độ phong kiến (Feudal regime)

Văn học trung đại (Medieval Literature)

Thời trung cổ/trung đại (Medieval/Middle Ages)

Hoàng đế, Vua, Thiên tử (King/Emperor)

Phật giáo (Buddhism)

Nho giáo (Confucianism)

Đạo giáo (Taoism)

Lão tử (Lao-tzu)

Thiền tông (Chan sect, Zen school)	Văn học Nho giáo (Confucianist literature)
Xâm lược (invade)	Đặc trưng văn học (specific characteristics of Literature)
Giai đoạn văn học/thời kỳ văn học (Literary period)	Kinh (Canon)
Thi sĩ/nhà thơ (Poet)	Điển tích/điển cố (classic reference)
Nho sĩ/nho gia (Confucianist)	Biểu tượng (symbol)
Đạo sĩ/đạo gia (Taoist hermit)	Model 3: English names of some Vietnamese literature works
Phật tử (Buddhist)	<i>Truyện Kiều: The Tale of Kieu or The story of Kieu</i> by Nguyen Du
Thiền sư (Zen master)	<i>Thơ Hồ Xuân Hương: The Poetry of Hồ Xuân Hương</i>
Giác ngộ (enlightenment)	<i>Số đỏ: Dumb luck</i> by Vu Trong Phung
Tu hành (lead a religious life)	<i>Nỗi buồn chiến tranh: The Sorrow of War</i> by Bao Ninh
Hành trạng (religious action)	<i>Vừa nhắm mắt vừa mở cửa sổ: Open the window, eyes closed</i> by Nguyen Ngoc Thuan
Vô ngã (no-self)	<i>Trong sương hồng hiện ra: Behind the red mist</i> by Ho Anh Thai
Tác phẩm (work)	<i>Những ngôi sao, trái đất, dòng sông: The stars, the earth, the river</i> by Le Minh Khue
Tác giả (author)	<i>Đường xa: Distant road</i> (poem) by Nguyen Duy
Xuất xứ (origin of)	<i>Ngược dòng nước lũ: Against the flood</i> by Ma Van Khang
Tuyển tập (Collection of)	<i>Qua sông: Crossing the river</i> by Nguyen Huy Thiep
Bài thơ (the poem)	<i>Thời xa vắng: A time far past</i> by Le Luu
Câu thơ (line of verse)	<i>Cây thời gian: The time tree</i> (poem) by Huu Thinh
Thơ thiền (Zen poetry)	<i>Gia đình bé mọn: An insignificant family</i> by Da Ngan
Hịch (Proclamation)	In short, the number of scientific and literary terms should not exceed 50 words in a lecture. In addition, a bilingual presentation (in Vietnamese and English) of the names of literary works as well as outstanding literary phenomena of Vietnam should be a requirement for lecturers teaching
Phú (Ode to)	
Chiếu (Royal Proclamation)	
Luận thuyết tôn giáo (Religious treatise)	
Thể loại văn học (literary style)	
Tôn giáo (religion)	
Triết học (philosophy)	
Văn học dân gian (folklore)	
Văn học/văn chương (literature)	
Quy phạm/điển phạm/(model, classical)	
Ước lệ (metaphor)	
Cao nhã (refined)	
Văn học Phật giáo (Buddhist Literature)	

Vietnamese literature to international students. This effective technique of the translation will save time and shorten the way to preserve literary memories and awareness of foreign students when approaching Vietnamese literature.

3.4. The fourth difference: Thoroughly applying cultural and literature comparisons in teaching and learning

Based on the respect for cultural, ethnic, and religious differences as analysed above, the teaching process cannot be separated from classroom democracy, meaning to make the most out of comparisons. It is impossible not to compare if we want international students to speak out their understandings about the readings when receiving a Vietnamese literary work or event.

Below are some examples of how to acquire and develop an understanding of groups of

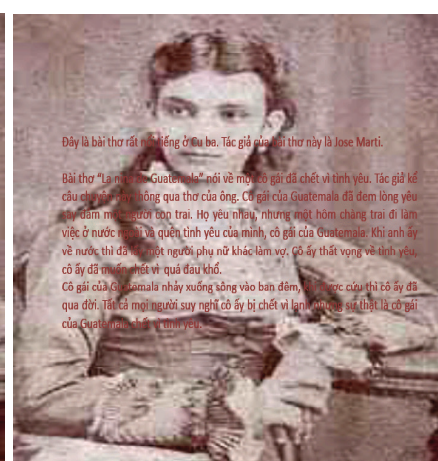
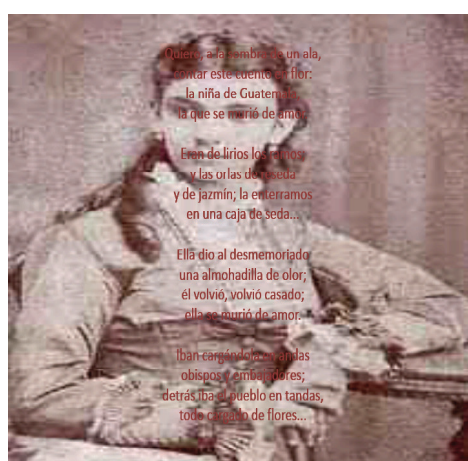
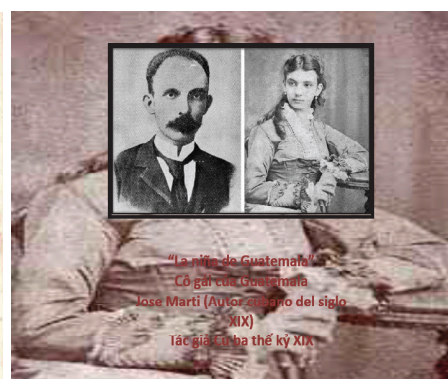
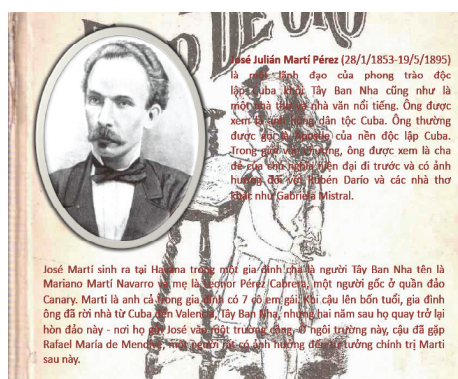
international students when studying Vietnamese Medieval Literature at the Faculty of Vietnamese Studies and Language, University of Social Sciences and Humanities, Vietnam National University, Hanoi (actual data was taken from international student assignments of the Vietnamese Studies and Language, academic year 2013-2014) [1].

The following was a presentation exercise with the topic “Introduce medieval works or authors of your country and compare your country’s medieval literature with Vietnamese medieval literature through some phenomena that interest you”. With this theme, and by comparing *The Tale of Kieu* with the masterpieces of their country, the students developed the following ideas:

Illustrated presentation for South Korean students:

	• <i>Truyện Nàng Xuân Hương</i> nguyên văn là <i>Xuân Hương truyện</i> không có tác giả cụ thể, hay còn gọi là tác phẩm khuyết danh. • Là một trong số tiểu thuyết cổ đại Hàn Quốc (ra đời khoảng thế kỉ XVII)	• Đầu thời kỳ Chosun xuất hiện dưới hình thức diễn xướng sân khấu “Pansori”. • <i>Xuân Hương</i> ca được coi là bài hát nổi tiếng nhất về tình yêu. • <i>Khi Xuân Hương</i> ca được nhiều người đón nhận và thêm bớt thì dần phát triển thành tiểu thuyết.
 Xuân Hương (ChunHyang) là con gái của Xuân Mai (Walmac) một kỹ nữ đã bỏ nghề ở huyện Nam Nguyên (Namwon). Xuân Hương (ChunHyang) là người con gái tài sắc vẹn toàn. Một ngày xuân nàng đi chơi du thi gặp công tử Lý Mộng Long (Lee MongRyong) con trai quan tri huyện Nam Nguyên. Một hôm chàng Mộng Long đi đón tết thì gặp nàng Xuân Hương chơi đu vào ngày Tết Đoan Ngọ liền say đắm vẻ đẹp của nàng. Hai người yêu nhau, ước ao ngày ngày được ở bên nhau và sau này sẽ kết duyên vợ chồng.	• Và đến nay còn được chuyển thể thành phim truyền hình và điện ảnh cũng như kịch. 	 Không bao lâu sau, cha Lý Mộng Long được thăng quan, gia đình chàng phải trở về kinh đô (Hanyang). Lúc đó chàng Lý mới nói với mẹ về chuyện Xuân Hương nhưng không được sự đồng ý của gia đình nên hai người tạm chia tay nhau. Mộng Long trước khi theo cha về kinh thành có hẹn rằng nhất định sẽ quay trở lại tìm nàng.

Illustrated presentation for Cuban students:



The comparison of *The Story of Chunhyang* and *The Tale of Kieu* by a group of South Korean students was a good choice. It was a reasonable choice both in terms of practicality and academicism. Regarding the presentation to the group of Cuban students, one can see that the nature of such comparison can be limitless. Nevertheless, within that Vietnamese Medieval Literature course, the Cuban students provided a portrait of the reputation they are proud of, similar to how the Vietnamese are proud of Nguyen Du.

Moreover, by comparing Vietnamese literature with their own, the method can provide a way of learning for those who have never had access to modern Vietnamese literature, let alone classical literature. Thus, there are some clear advantages in comparing literature works that resonate with the meaning of teaching literature and literary knowledge.

3.5. The fifth difference: Respecting the initiative and creative spirit of international students

While teaching a class with many international students, teachers need to seek out and understand

the teaching methods of universities abroad. This understanding should be considered a prerequisite for teachers to stand in front of a somewhat complex and differentiated audience with mixed academic backgrounds from the countries they come from, especially if these students come from nations with a democratic tradition. In fact, there is a profound reason for teaching with a philosophy that helps provide foreign students with knowledge that interests them, not with what we already have or want them to know.

It is necessary to encourage foreign students to ask questions and thoroughly think about problems and meanings and discover contradictions and paradoxes by native speakers' experiences with foreign literature. In other words, both faculty and students should come to class as debaters and reviewers looking for something new that is worth thinking about.

Beginning with the learners, a student interested in Vietnamese sociology will have a different way of understanding Vietnamese literature than a student who is dedicated to studying Vietnamese

linguistics. Likewise, a student studying Vietnamese history will have a different way of reading and exploiting Vietnamese literature than a student doing comparative studies of classical East Asian literature.

As such, the question of a student relating to Vietnamese history when reading Vietnamese literature could be “Why did Southern urban literature after 1954 - its interesting part - belong to a lot of literature of the Northern people who migrated to the South in 1954?”. Similarly, the question of a student researching Vietnamese sociology could be: “Who is the street-smart vagabond named Red-haired Xuân (out of *Dumb Luck* by Vu Trong Phung)?”.

The author has encountered such questions in the past in classes teaching Vietnamese literature to international students as well as graduate students from the United States.

One more point worth mentioning is that classes with international students are not homogeneous in terms of learning goals and their future relationships with the Vietnamese language. It is thus not recommended to set learning outcome requirements on the subject in a principled manner and compare different perceptions with a standard view of remembering facts because this approach would be far too simple and not enough to examine the learners’ inner progress after one semester. On the contrary, a learner’s awareness and renewal of linguistic experiences, together with a deeper sharing and sympathy with a culture, will be a more valuable learning outcome standard for them.

3.6. The sixth difference: Applying Kaizen in encouraging students to understand the lesson

Kaizen 改善 (the Sino-Japanese word for “improvement”) in Japanese refers to continuous improvement, that is, constantly changing oneself little by little to best correct and overcome difficulties and limitations in work, learning, and speaking. Although first practised in Japanese businesses after the Second World War to improve economic efficiency, Kaizen has become the key to success for many people in many fields. The Kaizen principle does not focus on quick, short-term breakthroughs, but places full emphasis on sustainable development, creating opportunities for everyone to work and train with a long-term approach, valuing the striving for improvement over concrete profits. With these basic concepts and approaches, Kaizen is very suitable for international students in understanding and analysing

literature, particularly Vietnamese literature.

In fact, criticising and commenting on a literary work or a phenomenon at the university level is no longer just a choice of teaching method. More than that, when the recipients of literary knowledge are foreign students, the lecturers must teach them each sentence, each lesson, and each idea; or even mix language and literature teaching or literature and culture teaching, if the pedagogical situation requires this.

The author also believes that it is helpful to spend a lot of time, maybe even an entire lesson, around a few Vietnamese words and phrases that are used in a rhetorical sense or need several explanations about the core of Vietnamese culture, rather than giving lectures according to massive, academic textbooks on literary periods, characteristics, and processes.

When approaching Nguyen Du’s “*Người con gái Nam Xương*” (16th century), the details of the child’s voice are something that needs to be explained carefully for foreigners to understand. For example, why does a child raising their voice create a tragedy, is the truth as portrayed in folk wisdom enough to tell all the subtle truths in life? In the story by Nguyen Du, the child gave crucial misinformation, even though it was telling the truth. This shows that written literature contains and approaches truths in a much more complex way than the folklore’s “bag of wisdom” that neatly sums these truths up.

Explaining little by little, or repeatedly discussing the meanings of such verses in different literary contexts, will give international students more opportunities to understand the abstract forms of language that can only unfold their meanings when they live in appropriate cultural contexts. A teaching approach inspired by the Kaizen philosophy supports teachers to be more patient and persistent in calling learners to participate in the contemplations of Vietnamese through bridging the languages.

3.7. The seventh difference: Providing detailed material for each lesson, with selected references

Unlike Vietnamese students, international students do not easily and directly find necessary materials for the subject when learning about Vietnamese literature. If they cannot rely on selected materials, suitable quotations, and related research, they have almost no opportunity to read, analyse, and understand the literary works provided by the teacher.

Foreign students thus need to be able to read the

selected material directly, with detailed annotations, and they need many “other teachers” besides the one meeting them in every class. Those “other teachers” are a system of selected materials specifically designed to help foreigners understand and interpret Vietnamese literature.

A brief sample of material that puts Vietnamese literature into context for international students can be detailed as follows [5]:

Author	Tan Đa (1889-1939), real name Nguyen Khac Hieu
Literature period	1900-1930: The transition period (also known as pre-modern literature) of Vietnamese literature, representing the shift from medieval literature to modern literature following the Western literary model.
Historical context	The French colonialists officially put the yoke of domination on Vietnam with their colonial exploitation, turning Vietnam into a semi-feudal colony. During this period, there were two literary trends taking place at the same time: the patriotic literary movement and the writing movement in the national language script. In general, this is the period of modernisation of the entire society and culture, especially in literature.
Main works	<i>Giấc mộng con</i> , <i>Khối tình con</i> , <i>Thề non nước</i> , <i>Vương Thúy Kiều chú giải tân truyện</i> , <i>Tản Đà văn tập</i> , <i>Tản Đà vận văn</i>
Notes on style	Tan Đa wrote, composed, and published as an amateur Confucian. He was a professional writer with some characteristics of contemporary writers and intellectuals with a talent for marketing, extravagance, polyamory, and liberalism. He straddles the two most important literary trends: romanticism and realism.
Main topics	The lost self, the dream of love, sympathy for the fate of the actor-beauty, innovation, and patriotism.

Analysis of *Thề non nước*, *Vương Thúy Kiều chú giải tân truyện*

Common questions and answers:

(a) *What was the separate section of the Indochina Magazine that was devoted to printing Tan Đa's articles?*

The answer: The section was called *Một lối văn Nôm* and set by Nguyen Van Vinh.

(b) *Since when did Nguyen Khac Hieu begin to use his pen name, Tan Đa, and what does it mean?*

The answer: Nguyen Khac Hieu used the pen name Tan Đa since 1916. The name combines the names of two places in his hometown, Tản Viên mountain and Đà river in Đà Giang.

(c) *What newspaper did Tan Đa publish and in which year? What was the fate of this newspaper?*

The answer: Tan Đa organised the An Nam magazine in 1926, which lasted for 10 issues from 1926 to 1927. In 1930, the An Nam magazine was temporarily republished but only for three issues.

(d) *In which work was the poem Thề non nước (The Vow between Mountain and River) printed, and in what year was it published?*

The answer: The poem was printed in *Tản Đà tùng văn* and published in 1922 when Tan Đa was 34 years old.

(e) *What was the title of a philosophical work that was written by Tan Đa?*

The answer: Tan Đa's philosophical writing was titled *Nhàn tướng*, and the work was published in 1929 [5].

3.8. The eighth difference: Paying special attention to linguistic and literary practices inside and outside the classroom

A lecture on Vietnamese literature for international students should never be confined to a specified number of lessons, regular school hours, or provide knowledge without a broad context and a rich teacher-student relationship in creative learning projects [6].

The forms of learning should include most of the

following: writing, organising and participating in plays (as the theatricalisation of literary works), group presentations, translations of poetry from Vietnamese into native languages, singing Vietnamese songs, participating in research seminars organised by Vietnamese educational institutions, reading books in the library, inviting the teacher to participate and share thoughts on these library books, understanding the library and its works, collecting materials, and writing academic papers in Vietnamese, among others.

All these activities are not radically different from teaching Vietnamese literature to native students. Nonetheless, for international students, these activities inside - and especially outside - the classroom should be fostered to create a study environment that motivates them to learn and be more excited about their studies [7].

In his article *Teaching English Through Literature*, M. Hişmanoğlu (2005) [8] analysed and

summarised the usefulness of teaching language through literature. He asserts that students can greatly improve their writing, reading, listening, and speaking skills when approaching literary works vividly. In particular, the author emphasises the great and profound benefits of teaching drama and acting to students: "Using drama in a language classroom is a good resource for language teaching. It is through the use of drama that learners become familiar with grammatical structures in context and also learn about how to use the language to express, control, and inform. The use of drama raises the students' awareness towards the target language and culture" [8].

Elsewhere, Japan's Tokyo University of Foreign Studies (東京外国語大学) has the long-standing tradition of holding the language and culture festival known as the Gaigosai Festival. Dating back to 1901, each November, the students of all foreign language classes are asked to perform plays during the festival.



As a rule, second-year students of foreign languages in the school spend six months preparing for a play of 50-80 minutes, with the dialogues entirely studied and performed in the languages taught at the Tokyo University of Foreign Studies. Particularly in Vietnamese Studies, the students performed very difficult plays such as *Hà Nội, tình yêu và cái chết* (adapted from *Tố Tâm* by Hoàng Ngọc Phách), *Hồn Trương Ba da hàng thịt*, *Quan Âm Thị Kính*, *Miss Sài Gòn*, *Tấm Cám*, and many more. Most students participating in the dramas within the Gaigosai Festival said that they made unexpected progress after six months of pondering, translating the script, memorising the lines, practising pronunciation, and remembering each detail to perform.

Such plays used to learn, work together, create a study environment outside the classroom, and establish an emotional connection with the cultural values of another population, which are a testament to the value of learning, practising creativity, science, and efficiency. Above are a few pictures of the play *Hà Nội, tình yêu và cái chết* as performed by second-year students majoring in Vietnam Studies at the Tokyo University of Foreign Studies on November 21, 2010, with the screenplay written by Prof. Dr. Kawaguchi Kenichi.

"Learners should make use of drama to promote their comprehension of life experiences, reflect on particular circumstances, and make sense of their extralinguistic world in a deeper way" [7].

Likewise, the difference in language and literature practice outside the classroom is one of the fulcrums that support the goal of teaching Vietnamese, and further strengthens the interests of international students regarding their Vietnamese studies.

4. Conclusions

This study focuses on describing the characteristics that need attention in the method of teaching Vietnamese language and Vietnamese literature to foreigners. It is certain that teaching Vietnamese literature to international students must be different from teaching Vietnamese literature

to Vietnamese students. The eight principles mentioned above are the honest and effective conclusions of the author during the process of teaching Vietnamese literature to foreign students. Those are the principles that we have followed, implemented, and successfully tested. These factors show that teaching Vietnamese literature to foreigners involves many issues like cultural identity, psychology of reception, cultural space, and the extent and scope of Vietnamese words to approach works, literature, and the reading and understanding of literary works.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] T.T.T. Le (2017), "Differences in interpreting knowledge in teaching methods of Vietnamese literature to international students", *Researching and Teaching Vietnamese Studies*, International Conference Proceeding, Ho Chi Minh city National University Publishing House, pp.896-911 (in Vietnamese).
- [2] N.V. Hoan (2022), "Translations of *The Tale of Kieu* into English", <https://www.nguyendu.com.vn/vi/nhung-ban-dich-truyen-kieu-sang-tieng-anh-D7B82F96C8B05FE6A4DD3621B80381F2.html>, accessed 20 April 2022 (in Vietnamese).
- [3] J. Dewey (2012), *John Dewey Experience and Education*, Tre Publishing House, 240pp.
- [4] M. Sato, M. Sato (2021), *Learning Community - The School's Comprehensive Innovation Model*, University of Education Publishing House, 171pp.
- [5] Many authors (2000), *Tan Da - About The Author and The Work*, Vietnam Education Publishing House, 520pp (in Vietnamese).
- [6] A. Paran (2006), *Literature in Language Teaching and Learning*, 192pp, <https://eric.ed.gov/?id=ED496783>, accessed 20 April 2022.
- [7] A. Sariçoban (2004), "Using drama in teaching Turkish as a foreign language", *Eurasian Journal of Educational Research*, **14**, pp.13-32.
- [8] M. Hismanoglu (2005), "Teaching English through literature", *Journal of Language and Linguistic Studies*, **1**(1), pp.53-66.

Table of Contents in 2022

No	Author	Title	Classification number	Volume (Number)	Page
1	Vu Minh	Completing the most monumental series on the “National History” of Vietnam.	Science Announcement	(64) 1	3
2	Van Cong Nguyen, Thu Hoai Ao	Factors affecting consumer behaviour to use e-wallets: An empirical study from Vietnam context.	Other Economics and Business (2.3)	(64) 1	10
3	Minh Quang Nguyen	Citizen science matters: Theorising citizen science and exploring its promises for addressing Mekong environmental problems.	Sociology (4.1)	(64) 1	25
4	Thi Hoa Sen Le, Tien Dung Nguyen	Stakeholders’ perceptions and responses to climate change impacts on agricultural sector in mountainous areas of Thua Thien Hue province.	Other Sociology, Anthropology, and Ethnology (4.4)	(64) 1	36
5	Thi Khanh Ha Tran, Manh Tuan Dinh	The UK’s foreign strategy toward ASEAN and prospect of UK - Vietnam relationship post Brexit.	International Relations (5.2)	(64) 1	46
6	Van Anh Le, Leah Samson	Is waiving IP protection a magic wand to make COVID-19 vaccines quicker and cheaper?	Jurisprudence (6)	(64) 1	60
7	The Anh Dao, Ngoc Mai Nguyen	Toward a sustainable food system and agroecology transition in Vietnam.	Other Social Sciences (7)	(64) 1	67
8	Quan-Hoang Vuong, Minh-Hoang Nguyen, Manh-Toan Ho	Bayesvl: An R package for user-friendly Bayesian regression modelling.	Other Social Sciences (7)	(64) 1	85
9	Minh Giang Vu	Land system and agricultural economy during the Tran dynasty: New approaches.	History (8.1)	(64) 1	97
10	Khac Su Nguyen	Vietnam’s Middle and Late Neolithic marine cultures.	Archaeology (8.2)	(64) 1	112
11	Van Chung Anh Le, Guillaume Finck	Market entry strategy for construction chemicals firm in Vietnam.	Business and Management (2.2)	(64) 2	3
12	My Tran Ngo, Anh Thu Ha, Le Thu Trang Ho, Kim Hanh Nguyen	Board characteristics and dividend payout ratios: Empirical evidence from the Vietnam Stock Exchange.	Business and Management (2.2)	(64) 2	13
13	Van Thanh Nguyen, Minh Hiep Ha	Smart manufacturing readiness in Vietnam: An assessment survey and policy implications.	Other Economics and Business (2.3)	(64) 2	24
14	Nam-Phuong Nguyen, Van-Thang Le, Huong-Giang Nguyen, Thi Thanh-Hang Nguyen	Teachers’ awareness of happy schools with UNESCO items: A case study of a primary school in Hanoi, Vietnam.	Curriculum and Pedagogy (3.2)	(64) 2	38
15	Dau Thanh Binh Nguyen, Tien Van Truong	The relationship between verbal aggressiveness and mental health of students at secondary school.	Other Education (3.4)	(64) 2	48
16	Thi Thuy Duong Truong	The multi-criteria decision making for evaluation of vulnerability to climate change: A case study in Vietnam.	Sociology (4.1)	(64) 2	55
17	Thuy Nguyen, Thang Ngo, Thi-Hong Diep Pham, Hong-Thi Nguyen, Thi-Huong-Lan Nguyen, Quy Van Khuc	Extent to which people perceive and accept COVID-19 vaccines in north central Vietnam.	Sociology (4.1)	(64) 2	63
18	Van Kham Tran, Huy Cuong Pham, Thanh Nam Tran, Thi Thai Lan Nguyen, Thi Kim Nhung Nguyen	Public interest in social research ethics: An analysis of the top 50 articles in Altmetric database.	Sociology (4.1)	(64) 2	75
19	Thi Huyen Le Nguyen, Thi Hoai Nguyen	Gestational surrogacy under the legal systems of countries around the world and experiences for the improvement of the law in Vietnam.	Jurisprudence (6)	(64) 2	83
20	Duy Phuong Nguyen, Duy Thanh Nguyen	Law on corporate social responsibility for consumers.	Jurisprudence (6)	(64) 2	93
21	Thi Huong Vu, Thi Dien Do	Law on settlement of civil disputes involving foreign elements at the Courts in Vietnam.	Jurisprudence (6)	(64) 2	105
22	Huu Can Nguyen	Scientists’ motivation to patent and commercialise their inventions at universities and research institutes.	Other Social Sciences (7)	(64) 2	120
23	Hoang Minh Dang, Van Vu Hong, Phuong Nguyen Lan, Dao Kieu Anh, Ha Ho Thu	Mental health and psychosocial support needs among Vietnamese families during the first wave of the COVID-19 pandemic in Hanoi: A mixed methods study.	Counseling and Clinical Psychology (1.2)	(64) 3	3
24	Thi Dieu Linh Huynh, Thi Kim Oanh Hoang	Trade creation and trade diversion effects of ACFTA on seafood exports.	Business and Management (2.2)	(64) 3	18
25	Anh Duc Do, Thi Diu Nguyen	Factors affecting phubbing of students in the context of COVID-19.	Sociology (4.1)	(64) 3	27
26	Van Bac Ho	Perceptions of farmers on risk management strategies in Son La province, Vietnam.	Sociology (4.1)	(64) 3	37
27	Van Anh Le	Moral rights and their position in the digital world.	Jurisprudence (6)	(64) 3	46
28	Tram Nguyen, Tang Li	The analysis of counterfeits and their impact on countries’ development.	Jurisprudence (6)	(64) 3	55
29	Nguyen Anh Dang, Thi Phuong Thao Nguyen	Reducing health inequalities in Vietnam: Implications for health in all policy.	Other Social Sciences (7)	(64) 3	65
30	Minh Giang Vu	FUNAN (Phu Nam) from a new perspective.	History (8.1)	(64) 3	71
31	Thi Vuong Pham	From the policy of “Ngu binh u nong” in the monarchy period to the military farm model during the 1956-1960 period in North Vietnam.	History (8.1)	(64) 3	86
32	Thi Hong Luong	The repatriation of Japanese in Vietnam from 1954 to 1960.	History (8.1)	(64) 3	96
33	Thi Thu Hoai Nguyen	Vietnamese studies training programs in Vietnam in the context of international integration: Reality and development orientation.	Vietnamese Studies (10)	(64) 3	105
34	Thi Thanh Tam Le	Differences in knowledge expression in teaching Vietnamese literature for international students.	Vietnamese Studies (10)	(64) 3	115

V MOST Journal of Social Sciences and Humanities (V MOST JOSSH): Manuscript Template

V MOST JOSSH mainly publishes original research and review articles which should provide a significant and substantial amount of new knowledge that can contribute to the existing theory or practice in the relevant field. The review articles should present a highly conceptual, intellectual, and in-depth analysis of an issue supported by a vigorous synthesis of relevant literature.

The structure of different types of articles may vary according to the type of study, and the content of the article.

The following are the detailed main components of the original research and review articles submitted to the journal.

Original research

The original research should have three following parts:

Preliminary section: it includes title, list of all contributing authors with their institutional affiliation, and abstract (160-250 words) with at least 3 keywords.

The title

List the author names separated by commas. Use superscript numbers to link affiliations, and symbols *†‡ for author notes. For example, X. Jones¹, P.Y. Smith^{1,2}

Author's affiliation addresses:

¹*Affiliations should be preceded by superscript numbers corresponding to the author list*

²*For any institutions, please provide the institution name, street, district, city, country*

Received ; revised ; accepted

Abstract:

Start your abstract here...

Keywords: keyword 1, keyword 2, keyword 3...

Classification number(s): 1.1, 2.2, 5.3, etc.

The abstract should range between 160 and 250 words and be structured in a single paragraph following keywords in a separate line. The abstract should represent the main part of the research manuscript. It should reflect a brief and comprehensive background following the aim of the study (main questions to be addressed), methods used for investigating the problem, a summary of significant findings, main conclusions, and implications of the results.

Keywords: they should come immediately after the abstract and contain 3-7 specific and relevant keywords. They should reflect the research study and the relevant field of research.

Classification numbers: depend on the Journal's Classification Scheme.

Author(s) are encouraged to write a "Highlights" that summarises the most exciting, interesting points from your manuscript.

Manuscript section: it is the main body of the scientific manuscript that consists of an introduction, purpose/objective of the study, research questions and/or hypotheses, literature review, research methods/methodology, results, discussion, suggestions/recommendations/implications/study limitations...(if any), and conclusions. These sections may slightly vary depending on the type of research approach and design used in the research. Each section should be numbered.

All of the Figures, Tables, and Equations should be cited in numerical order.

Figures

Fig. #: (Begin each figure caption with a label, "Fig. 1." for example, as a new paragraph).

Fig. 1. The figure caption should begin with an overall descriptive statement of the figure followed by additional text. They should be immediately after each figure. Figure parts are indicated with capital letters (A). If you prefer, you can place both the actual figures and captions logically through the text near where they are cited rather than at the end of the file (but not both). If a paragraph in the main text begins with the name of a figure, write out "Figure" in full (e.g., <para>"Figure 1 shows..."</para>).

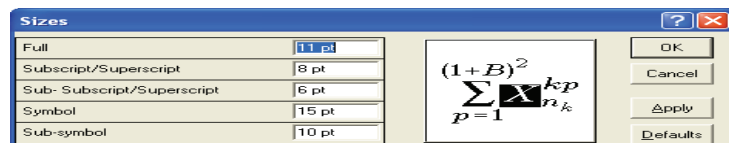


Fig. 1. The figure caption.

*Corresponding author(s): Email: Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.

Tables

Table #: (Begin each table caption with a label "Table 1.", etc.) as a new paragraph.

Table 1. Start this caption with a short description of your table. Format tables using the Word Table commands and structures. Do not create tables using spaces or tabs characters.

Table 1. Caption.				
a	b	c	d	e
f				
g				
h				

Equations

$$\int_a^b x dx \quad (1)$$

Closing section: it includes appendices/supplementary materials/data availability statement (if applicable), CRediT author statement (for multiple authors), acknowledgements (if applicable), competing interests, ethics (if any) and a complete list of references corresponding to all the citations given in the text of the manuscript. The appendices/supplementary materials may include data files and other material relevant to the research that should be submitted in separate files if required.

APPENDICES

The appendices should ideally be under 1000 words (approximately 2 A4 pages) for printing version. With longer appendices, they are only accepted for online publication.

CRediT author statement (for multiple authors)

CRediT offers authors the opportunity to share an accurate and detailed description of their diverse contributions to the published work.

ACKNOWLEDGEMENTS (if applicable)

This section is for the researchers who were funded for the research projects, and it should enclose all sources of financial support.

COMPETING INTERESTS

The author(s) declare(s) that there is no conflict of interest regarding the publication of this article.

REFERENCES

For in-text citation: References should be cited in the bracket with a number [1]. Multiple reference citations are separated by commas [2, 3] or if a series, dashes [4-6]. When citing sources with the author(s) and the year, they should be shortened to the first author's name, followed by et al. (with more than one author) and the year.

For reference list: With less than or equal to three authors, list all the author(s). With more than three authors, the first three should be listed and followed by et al.

References are listed in numerical order, and in the same order in which they are cited in text. The reference list should include all and only those references you have cited in the text. The reference list appears at the end of the article.

The reference consists of: Initial(s) and first/last name of the author(s), author' names separated by commas (Year of publication), "Titles of journal articles or chapter of book", Title of Journal, Book or Other Publication, Volume(Number) (if any), page numbers (if any), DOI (if any), URL and accessed date (if any) (in its original language if not English).

To cite a website and online/electronic resources, please include the accessed date (day month year).

Example of a reference list:

[1] D. Acemoglu, U. Akcigit, H.I. Alp, et al. (2018), "Innovation, reallocation and growth", *American Economic Review*, **108**(11), pp.3450-3491, DOI: 10.1257/aer.20130470.

[2] G. Dosi (2000), *Innovation, Organization and Economic Dynamics*, Edward Elgar, 720pp.

[3] Asia Program Area (1975), "The agricultural situation in the Far East and Oceania: Review of 1974 and outlook for 1975", *Foreign Agricultural Economic Report, No.105*, <https://ideas.repec.org/p/ags/uersfe/145966.html>, accessed 15 August 2022.

Review articles

They should be different from the original research as they would contain different sections on the literature review. Authors may structure this part as per nature, background, and available literature on the issue argued in the manuscript.

For more detailed instructions, please visit our website: d.vjst.vn or vmostscience.vn.

EDITORIAL BOARD

Editorial Board

Chairman

Nguyen Anh Dang (*Vietnam Academy of Social Sciences, Vietnam*)

Standing Members

Hong Tung Pham (*Institute of Vietnamese Studies and Development Science, VNU, Hanoi, Vietnam*)

Minh Khuong Vu (*National University of Singapore, Singapore*)

Tai Dong Nguyen (*Institute of Philosophy, Vietnam Academy of Social Sciences, Vietnam*)

Van Hy Luong (*University of Toronto, Canada*)

Members

Albert Pilot (*Utrecht University, Netherlands*)

Anil B. Deolalikar (*University of California Riverside, USA*)

Chu Hoi Nguyen (*University of Science, VNU, Hanoi, Vietnam*)

Duc Khuong Nguyen (*IPAG Business School, France*)

Hoai Son Bui (*Vietnam National Institute of Culture and Arts Studies, Vietnam*)

Hoang Minh Dang (*University of Education, VNU, Hanoi, Vietnam*)

João J. Vila-Chã (*Pontifical Gregorian University, Italy*)

Lutz Brangsch (*Rosa Luxemburg Stiftung, Germany*)

Minh Giang Vu (*VNU, Hanoi, Vietnam*)

Nhu Phuong Huynh (*University of Social Sciences and Humanities, VNU, Ho Chi Minh City, Vietnam*)

Peter C. Phan (*Georgetown University, USA*)

Quang Ngoc Nguyen (*Institute of Vietnamese Studies and Development Science, VNU, Hanoi, Vietnam*)

Quang Tuyen Tran (*VNU, Hanoi, Vietnam*)

Salvatore Barbones (*The University of Sydney, Australia*)

Thai Yen Huong Nguyen (*Diplomatic Academy of Vietnam, Vietnam*)

Thanh Tu Anh Vu (*Fulbright University, Vietnam*)

Thi Mai Nhan Tran (*University of Social Sciences and Humanities, VNU, Ho Chi Minh City, Vietnam*)

Thi Phuong Lan Ngo (*University of Social Sciences and Humanities, VNU, Ho Chi Minh City, Vietnam*)

Tho Dat Tran (*National Economics University, Hanoi, Vietnam*)

Tuan Cuong Nguyen (*Institute of Sino-Nom Studies, Vietnam*)

Van Nghia Hoang (*Ho Chi Minh National Academy of Politics, Vietnam*)

Van Sen Vo (*University of Social Sciences and Humanities, VNU, Ho Chi Minh City, Vietnam*)

Vu Hao Nguyen (*University of Social Sciences and Humanities, VNU, Hanoi, Vietnam*)

Editor-in-Chief

Nguyen Thi Huong Giang (*Ministry of Science and Technology, Vietnam*)

Deputy Editor-in-Chief

Nguyen Thi Hai Hang (*Ministry of Science and Technology, Vietnam*)

Managing Editors

Pham Thi Minh Nguyet (*Ministry of Science and Technology, Vietnam*)

Phi Cong Thuong (*Ministry of Science and Technology, Vietnam*)

Vu Van Hung (*Ministry of Science and Technology, Vietnam*)

Ninh Van Dien (*Ministry of Science and Technology, Vietnam*)

Le Thi Bac (*Ministry of Science and Technology, Vietnam*)

Tang Xuan Binh (*Ministry of Science and Technology, Vietnam*)

Doan Duc Khai (*Ministry of Science and Technology, Vietnam*)

Truong Thi Thao Duong (*Ministry of Science and Technology, Vietnam*)

EDITORIAL OFFICE

113 Tran Duy Hung Str., Cau Giay Dist., Hanoi, Vietnam

Tel: (84.24) 39436793; Fax: (84.24) 39436794

Email: vmostjossh@most.gov.vn; Website: d.vjst.vn or vmostscience.vn