



**INTERNATIONAL COLLEGE,
KRIRK UNIVERSITY**

ASEAN Journal of Research

**Volume 1 Number 1
January - June 2023**

Table of Contents

Editor's Introduction	4
Peer Reviewed Papers	
A Study on the Relationship among Teachers' Professional Learning Community, Organizational Commitment and Teachers' Teaching Effectiveness by Jing-Feng Zhang and Chun-Te Hsin	12
The Relationship Between College Students' Creativity and Academic Achievement Under the Background of Sustainable Development - Using Deep Learning as a Mediating Variable by Jingqiu Yang and Minte Fan	26
Dreams of the Hebrews and Other Ancient Peoples: A Contextual Panoply for Religious Minds by O.N. Shogunle and B.S. Taiwo	38
Quantitative Analysis of Value Investment in Listed Chinese Banks during the COVID-19 Epidemic by Tao Zhu and Xi Qin	50
Research on Experience Tourism Products in Rural Tourism — a Case Study of Dongtou District of Wenzhou City by Kancheng Jin	61
Book Reviews	
A Meeting of Masks: Status, Power and Hierarchy in Bangkok by Sophorntavy Vorng	75
The Year 1000: When Explorers Connected the World by Valerie Hansen	77
The Care Crisis: What Caused It and How Can We End It? by Emma Dowling	79
Scorched Earth: Beyond the Digital Age to a Post-Capitalist World by Jonathan Crary	81
Another Now: Dispatches from an Alternative Present by Yanis Varoufakis	83

EDITOR'S INTRODUCTION

Editor's Introduction

Welcome to the inaugural edition of the *Asia Research Journal* (ARJ). The ARJ is an academic journal which publishes papers in the fields of business, management and economics, social sciences, arts and humanities, engineering, education and related subjects. It is my hope that the journal will make a contribution not just to academic knowledge but to harmonious cross-border relations at a time of complex international relationships.

Deglobalization

1. What Is Deglobalization?

The Russian invasion of Ukraine which began on February 24th, 2022 was met by a raft of sanctions of Russian institutions, firms and individuals on an unprecedented scale. Individuals who were thought to have a personal connection with the Putin regime and to have benefited from it were considered 'oligarchs' and considered to be valid attempts for sanctioning. Yachts were seized, travel restrictions were imposed and Chelsea football club, recently crowned FIFA Club World Cup champions, was prised from the hands of its owner. One consequence of this is the further dislocation of supply chains that had first been affected by the ongoing coronavirus pandemic. However, while the disease posed what was widely thought to be a temporary disruption to global trade, the Russian war started to make people think this would be a permanent ending to globalization. In his annual letter to shareholders of BlackRock, which has \$10 trillion dollars in its portfolio and is the world's largest asset management company, Larry Fink wrote: "The Russian invasion of Ukraine has put an end to the globalization we have experienced over the past three decades.' He predicted that "... companies and governments will also be looking more broadly at their dependencies on other nations. This may lead companies to onshore or nearshore more of their operations, resulting in a faster pull back from some companies." (Masters, 2022).

Fink sees the war, in other words, as an external environmental shock of such severity that it might lead to a radical restructuring of the global economy and the creation of another international division of labour. Firms would be making decisions based on relative costs but with a more prudent re-evaluation of the nature and extent of risk in the system. However, the sanctions have provoked another response and another direct threat to globalization. D'Eramo (2022) wrote: "... what has been damaged is faith in globalization itself and hence the very formulation on which it's built. A globalized economy rests on the assumption that its overall order is more important than the contingencies of individual states. Capital can only move freely between banks in different nations if it is equally secure in any given institution. As such, globalization is based on the conviction that there are no national elites, but rather a single, global one that is invulnerable to the vicissitudes of state politics." This understanding of the world, that the global elites will be permitted to behave in any way that they wish and can dispose of their numerous assets according to their precise ideas has been required to have a radical rethinking. There were plenty of reasons for those involved to believe that their immunity to the usual laws would continue – Bullough (2022), for example, has provided a devastating critique of the ways in which British institutions have accommodated the needs of overseas capital, notably Russian capital, in finding safe havens overseas in a conducive environment where people might want to live and bring up their relatives and connections. Yet the threat to the interests of the global hegemon has trumped those of anyone else. Consequently, we may see some rolling back of globalization for reasons of realpolitik. However, although there may be some expulsions from the system, the system itself is likely to be reconfigured in a similar style though on a slightly smaller scale in due course. The fiendish complexity of global value chains means that it would be fearsomely difficult and expensive to abandon them altogether. However, most arguments for deglobalization aim for just such a radical rupture, in one form or another.

There are three principal arguments that have been put forward for deglobalization and these tend to overlap and interact with each other in various ways. The first argument depends on equality and decolonization – owing to the depredations of the past, it is now not possible to conceive of a globalized world which does not continue to reinforce existing power structures that are inherently unfair and exploitative. There is a variation to this argument which places the act of exploitation and the drive for inequality into the present and the future rather than the past. The second argument depends on the threat of global climate change and environmental degradation, which is being driven to a considerable extent by the instruments of globalization, the planes and ships and factories that make hyper-consumption possible and the ideological instruments of capitalism that drive the desire to participate in such a society. The third argument adopts ethical and aesthetic approaches and insists that smaller is better for its own sake. This argument for degrowth is controversial on many grounds and is associated with some unpleasant side-arguments but it should be considered nevertheless. In this introductory chapter, a summary of these arguments will be provided. However, before seeking to understand what deglobalization is, it is necessary to understand the nature and scope of globalization and that will be presented next. Following these sections, the introduction will describe the nature of the other chapters included in this book and consider their contribution to the overall debate.

2. Globalization

Deglobalization is the process that reverses globalization – and globalization is the process or set of processes that lead to similar patterns of production and consumption spreading around the world based on a paradigm of increasing efficiency resulting from economies of scope, scale and learning. Although a powerful wave of globalization is associated with the creation and functioning of imperial systems by mainly European colonialists, the current form that it takes results from the changes brought about by the collapse of the Soviet system (1989-92). The end of the Cold War saw the majority of those people who had been part of Communist command economies switched to some form of the capitalist economy. This greatly increased both the potential pool of labour that could be drawn upon to participate in low labour cost intensive manufacturing. It also led to a significant increase in the number of future customers for those manufactured items. With large increases in both supply and demand factors, it is not surprising that world trade has flourished in the years since then (although with exceptions at time of global economic recession and the ongoing coronavirus pandemic).

The movement of manufacturing and assembly work to countries with low labour costs preceded the end of the Cold War but were intensified by it. The concept of the New International Division of Labour had already been identified in the 1970s (Fröbel, Heinrichs & Kreye, 1980) and the Japanese economy had already reached the stage that domestic labour costs made production there unprofitable compared with the possibility of offshoring to Southeast Asia (Kang & Piao, 2015) and, later, China. As an East Asian country, Japan shared some cultural assumptions and similarities which enabled its companies to integrate themselves more smoothly into the overseas markets than their European and North American rivals were able to do. Perhaps the most significant spur to globalization was the decision of the Chinese government under Deng Xiaoping in 1980 to adopt the Open Door policy as a means of strengthening the economy. This policy welcomed foreign businesses wishing to establish themselves in a specified number of special economic zones (SEZs), which were mostly located in coastal areas (Bohnet, Hong & Müller, 1993). The policy proved enormously successful: most of the world's largest companies were keen to open operations in China so as to gain access to the country's more than one billion consumers; many thousands of Chinese workers were keen to work in the SEZs where the wages available were greatly in excess of what they might achieve by remaining in the agricultural sector. Since many workers were unable to transfer their official residence via the *hukou* system (HRW, 2008), they were vulnerable to harassment and exploitation and this prolonged the period of low labour cost competitiveness up to and beyond the Lewisian point of equal supply and demand for labour. One result was that hundreds of millions of people were lifted out of poverty in one of the most spectacularly successful economic experiments of all time.

Yet globalization has a definite negative element – more than one element, in fact. The impact on the natural environment of the endless desire to increase productivity has been intense and possibly ruinous beyond repair. The evidence of widespread exploitation and abuse of workers is extensive and the primacy given to the mobility of capital over labour has led to the systematic spread of this model further and further across the world, as spatial fixes (Harvey, 2001) are brought into play to avoid the trap of falling profitability. More and more people question the sustainability of this system and whether it could and should be reversed.

References

Bohnet, A., Hong, Z. & Müller, F. (1993). China's open-door policy and its significance for transformation of the economic system, *Intereconomics*, 28, 191-7, available at: <https://link.springer.com/content/pdf/10.1007/BF02926200.pdf>.

Bullough, O. (2022). *Butler to the world: How Britain became the servant of tycoons, tax dodgers, kleptocrats and criminals*, London: Profile Books.

D'Eramo, M. (2022), Deglobalization, *Sidecar* (March 29th), available at: newleftreview.org/sidecar/posts/deglobalization.

Fröbel, F., Heinrichs, J. & Kreye, O. (1980). *The new international division of labour: structural unemployment in industrialised countries and industrialisation in developing countries*, Cambridge: Cambridge University Press.

Harvey, D. (2001). Globalization and the “spatial fix,” *Geographische Revue: Zeitschrift für Literatur und Diskussion* 3(2), 23-30.

Human Rights Watch (HRW) (2008). ‘One year of my blood:’ Exploitation of migrant construction workers in Beijing” (March 11th), available at: <https://www.hrw.org/report/2008/03/11/one-year-my-blood/exploitation-migrant-construction-workers-beijing>.

Kang, J.S. & Piao, S. (2015). Production offshoring and investment by Japanese firms, *IMF Working Paper WP/15/183*, available at: <https://www.imf.org/external/pubs/ft/wp/2015/wp15183.pdf>.

Masters, B. (2022). BlackRock chief Larry Fink says Ukraine war marks end of globalisation, *FT* (March 24th), available at: <https://www.ft.com/content/0c9e3b72-8d8d-4129-afb5-655571a01025>.

This is the beginning of the introduction to Deglobalization: The Future of Growth in the International Political Economy, which is an edited open access volume available at: <https://www.proudpen.com/book/deglobalization-the-future-of-growth-in-the-international-economy/>. To read the rest of the introduction, please visit: <https://jcwalsch.wordpress.com/2023/01/25/introduction-to-deglobalization-the-future-of-growth-in-the-international-economy/>.

The Seemingly Inevitable Demise of the Irrawaddy Dolphin in Myanmar

A second Irrawaddy dolphin calf – *Orcaella brevirostris* – was spotted in the River Mekong at Cambodia's Kratie province in March of 2021 (Phnom Penh Post, 2021). Nine were spotted the previous year and 13 in the year 2019. There are perhaps 92 of the animals in the 118-mile (190 km) stretch of the Mekong between Myanmar and Lao PDR. Every year, since reliable records began, between 2-6 dolphins are found dead (Aung, 2019). There are thought to be 72 dolphins in the eponymous Irrawaddy (Ayeryawaddy) and more

in the Ganges and the Mahakam river in upland Borneo. There may be as many as 300 living dolphins worldwide (World Wildlife Fund, 2021).

The Irrawaddy dolphin has a reputation for intelligence, as well as its appealing smiling face and it is reputed to work in partnership with local fishing people, by indicating where fish may be found in the river. Since the dolphins are reasonably predictable in their movements, attempts have been made to create a sustainable community-based tourism business to support them at six villages which are part of the Dolphin Conservation Centre and located in Mandalay division and Kyaukmyang in Sagaing.

Unfortunately, the attempt has not been very successful because reaching the designated villages requires extensive travel on unimproved roads, the accommodation and catering are very basic and the local people not always very welcoming – the women of the area tend to be restricted to their households and fear and dislike the dolphins themselves. Furthermore, logistical difficulties make an excursion much more expensive than for alternative trips and there can be no guarantees that the dolphins will be ready for a rendezvous anyway (Walsh & Zin, 2019).

Unfortunately for them, Irrawaddy dolphins cannot be trained to do tricks or swim with minders and so cannot claim asylum at international aquariums or dolphinariums (Tun, 2020).

The precarious numbers of dolphins means that the loss of even one individual can provoke a crisis for all and it is not known at which number the entire population will become unsustainable. Annually, as many as half a dozen animals are killed as a result of fishing with electricity, which some Myanmar fisher people use as a deadly approach to any living thing that may happen to be in the water. Attempts to persuade the fishers to use less lethal means to the by-catch and, generally, to monitor the dolphin population has been made much more difficult because of the coup of February 1st earlier this year and the armed resistance which is now opposing it in most parts of the country. Needless to say, the country's small but important international tourism sector has been almost extinguished because of recent events, not least of which is the ongoing coronavirus pandemic. More than 150,000 cases of COVID-19 have been recorded in the country and more than 3,000 deaths (World Health Organization, 2021) but, given the lack of technical capacity, equipment and resources in most regions, the real numbers will be much higher. It is difficult to be optimistic about whether the situation will be brought under control in the foreseeable future.

What is clear is that conflict restricts people's ability to maintain a decent standard of living and, as a result, it is to be expected that people will take whatever means they can to supplement the food supply for themselves and their families and so more dolphins will die. This is in addition to the continuing menace to wildlife construction of dam construction, which acts to restrict the habitat of riverine dolphins and interferes with food chains (Sotheary, 2020). Fishers also use mines, poisons and illegal nets. Since local people have little incentive to rush to tell authorities about the death of a dolphin, when a corpse is discovered, it may no longer be possible to determine the cause of death given the resources available in the field (The Irrawaddy, 2020).

The impact of global climate change is also evident in the area and the deleterious impacts on wildlife of some of the special economic zones in the area are starting to be brought to light (Tong, 2021). The Tatmadaw, the Myanmar military force, might even be a direct threat to the dolphins since former dictator Ne Win was said by some to have bathed in dolphin's blood in the belief that it would grant him supernatural powers (History Answers, 2015) and these beliefs appeal to many high powers in the military. It is certainly the case that the fighting that followed the coup of 2021 has rendered many environmental protections moot and the issues of animal care considered less important amidst the ongoing human tragedy.

Given the scale of the tragedy of human suffering to be found now in the country, it might be argued that the loss of a few animals is not that important. However, the seemingly inevitable demise of the Irrawaddy

dolphin in Myanmar is not just a symbol of the country's rulers destroying the country's future but a genuine additional threat to the environment.

References

The Irrawaddy (2020), Giant Myanmar Irrawaddy dolphin died of old age: Environmentalists," (January 12th), available at: <https://www.irrawaddy.com/news/burma/giant-myanmar-irrawaddy-dolphin-died-old-age-environmentalists>.

History Answers (2015), Ne Win: the dictator who bathed in dolphin blood, *History Answers* (2015), available at: <https://www.historyanswers.co.uk/people-politics/woodrow-wilsons-fourteen-points/>.

Phnom Penh Post (2021). Second Irrawaddy dolphin calf seen in Mekong River, (March 9th), available at: <https://www.phnompenhpost.com/national/second-irrawaddy-dolphin-calf-seen-mekong-river.htm>.

Aung, M.H. (2019). Measures taken to upgrade Ayeyarwaddy dolphin conservation to regional level, *The Global New Light of Myanmar* (December 31st), available at: <https://www.globalnewlightofmyanmar.com/measures-taken-to-upgrade-dolphin-conservation-to-regional-level>. Translated by Z.H. Oo.

Sotheary, P. (2020). Losing dolphins for more hydropower, *Khmer Times* (January 22nd), available at: <https://www.khmertimeskh.com/50682044/losing-dolphins-for-more-hydropower>.

Tong, S.L.T. (2021). Chinese special economic zones hotspots for wildlife trafficking, surveys say, *Mongabay* (June 11th), available at: <https://news.mongabay.com/2021/06/chinese-special-economic-zones-hotspots-for-wildlife-trafficking-surveys-say/>.

Tun, E.T. (2020). Save Irrawaddy dolphins, stop electrocuting them! *Myanmar Insider* (October 25th), available at: www.myanmarinsider.com/save-irrawaddy-dolphins-stop-electrocuting-them.

Walsh, J. & Zin, K.K. (2019). Achieving sustainable community-based tourism in rural Myanmar: The case of River Ayeyarwaddy dolphin tourism, *Zagreb International Review of Economics and Business*, 22(2). DOI: <https://doi.org/10.2478/zireb-2019-0022>.

World Health Organization (2021). Myanmar, available at: <https://covid19.who.int/region/searo/country/mm>.

World Wildlife Fund (2021). Facts, available at: <https://www.worldwildlife.org/species/irrawaddy-dolphin>.

This Issue

In this issue there are four double-blind peer-reviewed academic papers and five edited book reviews. The geographical scope of the authors ranges from Nigeria in the west to China in the east. The subjects include education, finance and religion. Academic papers in any of the disciplines taught at the International College of Krirk University will be eligible for consideration in the journal, which includes engineering, business and management, economics, arts and media, communication studies, political studies, public health and science and technology. Please feel free to contact the editor (dr.john.wal@staff.krirk.ac.th) for any inquiries.

About Krirk University

Krirk University is one of the most reputable universities in Thailand. It was founded in 1952 by Dr. Krirk Mangkhlaphrik and has been promoting higher education in the country since 1970. At first, it used the Ratchadamnoen Buidling. Krirk was upgraded to university status in 1995.

Dr. Krirk was a renowned educator both in Thailand and abroad. He received an honorary doctorate in education from David & Elkins College, USA. Owing to his high competence in teaching English, his high-level pedagogical skills and work experience, Dr. Krirk decided to establish a university dedicated to teaching English. He became known as the first Thai person to teach modern English aimed at students wishing to understand the principles of the language so that they could use English effectively. Consequently, the institution was licensed as a “Language and Professional School.” However, most people knew it as Dr. Krirk’s School. Nowadays, the university has become well known for teaching Chinese as well.



Krirk University today is organized into several reputable faculties and colleges, including the Faculties of Business Administration, Liberal Arts and Law, the International College, Political Communication College and China International Language and Culture College.

Furthermore, the President of Krirk University, Professor Dr. Krasae Chanawongse, is one of the most famous people in Thailand. He has served in various prominent positions, such as the Minister of the Ministry of Foreign Affairs, Minister of University Affairs, Minister to the Office of the Prime Minister and Minister of the Ministry of Public Health. He received the Ramon Magsaysay Award for Community Leadership in 1973.

Many faculty members of Krirk University have contributed to both the public and private sectors. For example, Krirk researchers have helped surrounding communities solve problems, while lecturers have taken important roles in other universities or organizations.

The Alumni of Krirk University have made distinguished contributions in the political, social and education spheres. We have such successful alumni as Dr. Chalermchai Sreeon, Minister of Agriculture and Cooperatives; Dr. Kanokwan Vilawan, Deputy Minister of Education, Dr. Thanakorn Wangboonkongchana, Secretary to the Minister of the Office of the Prime Minister, Mr. Sira Jenjaka, Member of Parliament for Bangkok and Mr. Mario Maurer, the famous actor.

Krirk University has signed Memorandums of Understanding (MoU) with hundreds of higher education institutions in China. The university also signed an MoU with Mahidol University of Thailand to promote education.

Krirk University consists of professional and highly qualified instructors. Thai and overseas faculty are both knowledgeable and experienced and teach at undergraduate, graduate and doctoral levels. There are now 129 full-time faculty members and 540 part-time instructors. Of these, 56 full-time faculty members are PhDs and 406 part-time teachers are PhDs. Furthermore, 46 full-time faculty members are from overseas, as well as 470 part-time teachers. Lecturers at Krirk University have received the “Role Model of the Year in Education and Social Development” award. They share their knowledge with students and introduce them to new skills.

Krirk University educates both Thai and international students. There are currently 1,172 full-time undergraduate students and 461 part-time students, as well as 1,193 full-time graduate students and 284 part-time students. Of these, 305 full-time undergraduate students from overseas and 1,076 full-time graduate students are from overseas. Krirk University provides an excellent learning environment for students. The modern teaching equipment and the supportive and stimulating environment really help students to learn and to develop their personalities. Students learn from diverse cases and situations, so they can develop critical and creative thinking skills and become able to study and work independently, work with others and work efficiently in any circumstances.

In 2022, Krirk University was awarded 5 stars by QS Stars and considered an excellent university. It won prizes for its performance at international conferences. The university is ranked 5th best in Thailand and 149th in all of Asia.

John Walsh, Editor

PEER REVIEWED PAPERS

A Study on the Relationship among Teachers' Professional Learning Community, Organizational Commitment and Teachers' Teaching Effectiveness

Jing-Feng Zhang, International College, Krirk University, Thailand. Email: 969835517@qq.com

Chun-Te Hsin, International College, Krirk University, Thailand. Email: hsingender@gmail.com¹

Abstract: *This study aimed to understand the relationship between teachers' professional learning communities, organizational commitment, and teachers' teaching effectiveness. In this study, 686 primary school teachers were asked to fill in the questionnaire. The conclusions are there are significant differences between teachers' teaching effectiveness in age, education level, years of working, and position; there is no significant difference between teachers' teaching effectiveness in teachers' gender, school size, and school location; teachers' learning community can effectively predict respectively 89.8% and 3.3% of the variation of organizational commitment through two groups of typical factors; teachers' learning community can effectively predict respectively 89.1% and 3.6% of the variation of teaching effectiveness through two groups of typical factors; teachers' organizational commitment can effectively predict respectively 92.7% and 2.6% of the variation of teaching effectiveness through two groups of typical factors and teachers' professional learning community and organizational commitment have 93.7% positive predicting ability to teachers' teaching effectiveness.*

Keywords: *organizational commitment, teachers' professional learning community, teachers' teaching effectiveness*

1. Introduction

1.1. Research Motives

Traditionally, school teachers make efforts to carry out class teaching under a conservative campus atmosphere and fighting against some accepted ideas. However, with rapid changes because of time, traditional educational thinking and teaching methods can no longer meet the challenges of the complex and uncertain social environment. A school is an organization that emphasizes social and psychological interaction, and whose members interact frequently at all ordinary times. Therefore, building a professional learning community in school is an effective way to improve teachers' personal teaching and learning. In the community, teachers can carry out collaborative teaching through mutual discussion, dialogue, and knowledge sharing in a supportive atmosphere, so as to promote an overall improvement of teaching work and teaching quality (Feng, 2018). In terms of teaching effectiveness, a school can usually promote teachers' professional development through the power of cooperation. Only in the context of analysis, discussion, and dialogue with colleagues with open minds can teachers be able and willing really to improve their teaching methods (Wilson & Daviss, 1996). Therefore, the establishment of a school learning community is very important for teachers' professional development. Understanding the current situation of primary school teachers' professional learning community, and whether there are differences between teachers' professional learning communities under different backgrounds, is the first motive of this study.

Organizational commitment is a kind of emotional loyalty of an individual to a specific organization, and a kind of attitude and performance of dedication to his work (Wu & Lin, 2005). Teachers' organizational

¹ An earlier version of this paper was presented at the 4th International Conference on Sustainable Management held online at Krirk University on April 28th-29th, 2022.

commitment has a great impact on school effectiveness, so effectively improving teachers' organizational commitment has become one of the current educational study topics. Understanding the current situation of primary school teachers' organizational commitment, and whether there are differences between teachers' organizational commitments under different backgrounds, is the second motive of this study.

The type of teacher determines the type of students. The performance of students' learning behaviour in teaching activities is deeply influenced by their teachers (Wu, 1998). Teachers are the first-line executors, undertaking the responsibility of extolling, teaching, and dispelling doubts. Therefore, students' learning effectiveness depends on teachers' teaching quality. Understanding the current situation of primary school teachers' teaching effectiveness, and whether there are differences between teachers' teaching effectiveness under different backgrounds, is the third motive of this study.

Education must run forwards before social development, so as to play an influential role to guide social progress (Mi & Chen, 2018). Therefore, taking community as the starting point to explore teachers' organizational commitment and teaching effectiveness, is not only a new way of thinking about innovation in school education but is also one of the good strategies for the organization and for school innovation (Stoll *et al.*, 2006). A study by Qiu and Li (2018) shows that elementary school teachers feel well about the professional learning community, have a high degree of organizational commitment, and perform well in teaching effectiveness. In addition, teachers' professional learning community has a positive impact on teachers' teaching effectiveness and teachers' organizational commitment. At the same time, a teacher's professional learning community and organizational commitment can also together affect a teacher's teaching effectiveness. Cheng and Yu (2019) pointed out that there is an obvious positive relationship between teachers' professional learning community, organizational commitment, and teachers' teaching effectiveness. In addition, Hsin and Hsin's (2021) research on the relationship between teachers' professional learning community and teachers' teaching effectiveness shows that teachers' professional learning community has a 54.4% positive predicting ability of teachers' teaching effectiveness. Therefore, understanding the relationship between teachers' professional learning community, organizational commitment, and teachers' teaching effectiveness, and how teachers' professional learning community and organizational commitment can predict teachers' teaching effectiveness, is the fourth motive of this study.

1.2. Research Objectives

1. To explore the current situation of teachers' professional learning community, organizational commitment and teaching effectiveness, and differences among them.
2. To explore the relationship between teachers' professional learning community, organizational commitment, and teaching effectiveness
3. To explore the predicting ability of teachers' professional learning community and organizational commitment to teachers' teaching effectiveness.

2. Literature Review

Teachers' professional learning community is a group of like-minded school teachers, based on common beliefs, teaching needs, and vision, through professional dialogue, experience sharing, teaching observation, and file sharing, promoting teachers' professional growth and improving students' learning effectiveness (Hwang, 2020).

Buchanan (1974) pointed out, "commitment" is an individual's emotional attachment to organizational goals and values, which includes the following three components: (1) identity, internalizing organizational goals and pride in the organization; (2) involvement, actively participating in organizational activities; (3) loyalty,

sharing weal and woe with organization, trying their best to practice obligations and responsibilities. Chang (1983) avocated that an excellent teacher should have three subjective conditions: "able to teach", "good at teaching" and "willing to teach". A teacher who can concentrate on the knowledge to be taught is "able to teach". A teacher who has the ability of professional education is called "able to teach". A teacher who has the spirit of professional education is called "willing to teach". Among the three, the most important is "willing to teach". "Willingness to teach" is the determination of being willing to engage in a teaching career (Hwang, 1993).

3. Research Method

3.1. Research Framework

Figure 3-1: Research Framework



3.2. Research Object

This study takes the formal teachers of primary schools in Jiangsu Province in the past 110 years, as the study object, and the sample selection method is stratified proportional sampling.

3.3. Research Tool

This study takes "teachers' professional learning community", "teachers' organizational commitment" and "teachers' teaching effectiveness" as questionnaires.

3.4 Data Processing

The questionnaire data were collected and statistically analyzed by mean, t-test standard, one-way ANOVA, canonical correlation, and stepwise.

4. Analysis and Discussion

4.1. Teachers' Professional Learning Community

4.1.1. Analysis of the Current Situation of Teachers' Professional Learning Community, Organizational Commitment and Teaching Effectiveness

This study takes descriptive statistics to analyze the current situation of teachers' professional learning community, organizational commitment, and teaching effectiveness. The result shows that the mean of teachers' professional learning community is 3.91 points (Table 1), the mean of teachers' organizational commitment is 3.99 points (Table 2) and the mean of teachers' teaching effectiveness is 3.96 points (Table 3), ranking in the "upper-middle" level in the 5-point Likert scale.

4.1.2. Analysis of a Distinction in Teachers' Professional Learning Community Due to Different Teachers' Gender

Table 1 shows that the study takes a t-test analysis on an independent sample of teachers of different genders in the teachers' professional learning community. The result shows that the t-values on teachers' gender in the whole teachers' professional learning community do not reach a significant level.

Table 1: *The T-Test Summary Table of Professional Learning Communities for Elementary School Teachers of Different Genders; source: Original Research*

Dimension	Gender	Number	Mean	Standard Deviation	t
Shared vision	Male	361	3.88	1.05376	0.071
	Female	325	3.87	1.00067	
Cooperative learning	Male	361	3.93	1.03631	0.256
	Female	325	3.91	1.02340	
Structural support	Male	361	3.96	0.99943	1.054
	Female	325	3.88	1.06258	
Focus on learning	Male	361	3.94	1.01351	0.830
	Female	325	3.88	1.07498	
Overall	Male	361	3.93	0.99680	0.573
	Female	325	3.89	0.99940	

4.1.3. Analysis of the Distinction in Teachers' Professional Learning Community Due to Different Teachers' Age

This study takes one-way ANOVA to analyze teachers of different ages in the teachers' professional learning community. The results show that teachers under the age of 30 get the lowest level in the teachers' professional learning community.

4.1.4. Analysis of a Distinction in Teachers' Professional Learning Community Due to Different Teachers' Education Background

This study takes one-way ANOVA to analyze teachers of different educational backgrounds in teachers' professional learning communities. The results show that with "common vision", "cooperative learning", and "structural support" aspect, the professional learning community of specialist teachers is higher level than that of teachers with "undergraduate" and "master" degrees.

4.1.5. Analysis of the Distinction in Teachers' Professional Learning Community Due to Different Teachers' Working Years

This study takes one-way ANOVA to analyze teachers of different working years in the teachers' professional learning community. The results show that the professional learning community of teachers of 11-20 working years and more than 21 years, is of a higher level than that of teachers with less than 5 years and 6-10 years, while the professional learning community of teachers with less than 5 working years gets the lowest level.

4.1.6. Analysis of a Distinction in Teachers' Professional Learning Community due to Different Teachers' Position

This study takes one-way ANOVA to analyze teachers of different positions in teachers' professional learning community. The results show that the professional learning community of teachers and also tutors is higher level than that of professional teachers.

4.1.7. Analysis of the Distinction in Teachers' Professional Learning Community due to Different School Sizes and School Location

This study takes one-way ANOVA to analyze teachers of different school sizes and school locations in teachers' professional learning communities. The result shows that the t-values on teachers' school size and school location in the whole teachers' professional learning community do not reach a significant level.

4.2. Teachers' Organizational Commitment

4.2.1. Analysis of the Distinction in Teachers' Organizational Commitment due to Different Teachers' Gender

Table 2 shows that the study takes a t-test analysis on an independent sample of teachers of different genders in teachers' organizational commitment. The result shows that the t-values on teachers' gender in the whole teachers' organizational commitment do not reach a significant level.

Table 2: *The T-Test Summary Table of Organizational Commitment of Elementary School Teachers of Different Genders; source: Original Research*

Dimension	Gender	Number	Mean	Standard Deviation	t
Organizational identity	Male	361	3.98	1.01993	0.229
	Female	325	3.96	1.09464	
Willingness to work	Male	361	3.95	1.05193	-0.656
	Female	325	4.00	1.06062	
Stay in school	Male	361	4.03	1.02260	0.716
	Female	325	3.98	1.07227	
Overall	Male	361	3.99	1.00370	0.097
	Female	325	3.98	1.04305	

4.2.2. Analysis on the Distinction in Teachers' Organizational Commitment due to Different Teachers' Ages

This study takes one-way ANOVA to analyze teachers of different ages in teachers' organizational commitment. The results show that teachers under the age of 30 get the lowest level in teachers' organizational commitment.

4.2.3. Analysis on the Distinction in Teachers' Organizational Commitment due to Different Teachers' Education Background

This study takes one-way ANOVA to analyze teachers of different educational backgrounds in teachers' organizational commitment. The results show that the organizational commitment of specialist teachers is higher level than that of teachers with "undergraduate" and "master" degrees.

4.2.4. Analysis on the Distinction in Teachers' Organizational Commitment due to Different Teachers' Working Years

This study takes one-way ANOVA to analyze teachers of different working years in teachers' organizational commitment. The results show that the organizational commitment of teachers of 11-20 working years and more than 21 years, is of a higher level than that of teachers with less than 5 years and 6-10 years, while the organizational commitment of teachers with less than 5 working years gets the lowest level.

4.2.5. Analysis of the Distinction in Teachers' Organizational Commitment due to Different Teachers' Position

This study takes one-way ANOVA to analyze teachers of different positions in teachers' organizational commitment. The results show that the organizational commitment of teachers and also tutors are higher level than that of professional teachers.

4.2.6. Analysis of the Distinction in Teachers' Organizational Commitment due to Different School Size and School Location

This study takes one-way ANOVA to analyze teachers of different school size and school locations in teachers' organizational commitment. The result shows that there is no distinction in teachers' organizational commitment due to different school sizes and school locations.

4.3. Teachers' Teaching Effectiveness

4.3.1. Analysis of the Distinction in Teachers' Teaching Effectiveness due to Different Teachers' Genders

Table 3 shows that the study takes a t-test analysis on an independent sample of teachers of different genders in teachers' teaching effectiveness. The result shows that the t-values on teachers' gender in the whole teachers' teaching effectiveness do not reach a significant level. This indicates that there is no obvious difference between male and female primary school teachers in teachers' teaching effectiveness.

Table 3: *The T-Test Summary Table of Teaching Effectiveness of Elementary School Teachers of Different Genders; source: Original Research*

Dimension	Gender	Number	Mean	Standard Deviation	t
Teaching preparation	Male	361	3.9701	1.03880	0.181
	Female	325	3.9557	1.04362	
Teaching strategies	Male	361	3.95	1.03912	-0.378
	Female	325	3.98	1.05193	
Class management	Male	361	3.97	1.03611	-0.464
	Female	325	4.01	1.04074	
Learning performance	Male	361	3.91	1.04648	-0.150
	Female	325	3.92	0.98838	
Overall	Male	361	3.95	1.00263	-0.211
	Female	325	3.96	0.98848	

4.3.2. Analysis of the Distinction in Teachers' Teaching Effectiveness due to Different Teachers' Ages

This study takes one-way ANOVA to analyze teachers of different ages in teachers' teaching effectiveness. The results show that teachers under the age of 30 get the lowest level in teachers teaching effectiveness.

4.3.3 Analysis of the Distinction in Teachers' Teaching Effectiveness due to Different Teachers' Education Backgrounds

This study takes one-way ANOVA to analyze teachers of different educational backgrounds in teachers' teaching effectiveness. The results show that the teaching effectiveness of specialist teachers is higher level than that of teachers with undergraduate, master's or doctoral degrees.

4.3.4. Analysis of the Distinction in Teachers' Teaching Effectiveness due to Different Teachers' Working Years

This study takes one-way ANOVA to analyze teachers of different working years in teachers' teaching effectiveness. The results show that the teaching effectiveness of teachers of 11-20 working years and more than 21 years, is higher level than that of teachers with less than 5 years and 6-10 years, while the teaching effectiveness of teachers with less than 5 working years gets the lowest level.

4.3.5. Analysis of the Distinction in Teachers' Teaching Effectiveness due to Different Teachers' Positions

This study takes one-way ANOVA to analyze teachers of different positions in teachers' teaching effectiveness. The results show that the teaching effectiveness of teachers and also tutors is at a higher level than that of professional teachers.

4.3.6. Analysis of the Distinction in Teachers' Teaching Effectiveness due to a Different School Size and School Location

This study takes one-way ANOVA to analyze teachers of different school sizes and school locations in teachers' teaching effectiveness. The result shows there is no distinction in teachers' teaching effectiveness due to different school sizes and school locations.

4.4. Canonical Correlation Analysis among Teachers' Professional Learning Community, Organizational Commitment and Teaching Effectiveness

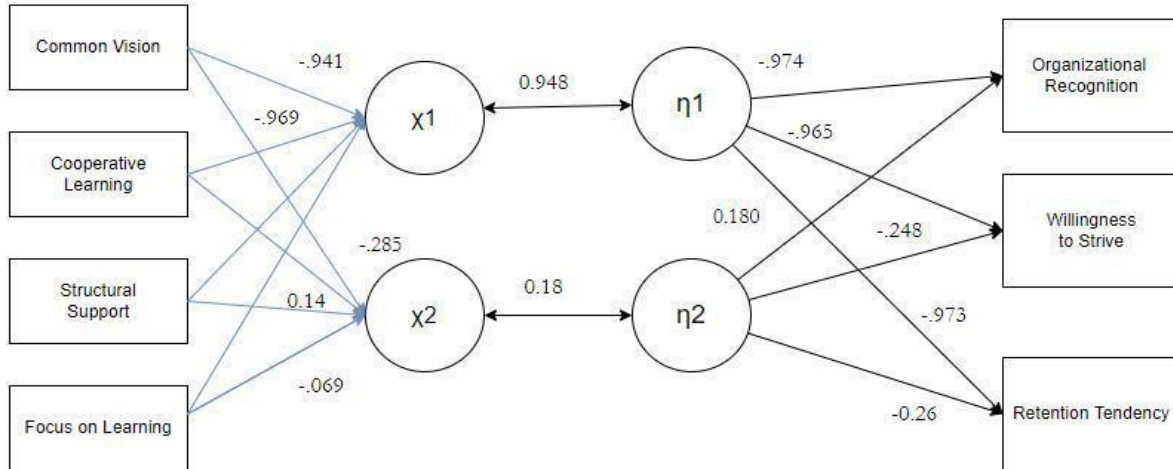
In this study, teachers' professional learning community can predict 89.8% of the total variation of teachers' organizational commitment through the first group of typical factors. The four predicting variables have predicting ability for three criterion variables, among which "structural support" and "focus on learning" have the most predictive ability. In the second group of typical factors, through which the predicting variable can predict 3.3% of the total variation of the criterion variable, the predicting variable of "common vision" has the most predicting ability on "willingness to strive".

Table 4: *The Canonical Correlation between Teachers' Professional Learning Community and Organizational Commitment; source: Original Research*

Control variable (X variable)	Canonical variable		Criterion variable (Y variable)	Canonical variable	
	X1	X2		η_1	η_2
Common vision	-0.941#	-0.285	Organizational recognition	-0.974#	0.180
Cooperative learning	-0.968#	-0.114	Willingness to strive	-0.965#	-0.248
Structural support	-0.972#	0.145	Retention tendency	-0.973#	-0.026
Focus on learning	-0.981#	0.069			
Extraction variation	0.930	0.030	Extraction variation	0.942	0.031
Overlap coefficient	0.835	0.001	Overlap coefficient	0.846	0.001
			Canonical correlation	0.948	0.182
			p^2	.898	0.33
			χ^2	1581.799***	27.807***

***p<0.001

Figure 2: *The Canonical Correlation between Teachers' Professional Learning Community and Organizational Commitment; source: Original Research*



4.5. Canonical Correlation between Teachers' Professional Learning Community and Teaching Effectiveness

Teachers' professional learning community can predict 89.1% of the total variation of teachers' teaching effectiveness through the first group of typical factors. The four predicting variables have predicting ability for four criterion variables, among which "cooperative learning" has the most predictive ability. In the

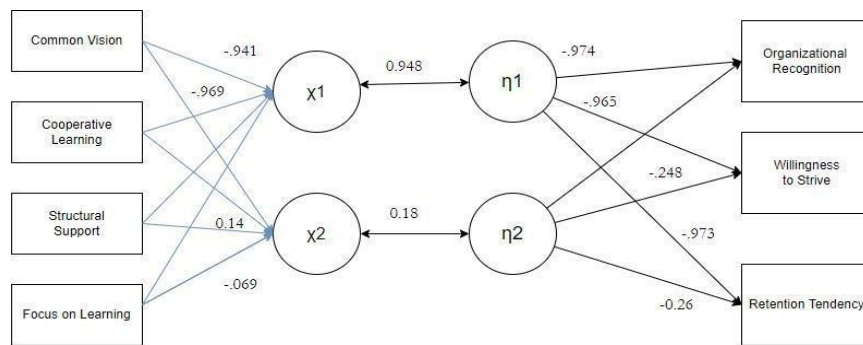
second group of typical factors, through which the predicting variable can predict 3.6% of the total variation of the criterion variable, the "focus on learning" has the most predicting ability on "teaching strategies".

Table 5: *The Canonical Correlation between Teachers' Professional Learning Community and Teaching Effectiveness; source: Original Research*

Control variable (X variable)	Canonical variable		Criterion variable (Y variable)	Canonical variable	
	X1	X2		$\eta 1$	$\eta 2$
Common vision	-0.958#	-0.042	Teaching preparation	-0.959#	-0.132
Cooperative learning	-0.972#	-0.157	Teaching countermeasures	-0.969#	0.220
Structural support	-0.963#	-0.129	Class management	-0.958#	0.063
Focus on learning	-0.969#	0.206#	Learning performance	-0.956#	0.127
Extraction variation	0.932	0.021	Extraction variation	0.923#	0.021
Overlap coefficient	0.830	0.001	Overlap coefficient	0.822	0.001
			Canonical correlation	0.944	0.191
			p^2	0.891	0.036
			χ^2	1543.664***	35.155***

*** $p < 0.001$

Figure 4-2: *The Canonical Correlation between Teachers' Professional Learning Community and Teaching Effectiveness; source: Original Research*



4.6. Canonical Correlation between Teachers' Organizational Commitment and Teaching Effectiveness

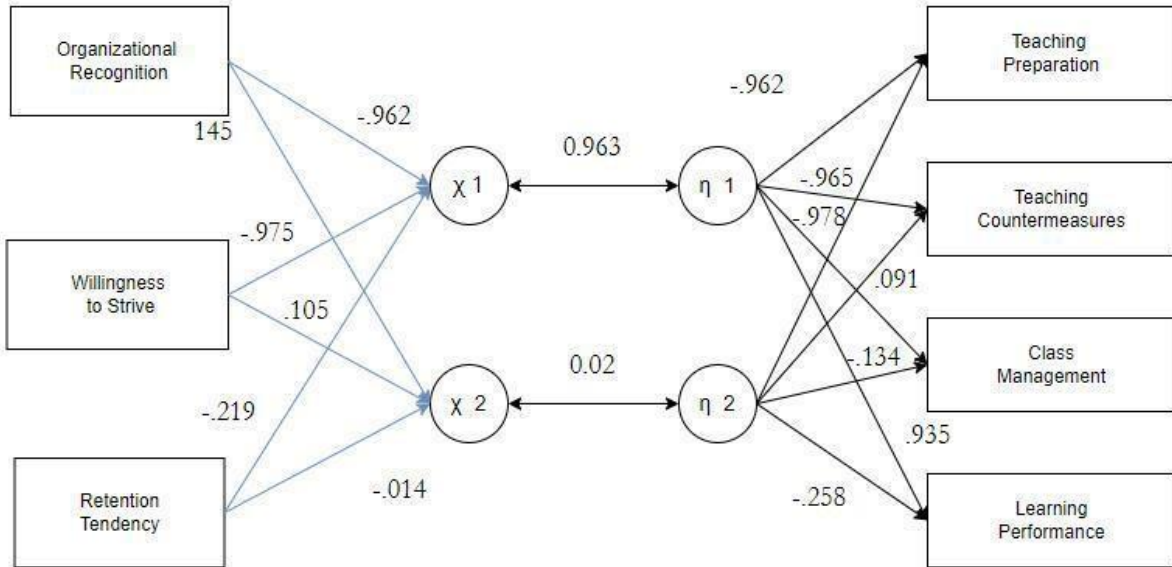
Teachers' organizational commitment can predict 92.7% of the total variation of teachers' teaching effectiveness through the first group of typical factors. The 3 predicting variables have predicting ability for 4 criterion variables, among which "willingness to strive" has the most predictive ability. In the second group of typical factors, through which the predicting variable can predict 2.6% of the total variation of the criterion variable. The predicting variable of "organizational recognition" has the most predicting ability on "learning performance".

Table 6: *The Canonical Correlation between Teachers' Organizational Commitment and Teaching Effectiveness;* source: *Original Research*

Control variable (X variable)	Canonical variable		criterion variable (Y variable)	Canonical variable	
	X 1	X 2		η_1	η_2
Organizational recognition	-0.962	0.145	Teaching preparation	-0.962	-0.116
Willingness to strive	-0.975	0.105	Teaching countermeasures	-0.965	0.091
Retention tendency	-0.219	-0.014	Class management	-0.978	0.134
			Learning performance	-0.935	-0.258
Extraction variation	0.943	0.027	Extraction variation	0.922	0.027
Overlap coefficient	0.874	0.001	Overlap coefficient	0.855	0.001
			Canonical correlation	0.963	0.161
			p^2	0.927	0.026
			χ^2	1814.496***	26.530***

*** $p < 0.001$

Figure 3: *The Canonical Correlation between Teachers' Organizational Commitment and Teaching Effectiveness;* source: *Original Research*



4.7. Multiple Regression Analysis on Teachers' Professional Learning Community and Organizational Commitment to Teaching Effectiveness

In Table 7, "structural support", "cooperation", "common vision", "shared practice", "organizational recognition", "focus on learning" and "retention tendency" are eight predicting variables of teachers' professional learning community and they predict teachers' teaching effectiveness (criterion variables). There are six indicating variables entering the regression equation, and the combined explanatory variable is 93.7%, that is, the 6 variables in Table 7 can jointly predict 93.7% of teachers' teaching effectiveness. In terms of the explanatory quantity of individual variables, the predicting ability of "retention tendency" is the highest, with an explanatory variable of 88.3%, and the second high is "common vision", with an explanatory variable of 3.2%.

Table 7: *The Multiple Regression Analysis of Teachers' Professional Learning Community and Organizational Commitment to Teaching Effectiveness; source: Original Research*

Input sequence of R	Predicting variables	R ²	ΔR ²	Beta	F
0.940	Retention tendency	0.883	0.883	0.940	5169.058***
0.957	Common vision	0.915	0.032	0.358	3684.032***
0.964	Willingness to strive	0.929	0.014	0.333	2965.897***
0.967	Organizational recognition	0.935	0.006	0.217	2454.805***
0.968	Focus on learning	0.937	0.002	0.115	2018.451***
0.968	Cooperative learning	0.937	0.000	0.071	1693.521*

* p < .05 ** p < .01 *** p < .001

5. Conclusion

The purpose of this study is to explore the relationship among teachers' professional learning community, organizational commitment and teaching effectiveness. Through the questionnaire survey of 686 primary school teachers, we come to conclusions as follows:

There are significant differences between teachers' teaching effectiveness in age, education level, years of working, and position.

There is no significant difference between teachers' teaching effectiveness in teachers' gender, school size, and school location.

Teachers' learning community can effectively predict respectively 89.8% and 3.3% of the variation of organizational commitment through two groups of typical factors.

Teachers' learning community can effectively predict respectively 89.1% and 3.6% of the variation of teaching effectiveness through two groups of typical factors.

Teachers' organizational commitment can effectively predict respectively 92.7% and 2.6% of the variation of teaching effectiveness through two groups of typical factors.

Teachers' professional learning community and organizational commitment have 93.7% positive predicting ability to teachers' teaching effectiveness.

5.1. Recommendations

5.2.1. Create a High-Quality Community Culture, Stimulate Teachers' Professional Commitment

In this study, the mean of primary school teachers' professional learning community is 3.91, ranking in the "upper-middle" level on the 5-point Likert scale, which shows that primary school teachers attach importance to the learning community. Since the construction and development of teacher community require teachers' enthusiasm, school administration should encourage teachers to form various learning communities so that teachers can change from individually "I" teaching to "we" community, so as to enhance teachers' professional commitment and inject innovative power into school organizations.

5.2.2. Improve Teachers' Teaching Effectiveness by Applying Community Function

The community is providing "care" to its members rather than general "services". In this study, we found that there is not only a positive relationship between primary school teachers' learning community and teachers' teaching effectiveness but also the total variation of teachers' teaching effectiveness predicted by teachers' learning community is 89.1%. Consequently, school teachers' professional learning community is beneficial to teachers' teaching effectiveness. Therefore, it is suggested that school administrative leaders should actively encourage teachers to construct and participate in various professional learning communities, so as to improve teachers' teaching effectiveness through the energy distributed by teachers' professional communities.

5.2.3. Encourage Teachers to Cooperate and Pay Attention to Students' Learning Results

In this study, the mean of primary school teachers' teaching effectiveness is 3.96, ranking in the "upper-middle" level in the 5-point Likert scale, but primary school teachers' teaching effectiveness still needs improving.

Since teachers' teaching is mainly for students' learning results, therefore, it is suggested that teachers should not only constantly enrich their professional knowledge, but also focus on students' learning performance through experience exchange and cooperation with other teachers in the community, so as to improve teachers' teaching quality and effectively achieve their education ideal.

6. References

- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19, 533-546.
- Chang, C.H. (1983). The effectiveness of special emphasis of teachers' educational programs on students' attitudes in National Taiwan Normal University. *Bulletin of Educational Psychology*, 16, 1-28. <https://doi.org/10.6251/BEP.19831201.1>.
- Cheng, G. & Yu, W.S. (2019). The Influence of teacher incentive on the organizational commitment-The mediating role of job satisfaction. *Teacher Education Research*, 5(3), 32-34.
- Feng, Q. (2018). Professional learning community: The exploration of junior teachers' professional growth area. *Journal of Shanghai Educational Research*, 4(7), 31-33. <https://doi.org/10.16194/j.cnki.31-1059/g4.2018.07.013>.
- Hsin, Y. C., & Hsin, C. D (2021). *The Research of Correlation between Teacher's Professional Learning Community and Teaching Effectiveness*. Paper presented at the Academic Seminar of International Education of Kirk University, Bangkok.
- Hwang, C.K (2020). *A study on the relationship between the implementation of teacher professional learning groups and teaching effectiveness for elementary school teachers in Chiayi County*. [Unpublished master's thesis]. The University of National Chiayi. <https://hdl.handle.net/11296/hjwz69>.
- Hwang, J.J. (1993). *Reform of Curriculum Teaching*. Education books.
- Mi, H.M. & Chen, J. (2018). Research of relationship between organizational commitment and job satisfaction of young teachers in higher vocational colleges. *Ability and Wisdom*, 3(5), 43-44.
- Qiu, D.F. & Li, Z.J. (2018). The development dilemma of teacher community and optimization strategy. *Journal of Hebei Normal University*, 1(3), 23-24. DOI: <https://doi.org/10.13763/j.cnki.jhebnu.es.2018.02.009>.
- Stoll, L., Bolam, R., McMahon, A., Wallace M. and Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 12 (4), 5-9. DOI: <https://doi.org/10.1007/s10833-006-0001-8>.
- Wilson, K.G. & Daviss, B. (1996). *Redesigning Education*. Teachers College Press.
- Wu, Q. S. & Lin, T.Y. (2005). Organizational commitment. *Journal of Education Research*, 136, 159.
- Wu, Q.S. (1998). *Research of school effectiveness*. Education books.

The Relationship Between College Students' Creativity and Academic Achievement Under the Background of Sustainable Development - Using Deep Learning as a Mediating Variable

Jingqiu Yang, International College, Krirk University, Thailand; email: 495557310@qq.com

Minte Fan, International College, Krirk University, Thailand²

Abstract: *College students in applied undergraduate colleges pay more attention to the learning of practical skills. In order to reflect the effect of students' skill learning, academic performance is the best indicator. The academic achievement of college students not only has a significant impact on their personal development, but also has an important relationship with the education of colleges and universities and the harmony and stability of society. Based on the purpose of education deepening and the sustainable development of talent training, this paper takes college students from applied undergraduate colleges as the research object, and uses data mining technology to mine the factors that affect college students' academic achievement (AA). The research shows that the factors that affect the AA of college students include gender, origin, in-depth learning method, creativity and others, and then through the significance analysis obtains the degree of influence of these factors on the AA of college students, and the obvious interaction between the variables.*

Keywords: *academic achievement, applied undergraduate universities, creativity, deep learning, sustainable development*

1. Introduction

The sustainable development of college students (CS) is a big problem that colleges and universities are facing. Colleges and universities (CAU) should cultivate students' all-round development if they want to inject constructive power into the society. This paper analyzes the relationship among creativity, learning achievement and deep learning mode, and puts forward sustainable development suggestions based on this, providing reference for talent cultivation in (CAU).

At present, many scholars have conducted in-depth research on the relationship between CS' creativity and academic achievement in the context of sustainable development - with deep learning as an intermediary variable. Some scholars have found through research that to obtain the breadth of information requires the active participation of learners, who collect information through multiple channels such as reading, listening, watching, speaking, and doing, and then differentiating and integrating to internalize and create new things (Sorour, Khairy & Elkholy, 2021). Deep learning emphasizes the integration and construction of knowledge. Today, in the era of the vigorous development of the Internet, CS can not only obtain physical learning resources, such as books, but also electronic learning resources. CS will integrate learning resources to show that students are exploring deep learning methods. They should also be able to integrate old and new knowledge, so as to deepen their understanding of new knowledge, which is conducive to long-term preservation and flexible application in the future (Galán-Casado *et al.*, 2020; Al-Madani, 2020). A scholar takes students as the research object, investigates the factors that affect the academic performance of students, and concludes that gender differences, learning styles, personality, learning motivation and other demographic characteristics will have a significant impact on performance (Tekin & Mustu, 2021).

² An earlier version of this paper was presented at the 4th International Conference on Sustainable Management held (online) at Krirk University, Thailand in April ,2022.

Although there are many related researches on this, in order fundamentally to improve the level of CS in all aspects, it is necessary to realize the balanced development of students.

This paper introduces the relevant theories of deep learning, creativity and learning achievement, and analyzes the relationship between the three, and then puts forward six hypotheses that will be investigated in this paper. This involves analyzing whether there is a relationship between them and, if so, what kind of relationship exists. The experimental results indicate that the hypotheses proposed in this paper are supported.

2. Relevant Theoretical Analysis

2.1. Deep Learning, Creativity and Learning Achievement

2.1.1. Deep Learning

Deep learning emphasizes the transfer and application of knowledge, requiring learners to connect new knowledge with existing experience and solve problems through practice and application, so as to better transfer and apply knowledge (Motahari, Rahimibashar & Ghasemnegad, 2020); deep learning emphasizes self-reflection, deep learners need to re-understand their own learning through reflection, reflect on their own confusion and problems in learning, adjust their mentality and learning plan, and propose improvement measures (Djudin, 2018); deep learning emphasizes the development of critical thinking ability, which is similar to shallow learning. In contrast, deep learning emphasizes the deep processing of knowledge, that is, the four cognitive levels of application, analysis, evaluation, and creation (Salari *et al.*, 2018).

2.1.2. Creativity

The criterion for creative thinking (CT) is the most common measure of creativity. Frequently, these types of measurements are classified as different thought tests. A large number of questions are asked to test creative knowledge and thinking process, and the level of creativity can be judged by testing the fluency and flexibility of thinking (Gebauer *et al.*, 2019). There are also some basic materials that require subjects to use CT to solve problems as innovatively as possible, and the solutions are usually not unique (Prifti & Rapti, 2018).

Some researchers and colleagues developed a set of test questions, the SOI Creativity Test, which consists of 14 parts. Among them, the first 10 language comprehension tests and the last four are non-verbal tests in graphic form (Nakano, Ribeiro & Virgolim, 2021).

2.1.3. Academic Achievement

Academics have differing views on the definition of academic achievement. Some scholars believe that academic achievement can reflect students' performance level through examinations, assessments and papers, and some scholars believe that AA is measured by the knowledge and skills acquired by students in the learning stage (Bultseva & Lebedeva, 2021).

2.1.4. The Relationship between CS' Creativity, AA and Deep Learning Style

Relatively many studies have explored the relationship between creativity and AA, and research has shown that creativity is associated with some positive outcomes. Aguilar's (2018) research found that students' creativity level can predict their achievement level. Kalantari and Toosi (2018) demonstrated that there is sufficient empirical evidence to support the relationship between creativity, AA and deep learning (DL) style, and has consistent associations among CS of various grades and academic levels. On the contrary,

lack of creativity will bring serious consequences to students, including poor academic performance, increased possibility of not participating in club activities and other activities which are important indicators of students' AA (Suprpto *et al.*, 2018). In the study of the influencing factors of college students' creativity, a large number of studies have shown that students' personality characteristics, growth environment and family education, curiosity are all influencing factors, but not only is DL one of the factors that plays a crucial role, DL is in fact the source of creativity.

At the same time, DL as a behaviour or tendency plays a mediating role as a bridge and link among many factors that affect AA. Haji, Zareh and Dadashi's (2019) research explores the relationship between high school students' daily academic flexibility level and their academic performance, and the mediating role (MR) of DL methods. The MR of DL methods is mainly reflected in reflective of the MR of learning and cooperative learning (Haji *et al.*, 2019).

2.2. Significance Test Model

Significance tests are used to test whether the difference between two populations is significant. The t-test statistic is:

$$t = \frac{\bar{X} - \mu}{\frac{\sigma_x}{\sqrt{n}}} \quad (1)$$

In this test, n is the number of samples, μ represents the t distribution with n degrees of freedom when the hypothesis is true, σ is the standard deviation,

$$t = \frac{\bar{d} - \mu_0}{S_d / \sqrt{n}} \quad (2)$$

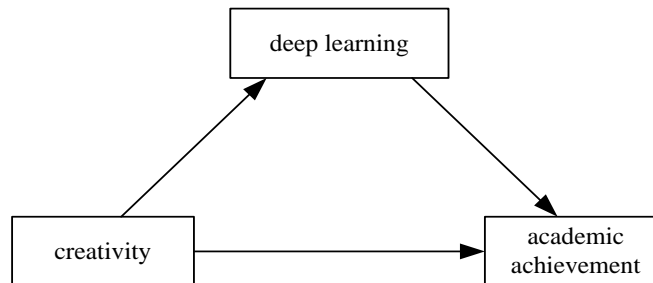
where \bar{d} is the paired sample mean, and S_d is the standard deviation, $\mu = \mu_0$.

3. Methodology

3.1. Establishing a Theoretical Model

According to the research content of this paper, the relationship between deep learning, academic performance and creativity is established as shown in Figure 1.

Figure 1. Theoretical Model to Study the Relationship between Variables; **source:** Original Research



3.2. Formulating the Research Hypotheses

This paper studies the relationship between three variables of CS' creativity, AA and DL style. It is not only necessary to explore the direct impact of CS' creativity on AA and DL methods, but also whether DL methods play a mediating role in the impact of CS' creativity on AA. This includes determining whether there are differences in AA in terms of gender and place of origin. According to the research content, this research proposes the following hypotheses:

H1: The creativity of CS is related to the AA of CS, and the creativity of CS has a significant positive impact on the AA of CS;

H2: The creativity of CS is related to the way of DL of CS, and the creativity of CS has a significant positive impact on the way of DL of CS;

H3: The DL style of CS is related to the AA of CS, and the DL style has a significant positive impact on the AA of CS;

H4: CS' DL style plays a mediating role in the relationship between CS' creativity and AA;

H5: There are significant gender differences in CS' creativity, DL methods and AA;

H6: There are significant differences in CS' creativity, DL methods and AA in the source of students.

3.3. Determining the Research Method

The questionnaire survey method used in this paper involved randomly selecting 500 college students in a general institution of higher learning and inviting them to complete the questionnaire. The random sampling method of this student is stratified sampling, that is, 125 students in each grade were selected from the students from the first to the fourth year of the school. The questionnaire response rate was 100%, so there is no need to eliminate invalid questionnaires. According to the results, boys account for 58.3%, girls account for 41.7%, students from rural areas account for 65.4%, and students from urban areas account for 34.6%.

3.4. Determining the Scale

3.4.1. College Students' Creative Power Scale

Some indicators of creativity can be measured by tools, but some are not easy to measure directly, such as creative motivation and creative awareness (Chen & Mallak, 2021; Liu, 2019). Some scholars have combined the research results of domestic and foreign scholars and divided the evaluation of CS' creativity into three secondary indicators and 11 third-level indicators. These include creative personality tendency and creative behaviour ability (Zhang, 2019; Zheng, 2018).

3.4.2. DL Scale for CS

According to the guidance of DL theory, the DL scale can include reflective learning, integrated learning, and cooperative learning. This study selects these three indicators and their associated items to evaluate DL (Lim, 2019; Gipson & Mitchell, 2017).

3.4.3. AA of CS

In previous studies of AA, whether conducted as quantitative or qualitative research, it has been related to achievement evaluation (Wilcox & Nordstokke, 2019). For CS, many scholars have proposed a comprehensive evaluation from various aspects. However, we believe that, as far as the current teaching situation in CAU is concerned, the most objective indicator to reflect students' AA is the students' academic performance (Shen, Ma & Guan, 2019). Therefore, to analyze similar studies, we chose to take the average grades of CS' compulsory courses in the semester as an indicator to reflect the AA of CS (Cho, Bak & Gim, 2020; Ijrish & Al-Rubaie, 2018).

4. Results and Discussion

4.1. Questionnaire Reliability and Validity Analysis

SPSS 25.0 was used to test the reliability and validity of the questionnaire, and the results are shown in Table 1. Cronbach's alpha was used to test the reliability of the questionnaire. The reliability of creativity, AA, and DL methods were 0.901, 0.895, and 0.937, respectively, all greater than 0.8, indicating that the reliability of the scale was very good enough to support this study. In this study, we used a factor analysis method for the construct validity of the questionnaire. Factor analysis (FA) mainly separates or extracts common factors from the items measured in the questionnaire to obtain the construct validity of the scale (Wang *et al.*, 2018). Before FA, we first performed KMO and Bartlett sphericity tests on the questionnaire to judge whether the questionnaire was suitable for FA. Through SPSS software, we calculated the survey data. The data with KMO value less than 0.5 is not suitable for FA. If the value is greater than 0.6, it is suitable for FA. KMO and Bartlett tests were used for validity verification. The KMO values were 0.894, 0.872 and 0.948, and the KMO values were all greater than 0.8, which were suitable for FA (Sun *et al.*, 2018). The Bartlett sphericity test results also showed a significance level of $P=0.000 < 0.001$. Therefore, all three scales passed the construct validity test. In conclusion, the three scales used in this study have good reliability and validity, and can be further studied and used.

Table 1. Summary of Reliability and Validity; source: Original Research

	Method	Creativity	AA	DL
Reliability	Cronbach's alpha	0.901	0.895	0.937
Validity	The number of KMO sampling	0.894	0.872	0.948
	Bartlett test of sphericity significance	0.000	0.000	0.000
	VE	67.308%	74.125%	63.849%
	Factor Loadings	0.654-0.717	0.695-0.826	0.741-0.853

4.2. Structural Equation Model Test

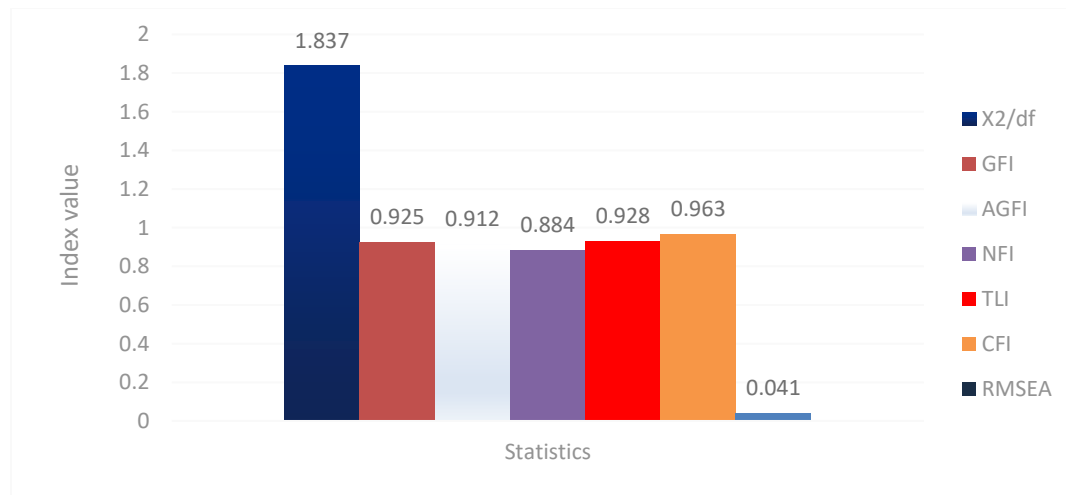
4.2.1. Model Fit Analysis

AMOS software was used to generate a structural equation model with path coefficients, and the path effects were analyzed to investigate H1, H2, and H3. In order to evaluate the external quality of the structural equation model, Liu and Yang (2018) believed that the absolute fitness index (FI), the value-added FI, and the parsimonious FI should be considered. The main statistics of the FI include chi-square degrees of freedom χ^2 , RMSEA, GFI, and AGFI. The fluctuation of χ^2 is easily affected by the size of the sample. If the sample is too large, the χ^2 tends to become larger, and it is easy to reject the null hypothesis and accept

the opposite. In contrast, the RMSEA value is not easily affected by the sample size, and its value is less than 0.05, indicating a good model fit, and it is acceptable between 0.05 and 0.08. GFI is equivalent to R^2 in compound regression, while AGFI is adjusted GFI. The larger the two, the better the model fit. The standard is generally greater than 0.9, and some scholars believe that it can be relaxed to 0.85, indicating the model path map and actual data. There is a good fit; the value-added fitness indicators mainly include TLI and CFI, among which the TLI value is lower than other indicators, and it is easy to show that other indicators show good fitting results, but TLI is not ideal, and CFI fits the hypothetical model. The degree of estimation is stable, and its standard is generally above 0.9, but it can also be relaxed to 0.85; NFI is representative of the parsimony fit index, which is used to judge the degree of simplification of the structural model (Zhou, 2018; Zhou & Ma, 2019). Therefore, this paper uses GFI, AGFI, NFI, TLI, CFI, RMSEA indicators to evaluate the fit of the model.

The next step was to perform structural equation analysis on models of college students' creativity, academic achievement, and deep learning styles, and optimize and correct incorrect terms. The model fitting results are shown in Figure 2.

Figure 2. Model Fitting Results; **source:** Original Research



The results in Figure 2 show that the chi-square DOF ratio is $1.837 < 3.000$, indicating a good model fit. From other fitness indicators, the GFI value is 0.925, the AGFI value is 0.912, the NFI value is 0.884, the TLI value is 0.928, the CFI value is 0.963, and the RMSEA value is 0.041, all within the general standard range, and the model fits well, indicating that the theoretical model is in good agreement with the actual data, and the model is convincing.

4.2.2. Model Path Analysis

S.E. is the standard error of the estimated parameter; C.R. is the statistic of the Z test. When the absolute value of the Z value is greater than 1.96, it means that the path coefficient (PC) is significant at the 0.05 level; The PC is significant at the 0.001 level, which is represented by the symbol "****". When $p < 0.01$, it means that the PC is significant at the 0.01 level, which is represented by the symbol "***". When $p < 0.05$, it means that the PC is in the 0.01 level. Significant at the 0.05 level, denoted by the symbol "*", when $p > 0.05$, it means that the PC is not significant, denoted by the symbol "-". The model standard PC of the research model are shown in Table 2.

Table 2. Standard PC for the Model; **source:** Original Research

Path	Estimate	S.E.	C.R.	<i>p</i>
Average grade for required courses← Creative thinking skills	0.312	0.037	2.583	***
Average grade for required courses← Creative personality tendencies	0.246	0.051	4.319	***
Average grade for required courses← Creative capacity	0.243	0.045	3.746	***
Deep learning method←Creative thinking skills	0.298	0.049	5.326	***
Deep learning method←Creative personality tendencies	0.156	0.027	2.915	***
Deep learning method←Creative capacity	0.374	0.055	5.842	***
Average grade for required courses← Deep learning method	0.253	0.081	3.706	***

It can be seen from Table 2 that the standardized coefficients of the three dimensions of creativity on the average grades (AA) of compulsory courses are 0.312, 0.246, 0.243, $p < 0.001$, indicating that creativity has a significant positive impact on academic achievement. Assuming that H1 is supported; the standardized coefficients of the three dimensions of creativity to deep learning methods are 0.298, 0.156 and 0.374, $p < 0.001$, indicating that creativity has a significant positive impact on deep learning methods. It is proved to be effective; the standardized coefficient of deep learning method on the average grade (AA) of required courses is 0.253, $p < 0.001$, indicating that DL method has a significant positive impact on AA, assuming that H3 is supported.

4.2.3. Mediating Effect Analysis

Based on the results of the path analysis, a hypothesis test is established. To explore whether there is a mediating effect on these significant paths, the Bootstrap method was run in AMOS, repeated 5000 times, with a confidence level of 95% for the interval standard and bias correction method for testing. The results of the Bootstrap test are shown in Table 3, and the mediation effect value is between 0.034 and 0.158. The confidence interval test shows that the confidence interval does not contain 0, so it can be indicated that the hypothesis H4 is supported, that is, the DL method has a mediating role in the relationship between CS' creativity and AA.

Table 3. *Bootstrap (95%) Mediation Effect Test; source: Original Research*

The Path	Effect of value	S.E.	Bootstrap (95%)
Creative thinking skills—> DL method—> Average grade for required courses	0.034	0.071	(0.025,0.084)
Creative personality tendencies—> DL method —>Average grade for required courses	0.158	0.066	(0.090,0.261)
Creative capacity—> DL method—> Average grade for required courses	0.073	0.032	(0.045,0.178)

4.2.4. Significant Difference Analysis

With a significance level of 0.05, when $p < 0.05$ the null hypothesis (H_0) is rejected, there is a SD in the overall population; when $p > 0.05$ H_0 is not rejected and it is concluded that there is no overall difference. As shown in Table 4, there are significant differences detection results. It can be seen that $p < 0.05$, assuming that H_5 and H_6 are true, that is, there are significant differences in the creativity, deep learning style and academic achievement of college students in terms of gender and student origin.

Table 4. *Significant Difference Detection; source: Original Research*

	Gender		Birthplace		<i>p</i>
	Male	Female	Rural	City	
Creativity	3.250	3.180	2.070	2.140	0.010*
DL method	5.420	5.490	3.820	3.750	0.028*
AA	1.960	1.830	3.340	3.460	0.003**

4.3. Suggestions for Promoting the Sustainable Development of CS

4.3.1. Innovative Educational Methods to Cultivate Students' Creativity

Creativity is the comprehensive performance of an individual's multi-faceted abilities. A person must have creative actions, not only a broad knowledge base, but also an innovative personality; not only must the individual have long-term deep thinking on certain types of problems, but also must have a sudden epiphany that creates the flash of thinking; it is necessary to concentrate the wisdom of the group, but also the independent thinking of the individual; it needs not only the drive of external motivation, but also internal motivation and original creative impulse. Creative thinking is not only the unity of memory thinking and manifest thinking, the unity of intuitive thinking and reasoning thinking, but also the unity of divergent thinking and convergent thinking.

Therefore, the cultivation, formation and development of creativity is a certain process, not a simple one-step event. People's performance characteristics and growth cycles are different, and they have their own laws. This is consistent with the conclusion that students' individual differences have a profound impact on creativity in previous studies, that is, students with different genders and places of origin have different creative performances, which in turn leads to differences in AA. The cultivation of creativity can not only be solved by the creation of the principles of creativity courses or the courses of creativity techniques, although they can also play a certain role. Paying attention to (PAT) the cultivation of students' creativity is actually PAT the development of students' academic harvest and overall quality from a higher level, it also shows that creativity has a significant impact on the AA of CS.

4.3.2. Innovate Learning Methods and Give Full Play to the Mediating Role of DL

CAU should innovate in-depth learning methods. For example, inquiry learning is to let students think with questions, and reflective learning is to allow students to reflect on what they have learned and what they are missing after the learning process. Through these types of learning methods, it can provide students with a direction for thinking about problems, let students go to the root of the problem, stimulate students' desire to explore knowledge, and help students develop creative thinking and imagination. It is the role of DL that students develop the habit of independent thinking, and it is also a manifestation of the mediating role of DL in promoting students' creativity and thus affecting academic performance. Therefore, the mediating effect of DL to improve the academic level of CS is not only conducive to college students' recognition of their own learning ability, but also to diversify students' creative thinking and improve their creative ability.

5. Conclusion

Based on the four hypotheses proposed in this study, the following conclusions are made:

There is a significant positive correlation between CS' creativity and AA

The data shows that the influence coefficient of creative thinking ability on AA is 0.312, the influence coefficient of creative personality tendency on AA is 0.246, and the influence coefficient of creative behaviour ability on AA is 0.243, which shows that the creativity of CS will be affected to a certain extent. This affect students' performance in school and thus has an impact on students' AA. Generally speaking, students with good creativity will be more concerned about others whether in campus life or in social life. Since creative students have unique personality and charm, they have unique opinions in handling things, dare to ask questions, and can solve problems by themselves, so the academic achievement of such students will be relatively outstanding. Studies have shown that creative tendencies such as risk-taking, curiosity and imagination can have an impact on AA. In terms of imagination and curiosity, the curiosity displayed by students with good AA is not only reflected in learning, but also in life. Students with poor AA tend to have weaker exploratory ability and thirst for knowledge, and lack space for innovation in imagination. Therefore, the impact of creativity on AA is significantly and positively correlated.

The creativity of CS has a significant positive correlation with DL methods

This study shows that the standardized coefficients of creative thinking ability, creative personality tendency, and creative behaviour ability to DL methods are 0.298, 0.156 and 0.374, respectively, which indicates that CS have a strong vision to improve their creative ability, and they need the school to provide more opportunities to innovate, coupled with teacher coaching to boost creativity. At the same time, the way of thinking of creative students in dealing with things is different from that of ordinary students. For example, some students may choose to give up if they cannot solve a certain problem, but some students take the result of the problem as the ultimate goal. By looking for materials and constantly reflecting, one

can finally get a satisfactory answer. This is the impact of DL methods on students, enabling them to maintain their perseverance.

DL methods have a significant positive correlation with AA

The standardized coefficient of DL method on AA is 0.253, indicating that the learning method of CS is a key factor affecting academic performance, and students can improve their academic performance through DL. Pay will be rewarded. Students make efforts in learning, and the reward to students must be grades. However, each student has different characteristics and learning characteristics. Therefore, the students who are suitable for them are also different and require an appropriate learning method in order to maximize the effectiveness of learning and improve students' academic achievement.

DL mode has a mediating role in the relationship between CS' creativity and AA

This study shows that the mediating effect value of DL in the impact of creativity on academic performance is between 0.034 and 0.158, indicating that college students can improve creativity and AA through deep reflective learning and cooperative learning.

There are significant differences in the creativity, in-depth learning methods and AA of CS in terms of gender and origin.

The results of the significant differences between gender and origin of students in this paper show that gender and origin are the reasons for students to have different creative abilities, different learning styles, and high and low academic performance. Generally speaking, boys' creative thinking ability is stronger than girls', which may be a natural advantage of boy' logical thinking or because they are given more and better opportunities to learn. Children born in cities have a much better family structure than rural children in terms of wealth and status. Parents of urban children commonly permit their children to enroll in interest classes and so cultivate their creativity from an early age. Therefore, gender, and student origin are also factors that cause students to have different creativity, in-depth learning methods, and AA.

To sum up, in order to realize the sustainable development of college students, suggestions are put forward to help students improve their academic performance and enable them to develop actively from the perspectives of creativity and DL.

6. References

Al-Madani, F.M. (2020). The impact of quality content educational resources on students' academic achievement: Survey research (on the example of Northern Border University, Arar), *The Education and science journal*, 22(5), 132-149. DOI: <https://doi.org/10.17853/1994-5639-2020-5-132-149>.

Aguilar, S.J. (2018). Examining the relationship between comparative and self-focused academic data visualizations in at-risk college students' academic motivation, *Journal of Research on Technology in Education*, 50(1), 84-103. DOI: <https://doi.org/10.1080/15391523.2017.1401498>.

Bultseva, M.A. & Lebedeva, N.M. (2021). The role of intercultural competence in the relationship between intercultural experiences and creativity among students, *International Journal of Intercultural Relations*, 82(1), 256-264. DOI: <https://doi.org/10.1016/j.ijintrel.2021.04.010>.

Chen, Y. & Mallak, S.K. (2021). Research on the influence of teaching existence on college students' academic achievement under technical support, *Educational research*, 4(7), 18-19. DOI: <https://doi.org/10.12238/er.v4i7.4034>.

Cho, J., Bak, Y. & Gim, U.S. (2020). Analysis of the factors affecting college students' academic achievement and leadership, *The Korean Journal of Community Living Science*, 31(4), 699-716. DOI: <https://doi.org/10.7856/kjcls.2020.31.4.699>.

Djudin, T. (2018). The effect of teaching method and lecture program on students' satisfaction rates and academic achievement, *Journal of College Teaching and Learning*, 3(1), 121-128. DOI: <https://doi.org/10.26737/jetl.v3i1.322>.

Galán-Casado, D., Moraleda, A., Martínez-Martí, M.L. & Pérez-Nieto, M.A. (2020). Sustainable environments in education: Results on the effects of the new environments in learning processes of university students. *Sustainability*, 12(2668), 1-12. DOI: <https://doi.org/10.3390/su12072668>.

Gebauer, M.M., Mcelvany, N., Bos, W., Köller, O. & Schöber, C. (2019). Determinants of academic self-efficacy in different socialization contexts: Investigating the relationship between students' academic self-efficacy and its sources in different contexts, *Social Psychology of Education*, 23(2), 339-358. DOI: <https://doi.org/10.1007/s11218-019-09535-0>.

Gipson, J. & Mitchell, D. (2017). How high-impact practices influence academic achievement for African American college students, *Journal Committed to Social Change on Race and Ethnicity*, 3(2), 123-144. DOI: <https://doi.org/10.15763/issn.2642-2387.2017.3.2.123-144>.

Haji, A.N.Y., Zareh, N.M. & Dadashi, M. (2019). The relationship between creativity and social intelligence in students at Allameh Tabatabai and Shahid Beheshti Universities, *Military Caring Sciences*, 6(1), 61-68. DOI: <https://doi.org/10.29252/mcs.6.1.61>.

Ijrih, H.H.A. & Al-Rubaie, M.S. (2018). Effects of brain-based learning method on academic achievement of undergraduate students at the college of basic education, *Indian Journal of Public Health Research and Development*, 9(8), 1371-1376. DOI: <https://doi.org/10.5958/0976-5506.2018.00922.1>.

Kalantari, M.R. & Toosi, Z.A. (2018). The relationship between students' personality type and their creativity, *Journal of Health and Care*, 20(2), 148-155. DOI: <https://doi.org/10.29252/jhc.20.2.148>.

Lim, H.J. (2019). Roles of grit, cognitive strategy, and perceived task instrumentality in college students' academic achievement, *Journal of Educational Studies*, 50(3), 33-54. DOI: <https://doi.org/10.15854/jes.2019.9.50.3.33>.

Liu J. (2019) Research on the factors affecting the cultivation of creativity of college students majoring in art and design, *Sino Foreign Exchange*, 026(023), 20-21.

Liu L.M. & Yang N. (2018). Cultivation of college students' deep learning ability from the perspective of learning science, *Journal of North China Institute of Water Resources and Hydropower: Social Science Edition*, 034(004), 106-109. DOI: <https://doi.org/10.13790/j.cnki.issn1008-4444.2018.04.026>.

Motahari, M., Rahimibashar, M. & Ghasemnegad, S.M. (2020). The relationship between clinical self-efficacy and academic achievement motivation in nursing students, *Research in Medical Education*, 12(2), 10-20. DOI: <https://doi.org/10.29252/rme.12.2.10>.

Nakano, T.C., Ribeiro, W.J. & Virgolim, A.M.R. (2021). Relationship between creativity and intelligence in regular students and giftedness students, *Psico-USF*, 26(1), 103-116. DOI: <https://doi.org/10.1590/1413-82712021260109>.

- Prifti, L. & Rapti, E. (2018). The relationship between attachment, stress and academic success in Albanian students, *Journal of Educational and Social Research*, 8(2), 53-60. DOI: <https://doi.org/10.2478/jesr-2018-0016>.
- Salari, A., Emami-Sigaroudi, A.H., Zaersabet, F., Shakiba, M., Khojasteh, M. & Sharifi, M. (2018). Study of the relationship between academic achievement and interested in academic field in nursing students, *Research in Medical Education*, 10(2), 68-75. DOI: <https://doi.org/10.29252/rme.10.2.68>.
- Shen Z., Ma L. & Guan W. (2019) A review of domestic research on deep learning based on content analysis, *China Medical Educational Technology*, 033(001), 37-41. DOI: <https://doi.org/10.13566/j.cnki.cmet.cn61-1317/g4.201901009>.
- Sorour, M.S., Khairy, H.A. & Elkholy, S.M. (2021). Relationship between servant Leadership and its role on staff nurses' creativity and sustainable development behavior, *Assiut Scientific Nursing Journal*, 9(24), 87-101. DOI: <https://doi.org/asnj.journals.ekb.eg>.
- Sun D.M., Zhao C.H., Fang Y., Du Y.X., Liu Y.Y. & Wang W.F. (2018). The influence of curriculum and teaching on educational harvest under the background of "top-notch program" - a test of intermediary effect based on deep learning, *Journal of Lanzhou University (Social Science Edition)*, 046(005),179-187. DOI: <https://doi.org/10.13885/j.issn.1000-2804.2018.05.024>.
- Suprpto, P.K., Ahmad, M.Z., Chaidir, D.M., Ardiansyah, R. & Diella, D. (2018). Spatial intelligence and students' achievement to support creativity on visuospatial-based learning, *Jurnal Pendidikan IPA Indonesia*, 7(2), 224-231. DOI: <https://doi.org/10.15294/jpii.v7i2.14322>.
- Tekin, G. & Mustu, Ö.E. (2021). The effect of research-inquiry based activities on the academic achievement, attitudes, and scientific process skills of students in the seventh year science course, *The European Educational Researcher*, 4(1), 108-131. DOI: <https://doi.org/10.31757/euer.416>.
- Wang J., Yang L. & Zhang Q.R. (2018). Analysis on the current situation of college students' learning motivation and research on its training approaches, *Science and technology entrepreneurship monthly*, 031(010), 99-101.
- Wilcox, G. & Nordstokke, D. (2019). Predictors of university student satisfaction with life, academic self-efficacy, and achievement in the first year, *Canadian Journal of Higher Education*, 49(1), 104-124. DOI: <https://doi.org/10.7202/1060826ar>.
- Zhang Y.F. (2019). Student oriented, leading students to carry out "deep learning" thinking. *Mathematics world: guidance edition for grade three and grade four of primary school*, (09), 83.
- Zheng Y.S. (2018). An effective way to cultivate college students' creativity - An empirical study based on students' social practice activities in 20 colleges and universities in Guangdong Province, *Journal of Hubei Correspondence University*, 031(016), 1-3,7. DOI: <https://doi.org/10.3969/j.issn.1671-5918.2018.16.001>.
- Zhou X.L. & Ma W. (2019) The influence of college English assessment orientation on academic achievement - A Study on the mediating effect based on achievement goal orientation, *Foreign Language Teaching Theory and Practice*, 000(002): 53-60.
- Zhou Z. (2018). The relationship between physical exercise and college students' academic achievement: the mediating effect of self-esteem, *Zhejiang Sports Science*, 040(003), 84-89+101. DOI: <https://doi.org/CNKI:SUN:ZJTK.0.2018-03-019>.

Dreams of the Hebrews and Other Ancient Peoples: A Contextual Panoply for Religious Minds

O.N. Shogunle, Department of Religious Studies, Faculty of Arts, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria; email: seyi.shogunle@oouagoiwoye.edu.ng.

B.S. Taiwo, Department of Religious Studies, Faculty of Arts, University of Lagos, Akoka, Lagos State, Nigeria; email: taiwobabawale@yahoo.com.

Abstract

The Bible, as well as other great books of historical and revealed religions, shows traces of a general and substantial belief in dreams. Joseph saw eleven stars bow to him; he was the twelfth star. The famine of Egypt was revealed by a vision of fat and lean cattle. The parents of Christ were warned of the cruel edict of Herod, and fled with the Divine Child into Egypt. Pilate's wife, through the influence of a dream advised her husband to have nothing to do with the conviction of Christ. Consequently, most people have a haunting notion that there is more meaning in dreams than admitted. Students find volumes of research about dreams in various areas. Medical men are working on the psychology of dreaming in laboratories in many of the leading hospitals and universities, while others, following the likes of Freud and Jung, make studies from the standpoint of psychiatry, or anthropology, or history, and importantly, religion. In the Old Testament, a dream was a veritable avenue through which God communicated with His people in order to warn, direct and guide them. Furthermore, this same method of the divine dream is recorded among the Ancient Near Eastern Peoples (ANE), some of which existed before the biblical Hebrews. Such dreams were very much revelational and often with precise accuracy, just like those recorded by the Jews. This paper therefore theologically explores these ancient peoples and their dreams from a didactic context. The paper employs a descriptive research method as well as textual analysis of a diachronic type to interrogate the research focus. The paper concludes and recommends that contemporary Christians should be more intentional about cultivating their natural giftedness in the areas of dreams and visions, as well as the understanding of the import and impact of dreams as an oracular medium that is not demonic but an important revelatory and didactic process that is both divine and biblical.

Keywords: *ancient peoples, dreams, Hebrews, religious minds*

1. Introduction

Van de Castle (1994) explains that the earliest clues about the content of ancient dreams (in the context of the ancient near east (ANE)) are derived from materials dating back approximately five thousand years. The dreamers were inhabitants of the first urban centres in Mesopotamia, sometimes called “the cradle of civilization” and a region roughly corresponding to the central region of modern Iraq. With the development of irrigation canals, agriculture flourished in the previously arid land, and substantial cities, some containing over a hundred thousand inhabitants gradually developed. The Sumerians were the first cultural group residing in Mesopotamia and were followed by the Akkadians, the Babylonians, and the Assyrians as well as several invading tribes from the north and east. These nations and/or city-states had a rich practice built around their religious convictions and communal beliefs. One of such is the concept and significance of dreams and their symbolic interrelatedness to everyday life and fortunes. It is this practice that this paper investigated through the lens of Jewish culture and orthodoxy. This is done with the view to interrogating the discourse within its contemporary context and didactic orthopraxy.

2. Dreams and Their Interpretations in the Early Periods of Mesopotamia

In those days, kings ruled from impressive palaces such as the one at Mari, which covered roughly seven acres and contained nearly three hundred rooms. An elaborate pantheon of deities evolved. In the city of Babylon, there were fifty-five shrines to Marduk, one of the principal gods, fifty-three temples to other great gods, three hundred to earth gods, and six hundred to heavenly gods. Hundreds of altars to receive gifts and sacrifices were scattered about the city. The waking and dreaming Mesopotamian mind gave prominent attention to kings and deities.

Today's knowledge of Mesopotamian dream lore is based upon the fragmentary written material unearthed by various expeditions. The Sumerians' earliest records, which date to approximately 3100 BCE, involved pictographs, but by around 2700 BCE they had developed cuneiform, which is a form of writing utilizing wedge-shaped indentations pressed into clay tablets or cylinders. As the cuneiform system expanded to more than seven hundred different signs, the Sumerians were able to record not only business transactions and accounts of royal battles and other deeds, but also the mythology and religious beliefs of the time (Adler, 1936).

The most extensive and authoritative source on Mesopotamian dreams is the *Interpretation of Dreams in the Ancient Near East with a Translation of an Assyrian Dream-Book* by Leo Oppenheim (1956), a Professor of Assyriology at the University of Chicago's Oriental Institute. Most of the clay tablets containing information relevant to dreams were excavated from the time of Assurbanipal and were the relics of that Assyrian King who ruled in the seventh century BCE and was renowned as a dedicated scholar. Nearly twenty-five thousand clay tablets collected from many historical eras were found in his archives, including twelve broken tablets recounting the epic adventures of the legendary hero-king, Gilgamesh.

The Gilgamesh epic represents a remarkable chronicle of dream events, among them the first known references to sequential dreams from the same dreamers. The role of dreams in heralding impending tragic outcomes is also important. When the dream imagery involves such cataclysmic events as heaven roaring, the earth trembling, and lightning flashing, one is put on notice that tragedy will soon befall an important character. A similar awareness of the correlation between outer and inner turmoil characterizes many great works of literature, including Shakespeare's tragedies.

In the Gilgamesh saga, dream interpretations which turn out to be correct bring good fortune, while incorrect interpretations bring misfortune to the dreamer. Indications are given that dreamers could utilize various techniques to induce dreams or to increase the possibility that a deity will manifest itself in a dream to provide some form of guidance. However, according to Van De Castle (1994), the most salient aspect of the Gilgamesh epic, with regard to dreams, is the sophistication it demonstrates concerning the symbolic and metaphorical nature of dream imagery.

Gudea, a Sumerian king who reigned in the city of Lagash c.2200 BCE, was the first known historical figure associated with a dream. "His dream experiences were preserved on two clay cylinders that were not part of Assurbanipal's library" (Van De Castle, 1994:49). Gudea wished to build a temple for his god, Nin-Girsu. The god sent him an enigmatic dream in which a gigantic human-shaped figure, wearing the headgear of a deity but winged like a divine "cloud bird", appeared flanked by two lions. Gudea seemed perplexed, so the god continued, showing him the sun rising and introducing two additional figures. One was a woman pondering a tablet listing the "favourable stars" and the other a warrior drawing the outline of a temple on a lapis lazuli tablet. A basket to carry earth and a brick mould with a brick in it were placed before Gudea. The dream closed with an image of an impatient donkey pawing the ground, before the giant figure. Puzzled by his dream, Gudea approached the goddess Gatumdug for assistance in understanding its meaning by engaging in extensive rituals and prayers. She explained that the giant figure was Nin-Girsu and identified the other figures as deities, discussed the significance of the tools, and concluded that the impatient donkey

represented Gudea in his zeal to build the temple: Gudea seemed to be imperfectly satisfied by the goddess's interpretation and prayed for a clearer message from his god. Nin-Girsu then appeared in a dream, standing at the head of Gudea, and promised him a sign which would indicate the day on which the work should start.

Sometimes a deity might send a dream message to a priest or to a large number of dreamers simultaneously. On the eve of an important battle against Elamite invaders, Assurbanipal apparently felt some reluctance to attack. One of his priests reported a dream in which the goddess Ishtar appeared with a quiver on both shoulders and a bow in her hand. She indicated that Assurbanipal should "eat food, drink wine, enjoy music, and exult her divinity" because she would ensure victory for him the next day. A magnificently preserved series of large engraved panels in the British Museum graphically details the defeat of the Elamites which followed. In another account of this incident, Ishtar also appeared in the dreams of members of Assurbanipal's army and promised them victory (Capps, 2001).

It is difficult to catalogue or classify ancient dream reports because very limited datable source-materials are available. In the case of Mesopotamian dreams, there is the Sumerian description of King Gudea's dreams (2200 BCE), a Hittite text describing the dreams of King Hattushili and his wife (C12th BCE). Although no specific historical person or era was involved in the epic of Gilgamesh, this literary text in Sumerian and Akkadian does provide valuable information about ancient dream beliefs and practices.

The typical dream report in the above sources contains what Oppenheim (1956:179-373) refers to as "frame:" information is provided about the dreamer, the locality and circumstances of the dream, the dreamer's reaction, and the eventual outcome of the promise or prediction contained in the dream. Based upon Mesopotamian, Egyptian, and Old Testament sources, Oppenheim proposed classifying dreams from the ancient Near East as message dreams. Most message representatives would appear at the ruler's head and deliver a message about an event of personal significance to the dreamer. The dreamer generally woke suddenly after the deity disappeared.

Oppenheim (1956) proposed that message dreams are most easily explained at an incubation site. Although, descriptions of incubation procedures are rare in the cuneiform texts, there are enough brief references to suggest that the practice of incubation or dream-seeking was familiar to the Mesopotamians. A person wishing to undergo the process would sleep in a special temple and offer a prayer such as the following to the deity associated with that site:

"Reveal thyself to me and let me behold a favourable dream. May the dream that I dream be favourable; may the dream that I dream be [on] time. May Makhir, the goddess of dreams, stand at my head and let me enter the temple of the gods and the house of life."

A ruler who sought a message-dream would go to a temple or sanctuary of the deity, engage in various preparatory rituals, and stay there overnight. The setting would be strongly suggestive, so the dreamer might well experience imagery of the type expected to be associated with that deity's appearance or attributes. If the dreamer were less than completely successful in securing the desired dream, subsequent accounts of the ruler's incubation experience would probably be modified and edited to correspond with the particular theological traditions of that time and region.

Citizens of the ANE frequently tried to discern their personal destiny by scrutinizing various signs, called *omina*, which could range from patterns of stars in the sky to the movements of birds in flight to the shape of a puddle in front of one's door. *Omina* associated with the patterns found on sheep's livers held as much interest for diviners as did dreams, but only a few omen-texts involving dreams have survived.

Omen-texts consisted of lists specifying the outcomes associated with a number of signs, in short, cause-and-effect statements. Generally, categorically related signs were listed together. With regards to dreams, various outcomes were listed for a man who dreams of turning into various kinds of animals, wearing various types of clothing, or visiting various locations. The text might say, for example, “if a dead person kisses a man, one near to him will die” or, if a man dreams he “spatters himself with his own urine, he will forget what he has said”. These interpretations sound plausible if certain assumptions are made; in the latter case one might take the determination of personal hygiene to be symptomatic of intoxication or senility, both of which are accompanied by memory loss. Many of the *omina*, however, seem to us to have no rational relation to the events they were thought to foretell, perhaps in part because it is impossible to uncover the puns and verbal associations buried in a dead language (Van De Castle, 1994).

The third class of dream was called symbolic by Oppenheim (1956:179-373). These complex dreams involved unusual interactions with gods, stars, people, animals, or innumerable objects; in short, they expressed the dreamer’s personality dynamics. These dreams were considered dangerous and indicative of disease or encounters with evil and demonic powers. To mention them increased their potency, and they were hardly ever recorded unless their interpretation somehow served to diminish the threatening quality.

The Mesopotamians not only attempted to understand dreams and their future implications, but also to forestall any negative events that they predicted. The root word used in various ancient Near East languages for dealing with dreams had two associated meanings: one that implied comprehension and the other that suggested removal. In English, there is a similar linkage in the word “solve” and its derivative “dissolve”. The Mesopotamian dreamer wished both to “solve” a dream by determining its meaning, and to “dissolve” its potential evil consequences.

We might sometimes share our dreams with a family member or a friend in an attempt to understand them and thereby destroy the emotional power they have over us. The Mesopotamians had a ritual in which they told their dreams to a lump of clay and rubbed it over their entire body, saying, “lump! In your substance my substance has been fused, and in my substance your substance has been fused!” The dreamer then told the clay all the dreams and said to it, “As I shall throw you into the water, you will crumble and disintegrate, and may the evil consequences of all the dreams seen be gone, be melted away, and be many miles removed from my body.” Another variation is to tell the dream to a reed and then burn it, blowing on the fire to ensure its complete destruction. Amulets or charms to protect against bad dreams were also used. These rituals were particularly common when the dream was a nightmare or involved forbidden activities or sexual practices. The disturbing content of such dreams could not be mentioned to others and had to be dispelled magically to ward off possible evil consequence. Just as pleasant dreams were viewed as a sign of divine favour and good health, evil dreams were considered to arise from the presence of demonic forces (Castenada, 1993). They occurred because protective spirits, who would guard the person’s happiness and well-being, were absent. If these protective spirits abandoned a person, then ill health and other misfortunes could occur. Various demonic figures were always ready to swarm up from the underworld to attack people in their dreams, and evil dreams could also be sent by enemies if the dreamer were unprotected. The evil dream was not really in a separate category but rather fit into the general Mesopotamian demonology, in which magic and counter magic beliefs and practices were heavily emphasized.

There were apparently very few dream interpreters in Sumer and Akkad; such individuals were held in low regard and were often women who also practiced necromancy or communication with the dead. Dream interpreters were also conspicuously absent at the later court of Assyria, although there were numerous diviners, soothsayers, and exorcists present.

3. Dreams in the Old Testament

Dreams, and the gifts God bestows in dreams, figure prominently in the Old Testament. Psalm 127 says that the Lord “giveth unto his beloved in their sleep.” God granted Solomon’s gift of wisdom in a dream. Elsewhere, God announced, “if anyone among you is a Prophet, I will make myself known to him in a vision, I will speak to him in a dream (Num: 12:6).” The story of Jacob offers a striking example of God’s speaking in a dream. Jacob dreamed of a ladder extending from earth to heaven with a procession of angels ascending and descending the ladder. God stood above the ladder and told Jacob that his offspring would spread throughout the world (Gen 28:12-13). The ladder can be viewed as a powerful visual metaphor for the dream as a connecting link between God and his selected prophets (Van de Castle, 1972).

In addition to giving guidance to the Hebrew prophets for the benefit of their own people, God also appeared in their dreams to provide interpretation for dreams which were troubling their Gentile rulers. Daniel gained political power in Babylon by interpreting Nebuchadnezzar’s dreams (Dan 2:27-42), as did Joseph in Egypt when he explained Pharaoh’s (Gen 41). In both cases this power eventually led to the freeing of the Jews from bondage.

Dreams are viewed in a broader context in the sixty-three volumes of the Talmud; the collection of rabbinical literature that connects the Old Testament with contemporary Judaism. Representing the contributions of over two thousand scholars from various countries, the Talmud is divided into a Palestinian Talmud, dating from around 500 BCE, and a larger Babylonian Talmud, compiled during the Greco-Roman period from 200 BCE to about 300 CE. There are 217 references to dreams in the Talmud, attributed to many different sages and scholars, “so it’s not surprising that many different viewpoints toward dreams are expressed (Lorand, 1957:92-97).”

Mesopotamian influences may account for the belief that supernatural entities such as evil spirits, demons and the returning dead could instigate dreams. One demon, thought to cause erotic dreams, was described as hairy and resembling a goat. Another demon associated with sexual dreams was Lilith, who preyed upon those who sleep alone in a house. She appeared in a female form when approaching men and in a male form when approaching women. Lilith’s sister, Naamah, and another female spirit called Igrath also caused sexual and emission (wet) dreams.

The Jews also believed that good supernatural entities could be sources of dreams. Angels, who resided in a special department in heaven, were sent in dreams as messengers from God. The chief angel, Gabriel, was known as the prince of dreams. Soul travel was yet another explanation for dreams. The Jews believed that it was possible for a part of the soul to depart during sleep and travel all over the world. What it saw would constitute the dream.

Some dreams were thought to have a physical cause, such as when bad dreams originate from overindulgence in food. Temperature could also influence dreams; heat and moisture produced pleasurable dreams, while coldness and dryness yielded unpleasant dreams. Events from the previous day could also contribute to the creations of dreams. Many factors, including the dreamer’s occupation, economic circumstances, and state of unhappiness, had to be taken into account when making an interpretation and interpretations could vary (Van De Castle, 1994).

4. The Hebrew Theory of Dreams

Throughout the Old Testament the belief that Yahweh is concerned with human beings and makes direct contact with them in order to give them direction and guidance is common. Dream and vision experiences were one medium of this communication. Through this means, which was not subject to ego control, God brought men special knowledge of the world around them, and also knowledge of his divine reality and will

(Kelsey, 1974). Dreams and visions were an avenue of revelation that Yahweh continued to use because from time to time they were the best, or even the only way he could make connection. Furthermore, because of their importance, false prophets and charlatans sometimes manufactured false dreams and false interpretations of dreams in order to meet their own needs, or the needs of those who hired them, and so the Bible does not express only reverence for dreams; it also offers critical evaluation of them so that men will not be duped by false religions and false religious leaders.

In the first place, there is no clear-cut distinction between the dream and the vision in the Hebrew language; where moderns see a great gulf of separation, the Hebrews did not. Although the two experiences were sometimes distinguished, more often they were seen as aspects of the same basic perception of reality, different sides of the same encounter from beyond the world of sense experience. The word dream (חֶלֶם *chalom*, or the verb חָלַם *chalam*) is related to the Aramaic and Hebrew verb “to be made healthy or strong.” The dream is spoken of almost as if this were the form of the experience whose content comes through as a vision. The dream then is the mode or expression of the experience, while the vision is the content, the substance of what is seen or visualized or experienced. Dreams are the normal way to receive such experiences, but the same content can break through in waking moments, and this can happen either out of the blue or as a man turns to this reality for direction. This same overlapping of meaning is also found in the Greek of the New Testament (Shogunle, 2008).

There are many examples in which a dream experience is referred to as a vision of the night, as in I Samuel 3:15, Job 20:8, Isaiah 2:19 and Daniel 7:2. There are also several places in which dreams and visions are equated through the characteristic parallelism of Hebrew style (Job 20:8, Numbers 12:6). On the other hand, the visions of Zechariah are simply introduced by the statement: “I saw by night...” When the Old Testament speaks of visions, one cannot be sure by modern standards that this does not signify those which occur in the night, and therefore are actually what we would call dreams, and when the Hebrew does speak of a dream, this may carry more the idea of givenness and religious authority that one has come to associate with visions. It is really impossible to discuss the dreams of the Old Testament without describing the vision also. They are of one piece in the Hebrew imagining.

Technically, of course, a vision is simply a visual image, something seen which is not an immediate perception of any outer physical object, but closely associated with visions is the auditory experience that is described as listening to God or speaking with him/her, in which something beyond one’s ordinary self appears to speak to the individual in his own language. Many people know of this experience in dreams when there is a voice and no visual image at all sometimes, instead of being the object to which the speaking is directed, the individual becomes the subject through which the speaking is done. This is prophecy if the power speaking is God.

Since it is not too uncommon for people to talk in their sleep, or to perform somnambulistic actions, this idea of prophecy is actually strange only because so few believe that there is any reality beyond the physical which could make such contact with the individual. In fact, glossolalia in the New Testament is the same experience except that the individual speaks in an unknown language.

Probably the most common vision described in the Old Testament is the experience of an angel. In spite of the modern fear that the Bible may be talking nonsense when it describes the appearance of angels, they were seldom viewed as concretized “pieces” of spirituality, materializing and then disappearing into thin air. It is true there are stories in the early chapters of the Old Testament in which angels appear as actual human beings, but these are greatly overshadowed by the passages in which they are not viewed in this way. Later authors left no doubt about their understanding that the reality of an angelic being arises from someone’s visionary experience. This in no way devalues these experiences. It is simply stating that it is through visionary experiences that one comes into relationship with these non-physical entities (Woods, 1947).

5. The Great Dreamers-- the Patriarchs

The first description of a dream in the Old Testament occurs in the same passage with the first of the references to visions. In Genesis 15:1, Yahweh appeared to Abram in a vision to assure him of a great future and to tell him that his own offspring would be the ones to share in it. Abram believed. He made his sacrifice, and then “as the sun was going down, a deep sleep fell on Abram, and lo, a dread and great darkness fell upon him.” God spoke again, this time of the tribulation that would come before the vision was fulfilled, and now there appeared “a smoking fire pot and a flaming torch,” which passed between the pieces of the sacrifice.

This ceremony of covenant which Abram saw in his vision of the night was an ancient magic practice, so convincing that it had become the basic ritual for agreements between men. In practice the contracting parties sacrificed an animal and cut it in half; then, if they were equals, both walked between the pieces of the carcass, demonstrating their willingness to be bound by the agreement or else to suffer the same treatment. Thus, in a numinous and mysterious experience that touched a person to the depth, God turned his promise to Abram into the Covenant, the effective contract between God and humanity (Kelsey, 1974).

For Abram, this was the verification of the reality of his call from Ur. Hagar, the Egyptian servant, was twice comforted by the angel of God and was helped to bear Abram’s child who was to grow up in the wilderness (16:7 and 21:17). After Hagar’s flight three angels appeared to both Abraham and Sarah (whose names were now changed). These were described as angels, and also as two men accompanying the Lord himself, who became known only when Sarah’s thoughts were read. In spite of her disbelief, she was to bear a child. Abraham then learned of their terrible errand and was able to intercede for his cousin Lot (Genesis 18 and 19).

Again, it was through an angel that Abraham’s eyes were opened as he was about to sacrifice Isaac. Of that place-where the angel spoke and Abraham looked up to see a ram caught in the thicket and understood the test to which God has put him-it was said, “On Yahweh’s mountain there is vision” (22:11ff.). Not only was Abraham a seer in the technical sense, but King Abimelech also learned through a clairvoyant dream the true identity of Sarah, whom he has taken for his concubine (20:3).

While Isaac was not recorded as being much of a dreamer, some of the greatest moments in his younger son’s life were marked by dreams. As Jacob fled from the birthright he had stolen, and stopped for the night to sleep on the rocky ground, he dreamed of a ladder from earth to heaven with angels going back and forth. The Lord stood above and reiterated the promise given Abraham in his vision. So deeply moved was Jacob, awakened, that he said, “Surely the Lord is in this place; and I did not know it” (28: 11 ff.).

In accordance with the idea of incubation common in these cultures, he felt that place in which he had dreamed such a dream was the very “gate of heaven”. He vowed that if God would remain with him, that place at Bethel should become a sanctuary, and he would give to God a tithe of all he had. To Jacob this experience was no mere dream, but a religious experience of the most profound kind; one which had the extraordinary result of establishing the idea of tithing, a practice central to the very heart of Judaism.

Jacob spent twenty patient years in his new home with Laban. Then he was given God’s help in two dreams to leave his possessive father-in-law peacefully and with wives and wealth. In the first, which he interpreted well, he saw the spotted he-goat’s mate with the flock and was given God’s assurance that he should take the increase and return to the land of his birth (31:10). The second dream was Laban’s, in which God warned him on the night before he overtook the fleeing families not to press matters with Jacob, either for good or bad (31:24).

The magnificent passage which then follows - the story of Jacob's wrestling through the night with his unknown adversary to win both a blessing and a name - strongly suggests a dream or vision as its origin (32: 24). Jacob had briefly encountered the angels of God after Laban turned back (32:2), and then he had faced all the practical details of his meeting with Esau. There is realism about his night in the desert alone, and yet not alone, which recalls other descriptions of the dark night of the soul. Later biblical authors referring to this experience held that Jacob wrestled with an angel (Hosea 12:4).

Jacob, now become Israel, was an old man before another of his dreams was recorded. For at this point his favorite son arose to stand out among all the patriarchs as both dreamer and interpreter of dreams. In good measure it was just this about Joseph that brought down the hatred of his brothers on him. Joseph did not dream directly of God, but symbolically of his brothers' sheaves bowing down before his sheaf, and of the sun and moon and eleven stars doing obeisance before him (37:5). His naiveté in telling his dreams set the scene for the action that followed. Sold into Egypt as a slave, his similar frankness with Potiphar's wife landed him in an Egyptian prison.

Here he was consulted by Pharaoh's erring butler and baker about their own dreams, which they could not interpret. "Do not interpretations belong to God?" Joseph asked, and correctly foretold the future (40:5). Again, when Pharaoh himself was troubled by dreams, the butler remembered the interpreter back in prison. This time Joseph's wise interpretations explaining the fat and lean cows and the full and thin ears of grain were rewarded directly, and he was placed in a position of authority over Egypt (41:1). These dreams are central to the whole story of Joseph and his brothers.

Finally, when Jacob heard that his son was alive, he believed it only after God again appeared to him in a vision of the night with reassurance (46:2). And Jacob went down to Egypt knowing that God would go with him and in time would bring his people forth. Indeed, if there is any reality in this tradition of the patriarchs, which many modern scholars have come to view with great respect, it is certainly inseparable from the idea that dreams and visions are expressions of man's contact with some reality beyond the physical world.

6. Moses and the Dark Speech of God

The story of the exodus essentially begins with Moses' visionary experience of the burning bush and the angel, a content that recurs with authority however, with whom it was believed that God spoke face to face, and so did not use his dark and parabolic speech of dreams and vision with which he communicated to most men. The passage in Numbers that makes this clear (12:6) gives both a deep insight into the Hebrew reverence for Moses, and at the same time an understanding of their attitude towards dreams. The Lord was about to become angry with those who questioned Moses, and he said,

"Hear my words: if there is a prophet among you, I the Lord make myself known to him in a vision, I speak with him in a dream. Not so with my servant Moses; he is entrusted with my entire house. With him I speak mouth to mouth, clearly, and not in dark speech; and he beholds the form of the Lord. Why then were you not afraid to speak against my servant Moses?"

There are many references throughout the time of the exodus to the angel of the Lord, who drove back the Red Sea and went before the people of Israel as their protection and guide (Exodus 14:19, 23:20, 32:34, 33:2, Numbers 20:16). The repeated experience of the pillar of cloud also has a visionary quality, and the appearance of the pillar to Miriam and Aaron was undoubtedly a vision (Numbers 12:5).

But following the account of Joshua's period, one comes upon the stories of the book of Judges, which continue the spirit of the earlier Biblical narrative. Here angels and signs abound, and the direction of the

Lord, which elsewhere had been asked directly, was sought through them, often in experiences that were clearly visionary. Gideon found his destiny when an angel appeared to him (6:2), while the birth of Samson was announced by the appearance of an angel to both Manoah and his wife (13:2). In Judges 7:13 it was a dream that determined Gideon's defeat of the Midianites; in the night the Lord told him to get up and go spy on the enemy camp and he would hear something to strengthen his hand. As Gideon was following these instructions, he overheard an enemy soldier telling his dream of a cake of barley bread that fell on their tent and crushed it. "This can mean no other than the sword of Gideon," the man's comrade interpreted. Hearing these words, Gideon worshipped, and then he set forth to defeat the enemy.

The story of Samuel opens with the magnificent description of the child's dream, in which the Lord speaks to him and the old priest clearly recognizes the action of God (I Samuel 3:1). In this vision of the night, it is difficult for the child to distinguish between external reality and the visionary experience. Then he learns that the house of Eli will be overthrown, and he is afraid to tell the dream. Up to this time, we are told, the word of the Lord had been precious in Israel; there was no open vision, or more literally, "no vision breaking through." This vision-dream of Samuel's opened up a new era, and in several places Samuel is described simply as the seer, the one who sees beyond ordinary things (Dee, 1989).

7. The Dreams of the Great Kings

According to Stekel (1949), in some ways even more striking than the actual situation is the casual way in which the statement of Saul in his distress is recorded in the text. Samuel is dead, and Saul sees his enemies come upon him, and when he "inquired of the Lord, the Lord did not answer him, either by dreams, or by Urim, or by prophets" (I Samuel 28:6). Saul had lost his guidance, and so he went to the medium of Endor to ask her to bring forth the spirit of Samuel. Confronting the ghost of Samuel- "for the Philistines are warring against me, and God has turned away from me and answers me no more, either by prophets or by dreams; therefore I have summoned you to tell me what I shall do (28:15)." So desperate was Saul's condition that he broke his own law and consulted with a medium. The distress of Saul at not dreaming is paralleled among modern natives who lose their power when they can no longer dream big dreams. It means to them that gods have left them, and there is repetition of Saul's tragic state in the adjustment they face.

David was not left in the lurch by his prophets as was Saul. The word of the Lord came to Nathan the prophet in the night with instructions for David that he should not build the temple but should leave it for his heir (II Samuel 7:4, 1 Chronicles 17:3). In accordance with this vision or dream, Nathan spoke and David obeyed. Later, when the Lord became angry with David's actions and Gad prophesied the people's destruction, David himself saw the angel of the Lord and was given the chance to repent and stay the Lord's hand (II Samuel 24:16 and I Chronicles 21:15).

As for Solomon, the reputed source of his wisdom was at the instance of a dream he had at Gibeon in which the Lord appeared to him by night and said: "Ask what I shall give you". And in this experience, which sounds very much like incubation, Solomon asked for an understanding mind and received it. Then he went to Jerusalem to make offerings and hold a feast for his entire servant (I King 3:5ff). God had come to him and acted; what Solomon did with his wisdom was another part of the story.

After Solomon had finished building the temple, God appeared to him a second time, "as he had appeared to him at Gibeon (I King 9:2)." In the same kind of dream experience he was given the promise of God's protection to his house if he would follow only Yahweh. Solomon saw and listened, although he evidently forgot that the experience of dreams could even be a catastrophe. But as the kings of Israel got into more and more trouble, the record of their own dreams ceased. Instead, we are told that the word of the Lord came to Elijah and to Elisha, and marvelous things happened. After Elijah had fled from Jezebel's outburst, an angel came and touched him in sleep to show that he was taken care of in the wilderness, and he was comforted (I Kings 19:5). His experience of earthquake, fire, and still small voice in the cave there at Horeb

also has the quality of a numinous vision (19:11). Again, after Ahab's death an angel of the Lord came to Elijah, to direct him in his dealings with the new king in Samaria (II Kings 1: 15). The wonderful things that Elijah did were told right up to the end of his life, and then in a tremendous visionary experience of the assumption of the prophet, Elisha fell heir to the same spirit and power (2:12). As Elijah was taken up by a whirlwind, Elisha saw the horses and chariots of fire, just as they were later seen by the young man who served him (6:17). At that time, when they were surrounded by the forces of the Syrian king, Elisha opened the eyes of his servant to the same numinous vision of the spiritual power which was available to him (Shogunle, 2008).

8. The Prophetic Tradition and Deuteronomy

There are not many religious leaders who have had as much impact on the history and religious life of mankind as the prophets who thrived in Israel from the end of this period through the sixth century BCE. These men are universally admired for their insight into the moral nature of God and the religious endeavour, and it was among them that dreams were first openly valued in the Old Testament. Up to this time, dream experiences had been recorded and acted upon but not analyzed. But now the prophets, who all describe the inspiration of some kind of dream-like experience, began to voice real concern for distinguishing the true dreamer from the false dreamer, the genuine interpreter from the false interpreter, and the true prophet from the false prophet. They considered it one of the specific tasks of the prophet to be open in dreams and vision to intrusions of another realm of reality, and to be able to interpret them correctly.

The writings of these men agree in expressing, in one way or another, the basic idea that when the spirit of God is poured upon men, "your sons and your daughters shall prophesy, your old men shall dream dreams, and your young men shall see visions (Joel 2:28)." In a new time of the outpouring of God's spirit at Pentecost the authors of the New Testament turned back to point to the significance of this passage. But when God is not with his people, the prophets maintain with Saul that "disaster comes upon disaster, rumour follows rumour; they seek a vision from the prophet, but the law perishes from the priest, and counsel from the elders" (Ezekiel 7:26). The same basic thought is contained in Isaiah 29:10 and 32:15, Lamentations 2:9, Jeremiah 31:34, Ezekiel 39:29, and Micah 3:5. Thus, if life were not to be all bitter, it was essential that there be men who were open to something beyond the physical, and that there be those who could distinguish the true vision and true dream from the false, the true prophecy from the false.

9. Dreams and the art of Biblical *Oneirocritica* in Context

The concern about the proper understanding of dreams is first expressed in the book of Deuteronomy. Whether this book actually comes from the insights of the seventh-and eighth-century prophets, or whether it is an older tradition to which they turned, makes no difference in its basic importance and authority among Jews and Christians. Deuteronomy expresses the faith given in the wilderness and says explicitly how it shall be kept. Hence, when it came to the prophet and dreamer of dreams in Chapter 12, a legal problem was tackled which had to be slated conditionally. Legally a prophet or dreamer of dreams is false if he says "Let us go after other gods and let us serve them." Even if he shows wonders or correctly foretells the future, he must not be listened to. It is simply accepted as fact that the prophet or dreamer of dreams has the power to see beyond the present. However, if he uses this power to turn Israel away from its God, then his words shall be shunned, and he shall be put to death (13:1-5). Yet it never occurred to the author of Deuteronomy to do away with dreams by simply ignoring them or maintaining that they never have value, instead this passage implies that the prophetic function of dreaming and interpreting was so important that to pervert it was a heinous offense and had to be punished by death. In a backhanded way, dreamers were thus treated with real reverence.

This whole matter, of course, was complicated by the fact that the Hebrews lived among non-Hebraic people who had their own priests who had dreams and visions and interpreted them; and these priests used other interesting practices for divining the future. There was clearly a will in Israel that their own people stay away from pagan diviners. This is accepted unconditionally in Deuteronomy 18:9-22, which simply directs that there shall not be found among the people anyone who makes his son or daughter pass through the fire or who practices divination, or any soothsayer, augur, sorcerer, charmer, medium, wizard, or necromancer. While this passage, like the same tradition found in Leviticus 19:26-31, is often taken as a prohibition against dream interpretation, dreams are specifically not mentioned in either place, even though the writer practically exhausts the Hebrew words to include all the religious magic of other peoples.

This is a remarkable passage. Among even the Greeks and the Romans, with their highly developed religious forms and ethical practice, there was no attempt to curb the superstitious practices of the common people. But here it is put in unmistakable terms. The Israelites shall have nothing to do with pagan priests who do liver-reading or call forth the spirits of the dead. Practices like these were rife in the Near East at the time Israel's life and culture was developing, and it was undoubtedly meant that the children of Israel should not take dreams to such priests for interpretation. But the remarkable part is the next section, which tells the people what they should do.

The passage goes on to establish in the law the foundation for prophecy and the visionary experience of the prophet. So that the Lord may speak in a direct way to his people, he will raise up a prophet among them who is strong enough to hear the voice of the Lord their God, and see the fire like that on Sinai. He will put his words in the prophet's mouth. Then it is up to the prophet to speak what is given. The people shall listen and the Lord will deal with those who will not, but for the prophet the penalty again is death if he speaks anything but what is given, or if he speaks in the name of other gods. Thus these passages, which are the only part of the law touching on prophecy or dreams, contain no injunction against listening to visions and dreams, but only against failure to distinguish the word of the Lord. This therefore places a real responsibility on contemporary Christians who believed that God could actually approach and speak directly to them. They not only had to speak the word of God which would "come to pass or come true"; in effect, the final test for the true prophet of the Lord was to see if his prophecies led the people into closer communion with their God.

10. Conclusion and Recommendations

The two Hebrew transliterated words that are translated as "seer" show clearly how highly the Hebrews valued those who could see visions. They are *chozeh* and *roeh*, which are derived from Hebrew words for perceiving, seeing, the same roots from which the Hebrew words for visions are derived. "The see-er" is an excellent translation for either of these Hebrew words. The see-er is another name for a prophet. He is the one who perceives more than just the space-time world. Samuel was called a seer (I Chronicles 29:29), and it is stated that the prophet was aforesaid called a seer. (I Samuel 9:9). One of the earliest specific references is in II Samuel, in which "the word of the Lord came to the prophet Gad, David's seer". (24:11).

In several places in the books of prophecy, as well as in the books of history, the prophet is clearly identified as a seer. Amos is called a seer (7:12), while Isaiah equates the prophet and the seer (29:10), as does Micah in 3:6-7. The latest of these references may well be the passage in Isaiah 30:10 which speak of a rebellious people "who say to the seers, 'See not'; and to the prophets, 'Prophecy not to us what is right...'. Many scholars believe that these words were written very close to the time of Jesus' birth. Here and in other places it is clear that the main task of the seer was to see and understand the visionary realities - to know angels and hear God's voice and see visions.

All of these experiences, then - talking with God, angel, dream, vision, prophecy - express the same basic encounter with some reality that is not physical, and the most common of them is the dream experience.

The majority of the Old Testament authors took care to express their belief - as Plato did in later times - that man was in contact with two realities, a physical world and a non-physical one which they called spiritual. The contact they described with this second reality was made directly through these experiences. This paper therefore recommend that contemporary Christians should be more intentional about cultivating their natural giftedness in the areas of dreams and visions, as well as the understanding of the import and impact of dreams as oracular medium that is not demonic, but an important revelatory and didactic process that is both divine and biblical.

11. References

- Capps, D. (2001). *Freud and Freudians on religion: A reader*. New Haven, CT: Yale University Press.
- Castenada, C. (1993). *The act of dreaming*, Bexley: Aquarian Press.
- Dee, N. (1989). *Discover dreams*. London: Guild Publishing.
- Kelsey, M.T. (1974). The mythology of evil, *Journal of Religion and Health*, 13(1), 7-18.
- Lorand, S. (1957). Dream interpretation in the Talmud. *International Journal of Psychoanalysis*, 38, 92-97.
- Oppenheim, L.A. (1956). The interpretation of dreams in the ancient near east, with a translation of an Assyrian dream book, *Transactions of the American Philosophical Society*, 46(3).
- Shogunle, N.O. (2008). *The contemporary relevance of the prophecy of seventy-weeks in Daniel 9:23-27: An exegetical and ecclesiastical study*, M.A Dissertation. Department of Religious Studies, Faculty of Arts, Olabisi Onabanjo University.
- Stekel, W. (1949). *The interpretation of dreams*. New York, NY: Grosset and Dunlap.
- Van de Castle, R. (1972). Dream content and birth order, *Sleep Research* 1:126.
- Van de Castle, R.L. (1994). *Our dreaming mind: A sweeping exploration of the role that dreams have played in politics, art, religion, and psychology, from ancient civilizations*, New York, NY: Ballantine Books.
- Woods, R.L. (1947). *The world of dreams: An anthology*, New York, NY: Crown Publishing Group

Quantitative Analysis of Value Investment in Listed Chinese Banks during the COVID-19 Epidemic

Tao Zhu, Economics and Management Department, GuangXi MinZu Normal University, China; email: duoduo1124@outlook.com.

Xi Qin (corresponding author), Health and Tourism School, Nanning College for Vocational Technology, China; email: 948763301@qq.com.³

Abstract

This research was conducted in order to explore the nexus between return on investment (ROI) from listed Chinese banks and proposed fundamental indicators documented in financial statements during the COVID-19 epidemic period. Hierarchical analysis was employed to test the hypotheses established by the dependent variable ROI and other independent factors including the attribute of enterprise (State-owned or not), price/earnings ratios (PE), earning per share (EPS) as well as the non-performing loan ratio (NPL). The results show that the nature of enterprise has no impact on ROI. However, PE and NPL are negatively associated with ROI, and EPS is positively related to ROI. The results are tested and analyzed for robustness.

Keywords: banks, Chinese listed companies, COVID-19 epidemic, quantitative analysis, value investment

1. Introduction

1.1. Status of Return on Investment in Listed Chinese Banking Enterprises during the COVID-19 Epidemic

The global economy is suffering as a result of the COVID-19 pandemic. To some degree, this crisis is more extensive than the financial catastrophe of 2008. Almost every aspect of life is going through a difficult period. The purpose of this study is to investigate the current state of affairs and the elements that influence return on investment (ROI) from listed firms in China's banking industry during the COVID-19 outbreak. According to the most recent official sector categorization provided by the China Securities Regulatory Commission in 2021, there are 43 listed businesses in China's banking industry that represent the foundations of the Chinese financial market. One of the listed banking firms has delisted from the Chinese A-share stock market and five others have been listed for less than one year. As a result, these six listed firms were removed from this study due to a lack of appropriate statistics and comparability. Since the pandemic broke out towards the end of 2019, this study analyzes the ROI from the end of December in 2019 to the 31st of December in 2021. The ROI can be written as a formula: $[\text{EPS}(2020-21) + \text{CI}(2019-21)] / \text{P}(2019)$, where $\text{EPS}(2020-21)$ is the average of profits per share in 2020 and 2021, CI is the capital increase from the end of 2019 to the end of 2021 and P is the end-of-year price.

The ROI of the 37 listed firms in the sample is as follows:

Table 1. ROI Frequencies; source: Original Research

³ An earlier version of this paper was presented at the 5th International Conference on Sustainable Management held (online) at Krirk University, Thailand in December, 2022.

Items	Categories	N	Percent (%)
ROI	negative	7	18.92
	positive	30	81.08
Total		37	100.0

Table 2. *Descriptive Analysis of ROI; source: Original Research*

N	Min	Max	Mean	Std. Deviation	Median	Kurtosis	Skewness
37	-0.25	0.93	0.22	0.26	0.21	0.67	0.6

According to the sample of 37 listed businesses in the Chinese banking sector, 18.92% of ROI are negative while 81.08% are positive. The ROI ranges from -25% to 93% with a mean value of 22.2%. The standard deviation of the sample is 0.263, which indicates that the volatility of ROI of listed firms is quite low. The ROI is far from having a normal distribution, as shown by the fact that the kurtosis is only 0.67. Additionally, the skewness is 0.60, indicating a fairly positive skew in the ROI distribution.

1.2. Research Objectives and Questions

The ROI of listed Chinese banks stood out as positive more during the COVID-19 outbreak since the ROI in other sectors was relatively low. The intrinsic value of stocks may always be identified, according to the value investing concept put forward by Graham (2003), and as such, investigating the variables that would affect ROI during COVID-19 from 2019 to 21 is important for confirming the efficacy of the hypothesis. Consequently, the goals of this study are to:

- (i) determine the elements affecting ROI in the listed firms in China's banking sector;
- (ii) investigate the strength of the relationship between ROI and the factors affecting it;
- (iii) identify how influencing elements are related to one another and the reasons why they change.

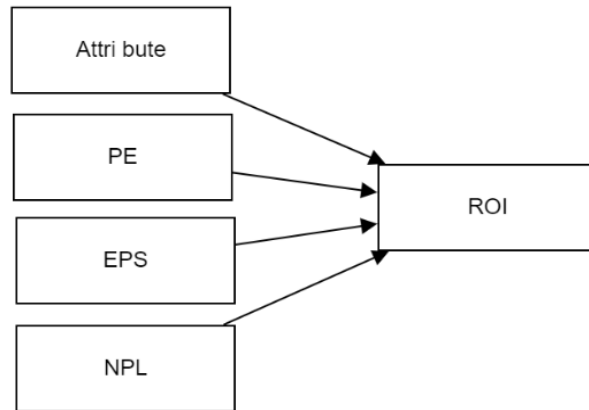
In light of the foregoing, the following research questions can be deduced from the objectives:

- (i) What variables affect ROI in the listed businesses of China's banking industry?
- (ii) How and to what degree are there relationships between ROI and the elements that influence it?
- (iii) How are the variables affecting ROI impacted by themselves, and how do they interact with one another?

1.3. Conceptual Framework

Numerous studies on value investing theory have shown that factors such as profitability, ability to manage financial risk, price at acquisition, size of listed companies, and others have had an impact on ROI in a variety of industry sectors to varying degrees throughout the course of decades of research by previous academics. This paper builds the conceptual framework for value investment on the basis of the contributions made by earlier studies and takes the epidemic situation into account (see below).

Figure 1. *Conceptual Framework; source: Original Research* (see Appendix for further details)



1.4. Research Hypotheses

Based on the conceptual framework above, the research hypotheses can be proposed as follows:

H1: ROI is associated with the attribute of the listed Chinese banks (Attribute).

H2: ROI is associated with price position (PE).

H3: ROI is associated with profitability (EPS).

H4: ROI is associated with financial risk control capability (NPL).

The proposed hypotheses will be tested in null format with a 95% level of confidence.

2. Literature Review

Benjamin Graham has been advocating the value investing idea for over 90 years, and a wealth of scholarly publications have demonstrated the theory's validity across a wide range of businesses. In Graham (2003), for example, he emphasized the need for a thorough examination of the financial statements as well as the nature of the businesses conducted by the listed firms. However, this approach has not been universally accepted. On the basis of original value investment, its adherents have created various analytical techniques. To support or refute the original value investing idea, other accounting-based indicators have been investigated. Piotroski, (2000) demonstrated that choosing high book-to-market (BM) value firms with strong financial standing can increase returns by at least 7% annually. The small and medium size of these high BM firms can also benefit from financial statement analysis, but this superior result is independent of stock purchases made at bargain prices. The findings of Piotroski (2000) are in line with Graham's partial views, according to which listed firms with a high BM and a modest size are more valued. Further, Basu (1977) provided additional evidence to show that stocks with low PE subsequently tend to gain higher average rewards than stocks with high PE. Graham (2003), however, also provided evidence that larger businesses, such as those in the manufacturing sector, were more resilient and valued on the stock market, particularly during times of financial crisis.

Piotroski's (2000) work featured the use of nine signals and these were taken further by Almas (2008) who adjusted them to measure three aspects of the listed companies' financial condition, thereby enabling them to choose companies from a high BM quintile. They then created a portfolio from the intersection of the high BM portfolio with the low accruals portfolios, and finally combined the high BM and low probability of bankruptcy to evaluate the performance of the portfolios chosen using the three modified BM strategy versions applied to the market. Research by Banerjee and Deb (2017) also used the nine signals to test the historical performance of a value strategy that relied on the strong performance of a few firms while "...

tolerating the poor performance of many deteriorating companies ..." within the broad value group. The findings revealed that firms with strong fundamentals within the value group outperform their less robust counterparts, based on absolute as well as risk adjusted measures.

Piotroski (2000) calculated F-scores ranging from 0-9 to indicate the relative financial strength of different countries. However, the results of the F-score based on conventional signals contradicted his own conclusions, according to Sharma and Sharma (2009). They claimed that the difference between the returns of high and low group enterprises is statistically irrelevant. Furthermore, Woodley, Jones & Reburn (2011) concluded that the financial statement variables identified by Piotroski (2000) no longer separate future winners from future losers among those stocks with high BM ratios, while confirming that Piotroski's findings for the 1976-1996 window used for his study were, in fact, reversed over the subsequent 12 years. By most metrics, the stocks of "High F Score" firms provide worse returns than those of "Low F Score" firms and below those of the group of value stocks as a whole. Daniel and Titman (2001) argue that while the future return of a stock is independent of a company's past accounting-based performance, it is closely related to the 'intangible' return, i.e., the portion of the return that is orthogonal to the company's past performance.

In subsequent work, Mohanram (2003, 2004) created an index, G-SCORE, by analysing financial statements and combining traditional fundamentals such as earnings stability, growth stability and R&D intensity, capital expenditure and advertising to distinguish winners and losers in the low BM stock market. The results are robust in the partitioning of size, analyst focus and liquidity and remain constant after controlling for momentum, book value, accruals and size. Meanwhile, Abarbanell and Bushee (1997a) investigated whether applying the basic concepts of fundamental analysis can produce significant abnormal returns. The results show that fundamental signals provide information on future returns associated with future return news. Furthermore, a large proportion of abnormal returns are generated around subsequent earnings announcements. In addition, the authors point out that many fundamental signals are related to future earnings and forecast revisions in the same way as earnings, although there are some notable exceptions.

Based on these foundations, Beneish, Lee and Tarpley (2001) employed a two-stage method to predict firms that are about to experience an extreme (up or down) price movement in the next quarter. The results suggested that forecasting power of accounting-based indices with respect to future earnings enhanced while controlling for many market-based attributes. Griffin and Lemmon (2002) examined the relationship between BM equity, distress risk and stock returns and found that the BM effect was largest in small firms with low analyst coverage. Lev and Thiagarajan (1993) explored the intrinsic value of listed companies on fundamental basis by such as earnings, risk, growth, and competitive position. The findings supported the incremental value-relevance of most of the identified fundamentals. A two-stage approach was also used to predict firms that are about to experience extreme (up or down) price movements in the next quarter (Beneish, Lee & Tarpley, 2001). The results show that accounting-based indices have enhanced predictive power for future returns, controlling for many market attributes. Griffin and Lemmon (2002) explored the nexus between BM, distress risk and stock returns. The paper noted that the BM effect was greatest among small firms with low analyst coverage. Previously, Lev and Thiagarajan (1993) had explored the intrinsic value of listed companies through fundamental factors such as earnings, risk, growth and competitive position. The findings support the incremental value relevance of most of the identified fundamentals. In the same vein, Nguyen (2003) analysed the relationship between financial statement information and stock returns for companies listed on the Tokyo Stock Exchange. The findings suggest that a score-based portfolio strategy can generate significant excess returns over a 10-year sample period. Fama and French (2006) further show that given BM and expected profitability, a higher expected investment rate implies lower expected returns. However, controlling for the other two variables, more profitable firms have higher expected returns, as do firms with higher BM.

In this research, listed banks were chosen as the scope of the study. It therefore follows in the footsteps of Chen (2016), who established an input-output model on this basis, selects four input indicators (number of employees, total fixed assets, operating expenditure, customer deposits) and two output indicators (non-performing loans ratio, net interest income), applies the data envelopment analysis (DEA) method to measure the credit asset efficiency of 16 listed banks from 2010 to 2016, and compares between joint-stock commercial banks and city commercial banks. The paper also uses the multiple linear regression method to analyse the impact of these six factors on the efficiency of credit assets, and proposes relevant policy recommendations. The paper concludes that: (1) the credit asset efficiency of the banking industry has shown a slight increase and then a significant decrease over the past six years; (2) the credit asset efficiency of state-owned commercial banks is low overall, and it is inferior to that of some joint-stock banks and city commercial banks; (3) large state-owned banks have lost their scale advantage under the new situation of economic transformation, and their internal management level needs to be strengthened and (4) the quality of credit assets and human resources have a very important impact on the efficiency of credit assets, while the blindly high cost of deposit-taking will also reduce the efficiency of credit assets (Wei, 2012). Based on the research on bank efficiency conducted by domestic and foreign scholars, this paper firstly defines the relevant concepts and analyses and compares the main methods of studying bank efficiency; then selects the data of 13 listed banks from 2017 to 2019 and applies the factor analysis method to measure the current situation of bank efficiency in China. Based on the results of the factor analysis, the DEA method was then applied to decompose the efficiency of banks and analyse the reasons for the differences in efficiency of listed banks in three aspects: allocation efficiency, pure technical efficiency and scale efficiency. The study concludes that: (1) emerging commercial banks are relatively more efficient than the four state-owned banks, while the listing reform of state-owned banks in recent years has to a certain extent promoted their efficiency; (2) the allocation efficiency and scale efficiency of Chinese commercial banks are the main reasons affecting their overall efficiency. On this basis, this paper proposes countermeasures for commercial banks to improve their efficiency and enhance their competitiveness in terms of product innovation, internal management and the introduction of strategic investors.

To sum up, the majority of academic studies on value investing confirmed that fundamental analysis of financial indices supported by financial statements is more likely to perform better than other techniques for forecasting the stock trends of the stocks. Rarely, however, have studies demonstrated the inefficiency of value investing strategies derived from Benjamin Graham's adherents, such as Piotroski (2000). As statistical knowledge in financial research has advanced, a large number of academics have favoured using the entire stock market as the study population rather than Graham's (2009) division of the stock market into industries. In fact, variance exists across a wide range of industries, as noted by Graham (2003), Zhu, Walsh and Ampornstira (2020) and Xi and Zhu (2022). This paper, therefore, seeks to make a further academic contribution to the existing literature by examining the factors influencing the return on investment of listed companies in the banking sector in China by studying specific industries in an epidemic context. It uses a quantitative method to do so, involving the use of hypotheses. Rejection of null hypotheses will provide further evidence to support the sectoral idea.

3. Research Methodology

3.1. Definition of Population

According to the most recent official categorization of industries provided by the China Securities Regulatory Commission in 2021, which comprises 43 firms, the research population in this study is defined as the total of listed companies in China's banking industry. Six listed banks were removed from the study's scope owing to the short listing period and warnings to delist and, therefore, the sample for this study consisted of 37 listed firms.

3.2 Data Analysis

All necessary information is taken from the financial statements of the 37 listed companies, and the relationship between ROI (the dependent variable) and other indices (the independent variables) is investigated using both fundamental analysis and inferential statistics. These variables are listed below:

Attribute (Dummy variable): This variable is employed to classify the nature of the listed Chinese banks. In this research, the sample is divided into two groups: state-owned or non state-owned.

EPS: Average earnings per share in 2020 and 2021;

NPL: Non-performing loans (2019);

PE: Price-to-earning per share ratio (2019);

ROI: The ROI can be expressed as a formula: $[ESP(2020-2021)+CI(2019-21)]/P(2019)$, where: $ESP(2020-21)$ = Average earnings per share in 2020 and 2021, CI = Capital increase from the end of 2019 to the 31st December in 2021 and P = the price at the end of 2019.

Except for NPL, which symbolizes risk control competence, particularly in the banking industry, the factors indicated above have been created and tested by extensive research addressed in the literature review above. In order to offer fresh support for the value investing theory, we presented NPL as an unexplored component to examine the probable causes of ROI in this study. Consequently, the degree and connection between ROI and other suggested independent variables will be assessed using the statistical approach of hierarchical regression analysis. And the following is an expression for the regression model:

$$ROI = \theta * Attribute + \beta * PE + \gamma * EPS + \lambda * NPL + \alpha$$

4. Results

Table 3. Descriptive Analysis of Independent Variables; **source:** Original Research

Items	N	Min	Max	Mean	Std. Deviation	Median	Kurtosis	Skewness	Coefficient of variation (CV) □
Attribute	37	0.000	1.000	0.189	0.397	0.000	0.778	1.655	209.875%
PE	37	5.150	15.660	8.567	3.126	7.380	-0.707	0.779	36.496%
EPS	37	0.370	3.180	1.033	0.655	0.890	3.295	1.752	63.423%
NPL	37	0.008	0.024	0.014	0.003	0.014	1.391	0.443	23.084%

According to Table 3, the attribute of Chinese listed businesses in the banking sector is significantly more variable from minimum to maximum value, although the CV of PE, EPS, and NPL of the 37 listed firms is comparatively lower. Apart from the PE, the kurtosis of the other three variables is positive; moreover, the EPS distribution is highly steep and distant from normality due to its high kurtosis of larger than 3.0. The preceding results reveal that all four variables are positively skewed.

Table 4. Variance Inflation Factor (VIF); **source:** Original Research

Items	Model 1	Model 2	Model 3	Model 4
Attribute	1.000	1.121	1.231	1.261
PE	-	1.121	1.278	1.347

Table 4. Variance Inflation Factor (VIF); **source:** Original Research

Items	Model 1	Model 2	Model 3	Model 4
EPS	-	-	1.181	1.211
NPL	-	-	-	1.064

The table above shows the VIF values for the diagnostic indicators of covariance at hierarchical regression. The results show that the VIF values for all models are less than 5.0, which means that there is no covariance between the four independent variables. It also means that the validity of the models is proven.

Table 5. Parameter Estimates; **source:** Original Research

	Model 1	Model 2	Model 3	Model 4
Constant	0.216** (4.444)	0.537** (3.985)	0.248 (1.471)	0.683* (2.643)
Attribute	0.031 (0.275)	-0.061 (-0.549)	0.021 (0.195)	-0.013 (-0.129)
PE		-0.035* (-2.527)	-0.023 (-1.659)	-0.030* (-2.189)
EPS			0.162* (2.538)	0.141* (2.302)
NPL				-24.859* (-2.145)
N of Samples	37	37	37	37
R 2	0.002	0.160	0.297	0.385
Adj R 2	-0.026	0.110	0.233	0.309
F Value	F (1,35) = 0.076, P = 0.785	F (2,34) = 3.236 P = 0.052	F (3,33) = 4.649 P = 0.008	F (4,32) = 5.018 P = 0.003
ΔR 2	0.002	0.158	0.137	0.088
ΔF Value	F (1,35) = 0.076, P = 0.785	F (1,34) = 6.384 P = 0.016	F (1,33) = 6.441 P = 0.016	F (1,32) = 4.602 P = 0.040

Dependent Variable: ROI;

* $p < 0.05$ ** $p < 0.01$; t statistics in parentheses

Hierarchical regressions are adopted to investigate changes in the model when the independent variable (X) is increased, and are often employed for model robustness tests, mediating or moderating effects research. As can be seen from the table above, there are four models involved in this hierarchical regression analysis. The independent variable in model 1 is Attribute, model 2 adds PE into model 1, model 3 adds EPS to model 2, model 4 adds NPL to model 3 and the dependent variable of the model is ROI.

The table above shows that linear regression analysis was conducted with Attribute as the independent variable and ROI as the dependent variable. The R-squared value of the model is 0.002, indicating that Attribute can explain 0.2% of the cause for the change in ROI. The model failed the F-test ($F = 0.076$, p

>0.05), revealing that Attribute has no impact on the link between ROI and the dependent variable, thus the analysis cannot be properly examined for the influence of the independent variable on the dependent variable.

Model 2's change in F-value after adding PE to model 1 was significant ($p < 0.05$), indicating that the inclusion of PE provides explanatory power for the model. Furthermore, the R-squared value improved from 0.002 to 0.160, showing that PE has a 15.8% explanatory power for ROI. PE's regression coefficient value is -0.035 and is significant ($t = -2.527$, $p = 0.016 < 0.05$), showing that PE has a substantial negative effect on ROI.

The inclusion of EPS to model 3 results in a significant change in F-value ($p < 0.05$), showing that the addition of EPS has explanatory effect on the model. Furthermore, the R-squared value improved from 0.160 to 0.297, showing that EPS has a 13.7% explanatory power for ROI. The regression coefficient value for EPS is 0.162 and significant ($t = 2.538$, $p = 0.016 < 0.05$), showing that EPS has a strong positive impact on ROI.

Model 4's change in F value after adding NPL to model 3 was significant ($p < 0.05$), indicating that the inclusion of NPL had explanatory power on the model. Furthermore, the R-squared value improved from 0.297 to 0.385, indicating that NPL has an explanatory power of 8.8% for ROI. NPL's regression coefficient value was -24.859 and demonstrated significance ($t = -2.145$, $p = 0.040 < 0.05$), showing that NPL has a substantial negative association with ROI.

4. Discussion

The reasons of the ROI in Chinese banking listed businesses were proposed to be explained by four factors in this study, namely Attribute, PE, EPS, and NPL, which were all designated as independent variables. Based on the findings examined above, we determine that PE has a significant negative effect on ROI, which is consistent with the findings of previous research on the low-price effect (see, e.g., Abarbanell and Bushee, 1997a; Almas, 2008; Basu, 1977; Banerjee and Deb, 2017; Beneish, Lee and Tarpley, 2001; Graham, 2003; Graham and Dodd, 2009). Additionally, the outcome shows that profitability (EPS) and ROI have a positive relationship, which is consistent with other studies (see, e.g., Abarbanell and Bushee, 1997b; Almas, 2008; Banerjee and Deb, 2017; Fama and French, 2006; Graham, 2003; Griffin and Lemmon, 2002; Lev and Thiagarajan 1993; Mohanram, 2003; Piotroski, 2000). Moreover, this study shows that NPL is inversely correlated with ROI, demonstrating the necessity of financial risk management for investors buying banking stocks during the COVID-19 pandemic. Finally, the attribute of the listed enterprises does not have an impact on ROI in Chinese Banking sector, which is not consistent with Chen (2016) and Wei (2012).

In this research, accounting-based fundamental analysis was utilized to test the relationship between ROI in Chinese listed companies of banking industry and other financial indices documented in past financial statements, and the paper aims to contribute the existing literature by providing new evidence to value investing theory through analyzing Chinese listed banking industry during the COVID-19 epidemic.

5. Conclusion

In this study, four hypothesized influencing variables of ROI were examined and analyzed: profitability (EPS), financial risk control (NPL), the attribute of the banking listed businesses (Attribute), and pricing position (PE). During the COVID-19 pandemic, it was shown that 18.92% of cases of ROI are negative, while 81.08% are positive in a sample of 37 listed businesses in China's banking industry, indicating that the banking industry in China does not experience profound depression in comparison to the rest of the real economy. Furthermore, the EPS of 37 listed businesses in China's banking industry are positive and largely

consistent during the pandemic period, and their NPLs are quite low, meeting the Central Bank of China's fundamental standards. According to the findings shown above, the majority of the listed firms analyzed in this study are not overvalued in the range of 0.45 to 1.63. Consequently, the attribute of listed firms in this article exhibits a wide range in the sample studied.

According to hierarchical regression, average three-year earnings per share (EPS) have a significant positive influence on ROI, while PE as well as NPL ratios have a significant adverse effect on ROI; nevertheless, the bank's attribute has no impact on ROI.

This paper would have benefited from more extensive data, including a wider range of firms and of time but it is necessarily limited by the research questions identified above. Comparative research in other industries or other geographical locations might also be instructive. Consequently, it is concluded that there is a need for further research in areas which extend the research reported on here, with the intention of deepening and broadening the basis of knowledge from which recommendations may be made.

6. References

- Abarbanell, J. & Bushee, B.J. (1997a). Abnormal returns to a fundamental analysis strategy, *Journal of Accounting Abstracts*. DOI: <http://dx.doi.org/10.2139/ssrn.40740>.
- Abarbanell, J. & Bushee, B.J. (1997b). Fundamental analysis future earnings, and stock prices, *Journal of Accounting Research*, 35, 1-24. DOI: <https://doi.org/10.2307/2491464>.
- Almas, D. (2008). *Value investing: The book-to-market effect, accounting information, and stock returns*, Doctoral Thesis. Universidade Tecnica de Lisboa.
- Banerjee, P. & Deb, S.G. (2017). Abnormal returns using accounting information within a value portfolio, *Accounting Research Journal*, 30, 73-88. DOI: <https://doi.org/10.1108/ARJ-01-2015-0003>.
- Basu, S. (1977). Investment performance of common stocks in relation to their price earning ratios: A test of the efficient market hypothesis, *Journal of Finance*, 32(3), 663-682. DOI: <https://doi.org/10.1111/j.1540-6261.1977.tb01979.x>.
- Beneish, M.D., Lee, C.M. & Tarpley, R.L. (2001). Contextual fundamental analysis through the prediction of extreme returns, *Review of Accounting Studies*, 6, 165-189. DOI: <https://doi.org/10.1023/A:1011654624255>.
- Chen, Q. (2016). *An empirical study on the efficiency of credit assets of state-owned commercial banks in China*, Master's thesis, East China Normal University (in Chinese).
- Daniel, K.D. & Titman, S. (2001). Welcome market reactions to tangible and intangible information, available at: <https://www.semanticscholar.org/paper/Welcome-Market-Reactions-to-Tangible-and-Intangible-Daniel-Titman/815e85d590c13230842320bddf851bc06e2127af>.
- Fama, E.F. & French, K.R. (2006). Profitability, investment and average returns, *Journal of Financial Economics*, 82, 491-518. DOI: <https://doi.org/10.1016/j.jfineco.2005.09.009>.
- Graham, B. (2003). *Intelligent investor* (revised edition). New York, NY: Harper Collin Publisher.
- Graham, B. & Dodd, D.L. (2009). *Security analysis* (6th edition), New York, NY: McGraw Hill.

Griffin, J.M. & Lemmon, M. (2002). Book-to-market equity, distress risk, and stock returns, *Journal of Finance*, 57, 2317-2336. DOI: <https://doi.org/10.1111/1540-6261.00497>.

Lev, B. & Thiagarajan, S.R. (1993). Fundamental information analysis, *Journal of Accounting Research*, 31, 190-215. DOI: <https://doi.org/10.2307/2491270>.

Mohanram, P. (2003). Separating winners from losers among low book-to-market stocks using financial statement analysis, *Review of Accounting Studies*, 10, 133-170. DOI: <https://doi.org/10.1007/s11142-005-1526-4>.

Nguyen, P. (2003). Market underreaction and predictability in the cross-section of Japanese stock returns, *Journal of Multinational Financial Management*, 15(3), 193-210. DOI: <https://doi.org/10.1016/j.mulfin.2004.08.004>.

Piotroski, J.D. (2000). Value investing: The use of historical financial statement information to separate winners from losers, *Journal of Accounting Research*, 38, 1-41. DOI: <https://doi.org/10.2307/2672906>.

Sharma, M. & Sharma, P. (2009). Prediction of stock returns for growth firms - A fundamental analysis, *Vision: The Journal of Business Perspective*, 13, 31-40. DOI: <https://doi.org/10.1177/097226290901300303>.

Wei W. (2012). *An empirical study on the efficiency of listed banks in China*, Master's thesis, Central South University (in Chinese).

Woodley, M., Jones, S.T. & Reburn, J.P. (2011). Value stocks and accounting screens: Has a good rule gone bad? *Journal of Accounting and Finance*, 11, 87-104.

Xi, Q. & Zhu, T. (2022). Value investing: Evidence from listed companies in China's banking industry during the COVID-19 epidemic, *International Journal of Economics and Finance*, 14(11), 1-7.

Zhu, T., Walsh, J. & Ampornstira, F. (2020). Quantitative analysis of the value investments of listed companies in China's mining industry, *International Business Research* 13(10), 31-8. DOI: <https://doi.org/10.5539/ibr.v13n10p31>.

Appendix A: Data Definition

Variable	Definition
Attribute	This variable is employed to classify the nature of the Chinese banking listed companies, and in this research, we just take the banking listed companies into two groups: state-owned or non state-owned.
PE	Price-to-earning per share ratio (2019)
EPS	Average earnings per share in 2020 and 2021
NPL	Non-performing loans (2019)
ROI	The ROI can be expressed as a formula: $[\text{ESP}(2020-2021)+\text{CI}(2019-21)]/\text{P}(2019)$, where: $\text{ESP}(2020-21)$ = Average earnings per share in 2020 and 2021, CI = Capital increase from the end of 2019 to the 31 st December in 2021, P = the price at the end of 2019.

Research on Experience Tourism Products in Rural Tourism — a Case Study of Dongtou District of Wenzhou City

Kancheng Jin, Krirk University, Thailand⁴

Abstract: *With the development of the economy, the demand for tourism is increasingly diverse, and rural tourism is also developing rapidly. When not working, urban people are more willing to go to rural areas to experience the natural scenery and rural life. The purpose of this paper is to summarize the experience and lessons of rural tourism development by studying the development and current situation of rural tourism in Dongtou District of Wenzhou City. This is done by analyzing the needs of the current rural tourism market, and developing a more effective development model of rural tourism products in Dongtou District of Wenzhou City, so that on the basis of existing rural tourism in Dongtou District of Wenzhou City a series of rural tourism products with rich cultural connotations, strong participation and prominent themes are added to construct a distinctive and high-quality tourism product. The development of a high grade rural tourism product system mainly includes characteristic folk tourism villages, new forms of rural tourism, agricultural and fishery science and technology sightseeing parks, as well as experiential tourism products of folk festivals.*

Keywords: *experience tourism, rural tourism, tourism products*

1. Introduction

In recent years, Chinese rural tourism has developed rapidly. Taking Dongtou District, Wenzhou City as an example, in 2015, the region received approximately 1.4 million tourists, which represents an increase of 12.6% year-on-year (Xu, 2006). During the process of rapid development, particular prominence has been placed on the development of rural tourism, especially in the form of experiential tourism products (Wu, 2017). By attracting urban tourists to the countryside to experience rural life, a series of experiential rural tourism products is created. In the process of developing and marketing these products, the tourism industry chain of rural tourism has been continuously improved, but at the same time, a series of problems and development bottlenecks have also emerged in that period (Zheng, 2014). Therefore, it is necessary to further study the advantages of experiential tourism products in rural tourism and to analyze the problems and bottlenecks, in order to propose corresponding measures to promote the further development of rural experiential tourism products.

1.1. Research Purpose

The purpose of this paper is to summarize the experience generated from rural tourism development, by studying the development and current situation of rural tourism domestically and internationally, therefore we could fully investigate the development status, existing problems, resource conditions, market conditions, and regional conditions for the development of rural tourism in Dongtou District, Wenzhou City (Huang, 2017). In addition, we can analyze the needs of the current rural tourism market, and develop more effective rural tourism products in Dongtou District along with the marketing model. The popularity of rural tourism products in Dongtou District could be improved not only by learning and adopting advanced experiences at home and abroad, but also by expanding the marketing methods of rural tourism products, which makes the rural tourism industry in Dongtou District add a series of rural tourism products with rich cultural connotations, strong participation, and distinguished themes (Jiang, 2014). Thus, a system of rural tourism products with distinctive features and high quality would be built. The development mainly

⁴ An earlier version of this paper was presented at the 4th International Conference on Sustainable Management at Krirk University, April 2022.

includes folklore tourism villages, new forms of the rural tourism system, sightseeing parks of agriculture, fishery science, new technology, and experiential tourism products of different festivals (Yu & Guo, 2017).

2. Research Overview and Methodology

2.1. Research Overview

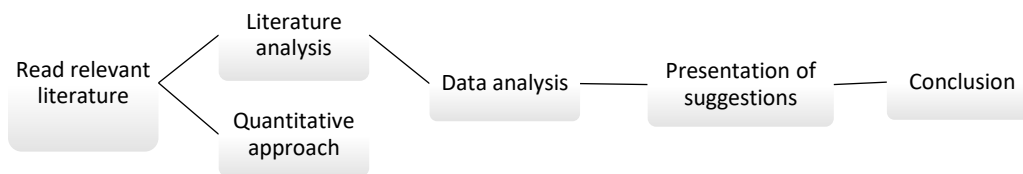
The main content of this paper is divided into six sections; the first part mainly introduces the research background, purposes, and main research contents of the paper. The second part integrates the related terminologies and collects some definitions of these concepts. The third part analyzes the development of experiential rural tourism products in Dongtou District, through SWOT analysis. The fourth section explains the design of the questionnaire and the data collection process. The fifth part is the analysis of the data. The sixth part is based on the results of the analysis, to find the problems and list solutions, and make conclusions and summaries.

2.2. Research Methodology

Literature analysis method - by reading relevant literature and searching for relevant network information, the relevant background, the development status, and research progress of the subject could be understood; and corresponding theoretical supports are set to be provided.

Quantitative method - by designing, distributing, collecting, and analyzing the questionnaires, similar characteristics will be found and corresponding conclusions are planned to be drawn.

Figure 1: Research Method



2. Literature Review

2.1. Definition Clarification

2.1.1. The Definition of Rural Tourism

Rural tourism refers to the use of rural areas as venues for activities, using the unique natural environment, rural scenery, folk customs, farming culture, rural ethnic minority people and other resources to provide urban residents with a variety of tourism business activities, such as sightseeing, leisure, vacation, fitness, entertainment, and shopping (Yang, 2016). Rural tourism is not new abroad. Rural tourism began in Europe as early as the 1830s. With the development of industrialization, rapid economic development, changes in demographic structure, increasingly convenient transportation and accelerated pace of life, urban residents enjoyed the comfort brought by the industrial civilization. While living a material life and a rich spiritual life, residents must bear the pain of the deteriorating living environment brought by industrial civilization (Yan, 2016). On the other hand, the vast grasslands, forests, lakes, and good ecological environment in the countryside are gradually welcomed by tourists. In the countryside, the natural beauty will inevitably become a good place for urban residents to visit. Therefore, urban residents have gradually stepped out of

the reinforced concrete city and moved to the beautiful countryside with an earthy atmosphere, and the rural tourism has been born.

2.1.2. Definition of Experiential Tourism Products

The book *Guidelines for Rural Characteristic Tourism Construction* compiled by the editorial board of *Rural Tourism Practitioners Series* mentioned that experiential tourism refers to "providing tourists with participatory and personally experienced activities, so that tourists can feel pleasure from perception." Experiential tourism is more focused on bringing tourists an experience different from their own life, such as providing urban people with the experience of rural life (Xia, 2012). With the increasingly rich travel experience of tourists, the increasingly mature concept of tourism consumption, and the increasingly high requirements of tourists for experience quality, they are no longer satisfied with popular tourism products, they are more eager to pursue personalized, experiential, emotional, relaxing and beautifying travel experiences (Song, 2007).

According to Fan (2008) based on previous studies, the author believes that experiential tourism products in rural tourism refer to attracting tourists to the countryside to experience rural life, participate in rural production activities, and experience rural cultural customs and natural landscapes.

2.2. A Review of Related Research at Home and Abroad

2.2.1. Review of Domestic Literature

Xu (2006) believes that experiential tourism is a pre-designed and organized tourism method that requires tourists to actively invest time and energy to participate, has little impact on the environment, and has high added value. Besides, through interaction with tourism products, tourists gain tourism experience and realize self-worth. Song (2007) defines experiential tourism from the perspectives of tourism providers and tourists. She believes that experiential tourism is a kind of tourism to pursue psychological pleasure. and that the development model of experiential tourism is very different from the development model of mass tourism and sustainable tourism. The former pays special attention to the personal feelings of tourists and tries to create a real experience for tourists.

2.2.2. Review of International Literature

In the research on rural tourism development, Sharpley (2002:133) believes that the main challenges of rural tourism development are lack of support, lack of training, lack of local tourism attractions and facilities, low occupancy rate (significant seasonality), and inefficient market promotion. Taking Cyprus as an example, it is found that rural tourism has a high cost and low income due to the lack of basic skills of operators. To change this situation, long-term financial support and technical support are needed. Goodwin (1998:158), meanwhile, believed that the role of the government in the development of rural tourism should be changed from the original governance to the current governance. More emphasis is placed on cooperation between the government and NGOs. The government's regulatory role in the development of rural tourism is the premise to ensure the coordinated development of rural tourism.

3. SWOT Analysis of Experiential Tourism Development under Rural Tourism in Dongtou District

3.1. Strengths

Dongtou District, Wenzhou is the only designated national 4A-level scenic spot throughout the whole country. It is in Wenzhou, which is a famous city of commerce and trade. It is part of Zhejiang Province, a

major industrial and commercial province, and has special conditions for the development of "global tourism" and "rural tourism."

As far as the tourism target market is concerned, the Yangtze River Delta market has a strong demand for rural tourism. The Yangtze River Delta, where the level of urbanization is relatively high, suffers from problems such as air pollution in large cities. Therefore, rural tourism is booming, and more urban residents like to go to the countryside to experience the natural scenery (Zheng, 2009).

When it comes to tourism destination development, Dongtou District has certain basic conditions for tourism development. For example, in terms of transportation, there is the "Five-Island Bridge" project connecting the mainland, and the urban light rail goes directly to the airport and the urban area; in the construction of scenic spots, there are seven major scenic spots and more than 400 scenic spots in the whole area (Ruan & Wu, 2015). In 2018, there were more than 100 scenic spots. In terms of rural tourism construction, it includes nine leisure farms, six homestay agglomeration areas, fishermen's paradises, and other characteristic rural tourism projects in Dongtou. In terms of hotel accommodation, there is one five-star hotel and two three-star hotels, with a total of 180 accommodation reception resorts. Currently, there is a five-star intercontinental hotel under construction. At the same time, in the construction of rural tourism, there are six fishing village homestay gathering areas and dozens of boutique homestays. In the development of rural tourism, the infrastructure is relatively complete, covering all aspects of "food, accommodation, travel, shopping, and entertainment", and tourism products have been continuously developed and improved (Jin, 2016).

3.2. Weaknesses

3.2.1. Aging Population and Talent Crisis

As an island city, Dongtou lacks large-scale industrial enterprises, resulting in a large exodus of young people. The lack of motivation for talent introduction has led to an increasingly aging population. The employees in the tourism industry are older and have a lower education level, and most of them are local residents (Zhu & Liu, 2015). The lack of scientific guidance and scientific and technological support in tourism development leads to low quality of tourism products, which further weakens the Dongtou tourism brand and is not conducive to the introduction of high-end tourism industries and talents.

3.2.2. Homogenization of Tourism Products

Zhejiang Province has a long and narrow coastline and has the largest archipelago in the country: Zhoushan Archipelago. The phenomenon of homogeneity in island tourism development is serious. The development of homogeneous tourism products is basically carried out around the beach coast, and there is no distinction in the development of rural tourism, all focus on the development of homogeneous products in rural fishing villages and agricultural fisheries (Fan, 2008:20). In terms of tourism development, Dongtou City lacks both the construction of innovative products and the support of branded products, and it lacks a competitive advantage over other island and rural tourism development.

3.2.3. Insufficient Development of Tourism Resources

The existing tourism resources in Dongtou, whether it is natural landscapes such as Dashaao and Xiandieyan, or cultural landscapes such as the Strait Military Theme Park and Wanghai Tower, are still relatively underdeveloped and the supporting facilities are not perfect (Song, 2007). As far as rural tourism is concerned, it is not feasible for rural tourism development to only focus on homestays and sightseeing, which will lead to the lack of substantive experiential tourism projects. At the same time, with the process of urbanization and the loss of population, traditional rural life gradually disappears. Furthermore, rural

tourism resources are not only lacking in development but also lacking in protection, and the countryside is gradually turning into an empty shell with only houses left.

3.2.4. The Natural Environment Needs to Be Improved

From the perspective of fishing village landscape construction, the marine environment restricts the development of fishing village tourism. Dongtou is located at the estuary of the Oujiang River. The Oujiang River carries a large amount of sediment and garbage pollution into the Dongtou sea area, which seriously affects the seawater environment of Dongtou and destroys the quality of the beach and the coastal landscape (Xu, 2006). In terms of rural landscape construction, despite the high vegetation coverage in Dongtou, there is still a lack of landscape construction. It is necessary to highlight the further integration of natural landscape and human landscape in the process of integrating rural landscapes.

3.3. Opportunities

In terms of economic development, tourism has become a new growth point under the new economic normal. Taking Dongtou District as an example, the tourism economy accounts for up to 15% of the region's GDP (Yu & Guo, 2017). At the same time, Wenzhou City also regards tourism as an important economic development method, which provides new opportunities for the development of Dongtou tourism.

In terms of policy support, Mr. Li Jinzao, the former director of the China National Tourism Administration (now the deputy minister of the Ministry of Culture and Tourism), proposed the "general tourism" development strategy to find a new direction for the development of rural tourism in Dongtou District. Dongtou is the only 4A-level scenic spot in the country named after the whole area, which means that the tourism development of Dongtou District is not developed around the scenic spots only but an all-round development of the whole area, including urban construction, rural development and natural scenic spots. It also seeks a new direction for the development of experiential tourism products in rural tourism, and integrates rural life, rural landscape, rural culture, nostalgia, and nostalgia to build a comprehensive experiential rural tourism.

In terms of social development, the development of rural tourism has promoted rural revival, stimulated employment, promoted economic development, and led to the re-development of rural areas. Taking Dongtou District as an example, tourism practitioners in Dongtou District account for 20% of the employed population (Yu & Guo, 2017). At the same time, Dongtou District has the highest per capita GDP in Wenzhou City, which benefits from the development of tourism. The resident population of Dongtou District is small, so the development of other industries lacks labour and resources. Tourism not only brings many floating population and capital inflow, but also further boosts the development of Dongtou's social economy and social production.

3.4. Threats

Internal challenges: The "hollowing phenomenon" in Dongtou village is getting worse. Take Banping Mountain in Dongtou District as an example. Banping Mountain is a small island in the Dongtou Archipelago close to the island. In the past, there were residents on the island who did farming and fishing and lived on the island for a long time. But nowadays, young people have basically left Banping Mountain, and went to the island or the urban area of Wenzhou and other big cities. Some elderly people gradually died, and some also left with their children. Nowadays, there are basically only some empty houses in Banpingshan (Yang, 2016). Under the development of rural tourism, these houses are developed as homestays, and Banping Mountain is also used as a tourist attraction for everyone to visit, but the feeling of life in the countryside has basically disappeared. How to protect and develop the countryside, how to

integrate tourism and countryside, how to integrate humanities and nature, a series of problems and challenges hinder the development of Dongtou countryside.

External challenges: Within Wenzhou region, marine tourism such as Pingyang Nanji Islands, Cangnan Yuliao Scenic Spot, and Ruian Tongpan Island have developed well in recent years, forming competition with Dongtou marine tourism (Wu, 2017).

Within the scope of southern Zhejiang and northern Fujian, tourism destinations such as Yandang Mountain-Nanxi River, Taishun Covered Bridge-Radon Hot Spring, Taimu Mountain-Baishuiyang and other tourist destinations have developed maturely, and have strong brand appeal and influence in the region, and Divert the Dongtou tourist source market. It has a certain shielding and squeezing effect on the tourism image of Dongtou (Huang, 2017).

Within the scope of Zhejiang Province, tourism in northern Zhejiang represents the highest level in the province and even the whole country. Anji, Tonglu, Deqing, Tongxiang, and other rural tourism economies are booming. In comparison, there is still a big gap between Dongtou and the above areas in tourism development. Dongtou is one of the first provincial-level pilot counties for comprehensive tourism reform, and one of the three core sectors in the tourism economic circle in southeastern Zhejiang, with the same tourism value as "Yandang Mountain-Nanxi River" and Xianju National Park (Zheng, 2014). However, the characteristics and potential of Dongtou tourism have not yet been brought into play, and the brand value needs to be further explored.

4. Study Design and Data Collection

4.1. Questionnaire Design

By reading studies conducted by Wu (2017), Huang (2017), Xu (2006), and Song (2007), the content of this questionnaire was designed. It mainly covers three aspects: first, tourists' willingness and inclination to consume experiential tourism products in rural tourism in Dongtou District; second, tourists' sense of experience and participation in experiential tourism products in rural tourism in Dongtou District; third, tourists' opinions on experiential tourism products in rural tourism in Dongtou District

4.2. Questionnaire Distribution and Collection

The questionnaire survey was carried out from March to April 2019, which is a total of one month. This questionnaire is issued by the author through a field visit to Dongtou District, Wenzhou City, to tourists who participate in rural experience tourism. The questionnaires were distributed in the form of paper forms. A total of 300 questionnaires were distributed, of which 276 were valid questionnaires, and the recovery rate of valid questionnaires was 92%. The questionnaire survey and results are attached in the appendix.

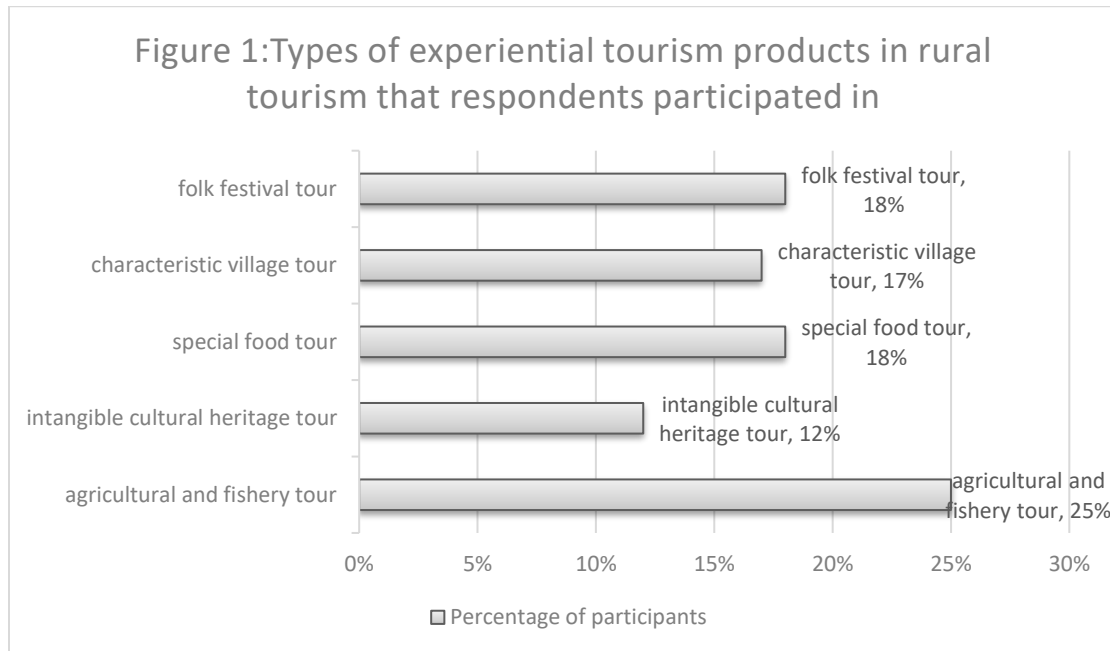
5. Data Collation and Analysis

5.1. Tourists' Willingness and Tendency to Consume Experiential Tourism Products in Rural Tourism in Dongtou District

Through a questionnaire survey, it was found that 59% of tourists had participated in similar rural tourism experiential tourism products, and only 24% of tourists had never participated in similar products. And this product also expressed a strong willingness to revisit. 76% of tourists indicated that they would still be willing to participate in such products in the future. Experiential tourism products in rural tourism have a larger tourism market, are more attractive to tourists, and have a higher revisit rate. For tourism

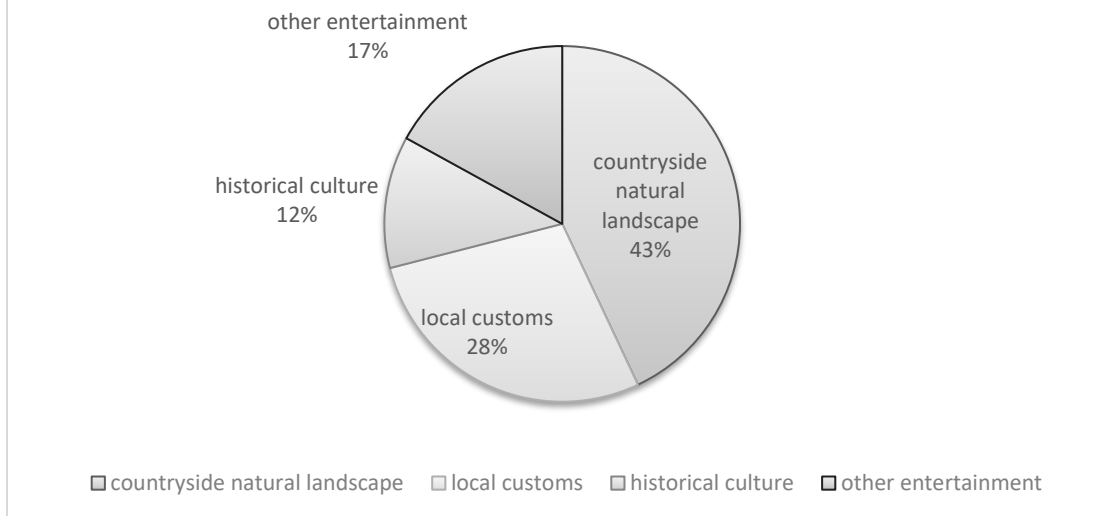
development, especially for rural tourism development, similar products can be further promoted and developed to promote the future development of rural tourism.

In Figure 1, for the types of experiential tourism products that tourists choose in rural tourism, the distribution is relatively uniform. Among them, the most selected is the agricultural and fishery tour, accounting for 28%, and the representative product is: "being a fisherman for a day", which is going out to sea fishing with a boat and experiencing the life of a fisherman. The special food tour and the folk festival tour account for the same proportion of 18%, which respectively refer to participating in the production and tasting of special food and participating in folk festival activities. The characteristic village tour refers to the residential villages with characteristic homestays established based in the countryside, accounting for 17% of the population. The least proportion is the intangible cultural heritage tour, which only accounts for 12%, which refers to participating in the production of local intangible cultural heritage, such as shell carving crafts. The development of different experiential tourism products is essential for rural tourism, and at the same time, it is necessary to increase the attractiveness of each tourism product to meet the needs of the target market.



In Figure 2, for rural tourism experiential products, the most attractive tourist attraction for tourists is the natural landscape of the countryside, while the lowest is the historical culture. It can be seen that for experiential tourism products in rural tourism, the most important thing is to protect the natural landscape of the countryside, preserve the local customs, integrating the natural landscape with the human landscape, and give people a good tourism experience. As for the history and culture of the countryside, we should focus on the experiential development and protection of traditional culture and intangible cultural heritage to ensure that history and culture can be integrated into experiential tourism products, not just reserved in museums.

Figure 2: The most attractive features for rural experiential tourism products

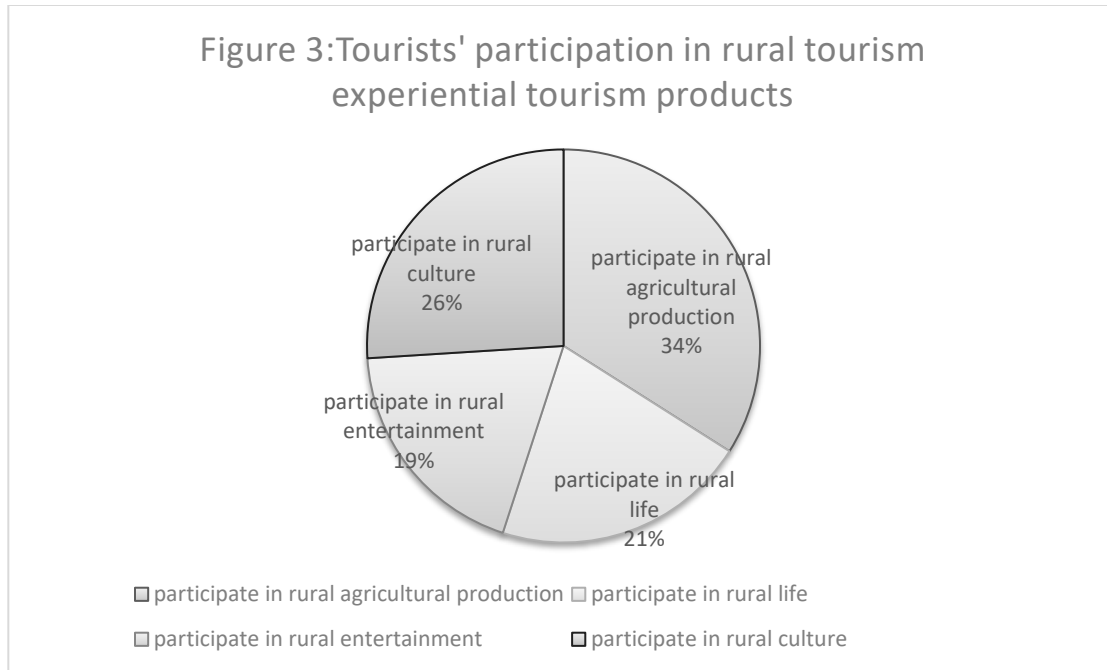


5.2. Tourists' participation in rural tourism experiential tourism products in Dongtou District

Through the questionnaire survey, it is aimed at whether tourists can fully participate in the survey of rural experience tourism products. The results show that only a small number of tourists can have a complete experience, and nearly half of the tourists can only experience the natural scenery, but cannot feel the cultural customs. It can be seen that rural tourism experiential tourism products should pay more attention to the development of comprehensive tourism experience, rather than just stop at ornamental tourism experience.

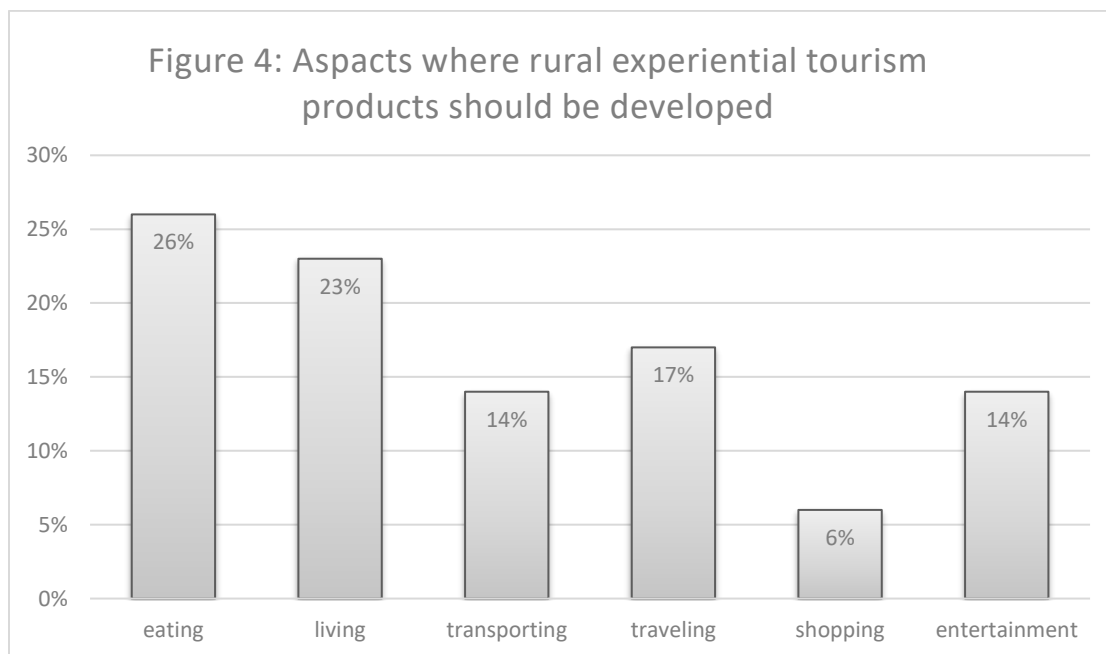
As shown in Figure 3, tourists believe that the most distinctive item of experiential tourism products in rural tourism is the ability to participate in rural agricultural production. Therefore, it is possible to integrate rural production labor with tourism to develop experiential tourism products and form a unique tourism model for experiential tourism products. At the same time, it can integrate rural culture, rural life, rural entertainment, and tourism, giving tourists a better experience, and can more comprehensively integrate rural resources and tourism.

Figure 3: Tourists' participation in rural tourism experiential tourism products



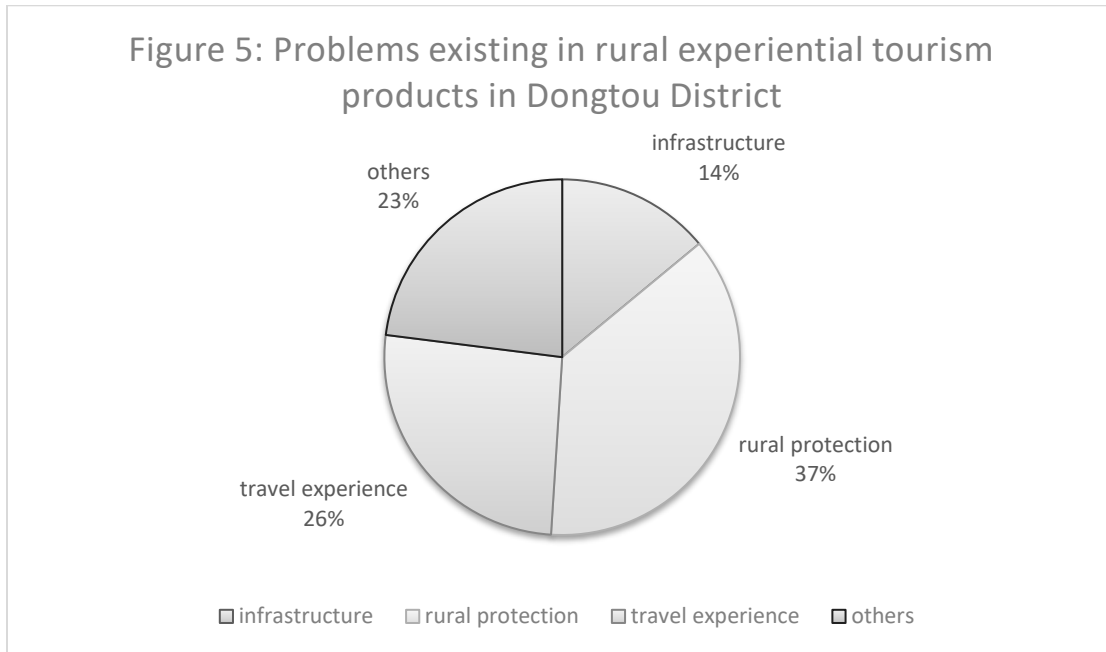
As shown in Figure 4, for the six elements of "eating, living, transporting, traveling, shopping, and entertainment", tourists pay more attention to "eating" and "living". Product development should pay more attention to the tourist experience of tourists. For example, the production and tasting of special food should be developed; the development of homestays should also incorporate rural elements. The tourist experiences those tourists least pay attention to is shopping, which only accounts for 6%. It can be seen that in the development of experiential tourism products, unnecessary tourism shopping marketing activities should be reduced to give tourists a better tourism experience.

Figure 4: Aspects where rural experiential tourism products should be developed



5.3 Tourists' Opinions on Rural Experiential Tourism Products in Dongtou District

As shown in Figure 5, the biggest problem of experiential tourism products in rural tourism in Dongtou District is the lack of rural protection. Owing to the outflow of the young population and the gradual reduction of the elderly population, the demise of the population is accompanied by the demise of rural production and the stagnation of rural construction, which eventually leads to the gradual demise of the countryside. Therefore, it is urgent to protect the countryside. At the same time, through the development of tourism and the development of rural tourism products, the vitality of the countryside and the rejuvenation of the industry are stimulated, and the integration of the countryside and tourism has become a development requirement. And most tourists believe that the rural scenery and way of life should be completely preserved, which reflects the urgent concern for rural protection.



In addition to the tourism experience and infrastructure, the respondents also talked about other specific issues, which are summarized here: single project form, homogeneous projects, template projects, lack of tourist participation, lack of cultural protection and development, imperfect management of scenic spots, relatively backward development level, etc.

These problems are numerous and targeted accordingly, reflecting that the current level of development of rural experiential tourism products is relatively backward. Whether it is funds, talents, management, or other aspects are insufficient. Therefore, the further development of rural tourism and experiential tourism products should solve the problems that arise, and provide corresponding human, financial and material support, so that the rural experiential tourism products can be more perfect.

6. Conclusion and Suggestions

6.1. Conclusion

Tourists have a strong willingness to consume tourism products of rural experiential tourism in Dongtou District, and tend to choose tourism products that combine agricultural production with tourism. At the same time, they are more attracted by the natural landscape of the countryside, but less interested in the history and culture of the countryside.

Tourists have their own unique experience of rural tourism experiential tourism products in Dongtou District, but this experience is still relatively simple, lacking the integration of natural landscape and humanistic customs. The experience requirements of "eating" and "living" are relatively high, while the shopping needs are relatively less strong.

Tourists believe that there are still some problems with rural experiential tourism products in Dongtou District, especially the protection and development of rural areas is a serious problem at present. Due to the current rural development situation, the village is gradually dying out. At the same time, there are areas that need to be improved for tourism development, and there is a lack of investment in capital, technology, and talents.

6.2. Suggestions

The countryside is the driving force for the development of rural experiential tourism products. In order to experience the local customs and customs of the countryside, the premise is that the countryside must be protected, that is, the production and lifestyle of the countryside must be protected. Make the countryside full of popularity and make farmers and fishermen affluent, so as to promote the gradual development and improvement of rural life that is different from urban life. And then dig out the tourism resources of the countryside. Feel the slow-paced life different from the city from the rural life; feel the labour method different from the city from the rural agricultural production; feel the simplicity from the interpersonal relationship in the countryside. The people of the city live in harmony with nature. These are all based on the protection and development of the countryside, and it is difficult to build rural tourism without the countryside. Even after commercial development, there are accommodation and business circles here, but the simplicity unique to the countryside is lost. In this kind of tourism, tourists cannot feel the existence of the countryside, and it is more like an unmanned scenic spot, so rural tourism disappears, along with the disappearance of the countryside.

Experience is the core of the development of rural experiential tourism products. Tourists' experience types can be roughly divided into four types, called "4Es" (Entertainment, Education, Escape, Estheticism), namely entertainment, education, escape, and aesthetics. Tourists leave the environment of daily living (escapism), accept the washing of rural life (aesthetic), enjoy leisure time (entertainment), and obtain spiritual growth (education) through a series of sensory stimulation and spiritual feelings. (Garrod, Wornell, & Youell, 2005). Hence, the most important thing to experience is participation. Through the participation of tourists, tourists can deeply experience every detail of tourism consumption, experience the connotation and charm of tourism products, and obtain a more intuitive and profound tourism experience. Therefore, for the experiential tourism products in rural tourism, how to increase the sense of participation of tourists has become the key point, not only in the viewing experience but more importantly in participating in live production, food production, festival activities, culture. From the comprehensive experience and cognition of customs and so on, a unique experiential tourism mode in rural tourism is formed.

Coordination is the requirement of rural tourism product development. Rural tourism is the product of urbanization and industrialization, so it essentially needs to undertake the responsibility of coordinating multiple aspects. First of all, we must coordinate the relationship between human beings and nature. In a society where urbanization and industrialization are accelerating, air pollution and environmental damage have become obstacles to social development. In the era of increasingly severe air pollution and increasingly prominent environmental problems across the country, a pure land like the countryside is needed to ease the relationship between human beings and nature. When the urban population is eager for green water, green mountains, and blue sky, rural tourism has become the best way for people to get along with nature. In addition, it is necessary to coordinate the relationship between the city and the countryside. In the process of urbanization, the influx of rural population to the city has caused the surplus of the labour force and the diseases of the big cities, and also caused the demise of the countryside. Under the same

pressure on both sides, rural revitalization came into being. Rural tourism is required to drive the development of other industries. At this time, it is necessary to develop more experiential tourism products to make tourism more radiant to other industries, to promote the industrial revitalization of the entire countryside.

7. References

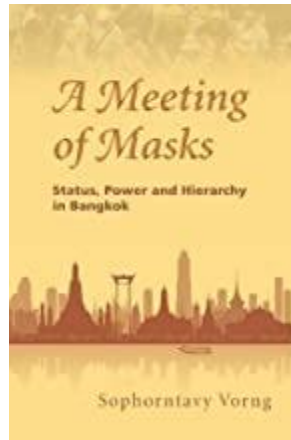
- Fan, Y. (2008). "Research on Zhejiang rural tourism technology innovation," *Economic Forum*, 20, 19-21.
- Garrod, B., Wornell, R. & Youell, R. (2005). "Re-conceptualising rural resources as countryside capital: The case of rural tourism." *Journal of Rural Studies*, 22, 153-178.
- Goodwin, M. (1998). "The governance of rural areas: Some emerging research issues and agendas," *Journal of Rural Studies*, 14(1), 5-12.
- Huang, L. (2017). "Dongtou: A wonderful pen in the global travel book, the garden at sea is unique," *Zhejiang Daily*, 3, 107-180.
- Jiang, S. (2014). "Research on government behavior in the development of rural ecotourism in Wenzhou," *Guangxi Normal University*, 119-234.
- Jin, C. (2016). "The transformation and upgrading of rural tourism in Zhejiang," *China Tourism News*, 2, 108-129.
- Ruan, H. & Wu, X. (2015), "Discussion on the development mode and path of rural ecotourism in Zhejiang Province," *Journal of Central South University of Forestry and Technology (Social Science Edition)*, 9, 61-64.
- Sharpley, R. (2002). "Rural tourism and the challenge of tourism diversification: The case of Cyprus," *Tourism Management*, 23(3), 233-44. DOI: 10.1016/S0261-5177(01)00078-4.
- Song, Y. (2007). "Research on the development model of rural tourism in Zhejiang," *Guangdong Agricultural Science*, 38, 187-213.
- Wu, F. (2017). "Research on the transformation and upgrading of rural tourism in Dongtou District, Wenzhou City," *Zhejiang Ocean University*, 80-203.
- Xia, Z. (2012). "An empirical study on consumption intention and behavior characteristics of rural tourism - Taking Wenzhou as an example," *Journal of Zhejiang Industry and Trade Vocational and Technical College*, 12, 54-60.
- Xu, L. (2006). "Research on the development countermeasures of Wenzhou rural tourism," *Zhejiang University of Technology*, 73-89.
- Yan, Z. (2016). "Analysis of the influence of rural cultural industry on rural economic development: Taking Wenzhou City as an example," *Journal of Chifeng University (Natural Science Edition)*, 6, 73-75.
- Yang, J. (2016). "A practical study on the economic development of rural leisure tourism in China - taking Wenzhou as an example," *Journal of Chifeng University (Natural Science Edition)*, 2, 72-74.

Yu, X. & Guo, X. (2017). "Research on financial support for Wenzhou rural tourism development under the background of 'Tourism +'." *Special Economic Zone*, 5,74-77.

Zheng, Q. (2014). "Reflections on the development of rural tourism economy in Luxi Township," *Central China Normal University*, 108-210.

Zhu, L. & Liu, Y. (2015). "Research on the operation mode of Zhejiang rural tourism circular economy," *Journal of Anhui Agricultural University (Social Science Edition)*, 24, 32-36.

BOOK REVIEWS



A Meeting of Masks: Status, Power and Hierarchy in Bangkok

Sophornvaty Vorng

Copenhagen: NIAS Press, 2017

ISBN: 978-87-7694-197-0

XII + 194 pp.

It has been said often enough to have become something of a cliché that the old boast that Thailand was never colonized by a European power should be amended to Thailand was colonized by Bangkok to prevent European powers from doing so. As a result, Bangkok has treated the rest of Thailand as a site of resource extraction and marginalized its people, consigning them to a subordinate status. This way of thinking is usually followed with the counterpointing of the capital city with the northeastern region known as Isan, where people are strongly connected with Lao cousins across the Mekong. Every aspect of the former is considered superior to that of the latter, from dialect to height to skin colour and everything in between. The reality, of course, is somewhat more complex than this but it works as a framing mechanism for considering the nature of Bangkok vis-à-vis other parts of the country. In particular, in the case of *A Meeting of Masks*, it is a background for the study of middle-class residents in a country in which until recently there were very few middle class people outside the metropolis – that situation has changed since Sophornvaty Vorng began the fieldwork reported on in this book and now not just a second tier of cities (e.g., Khon Kaen, Chiang Mai and Chonburi) have become complex urban developments in their own right but a third tier of what were once market towns and provincial capitals such as Roi Et, where my family and I spend time, and which now boasts an airport, shopping centres, international restaurants and so forth. However, the fieldwork began in 2005 and that process was nascent. Her purpose initially was to study the nature and characteristics of Bangkok's emergent middle classes but this developed as a result of political events in that decade and so she observes:

“... I extended the scope of my analysis beyond and account of everyday middle-class practice in Bangkok and now also engage the politico-historical undercurrents that are transforming Thailand. In so doing, my goal is to critique, rather than reproduce, simplistic representations of a rupture between rural and urban Thai society (p.9).”

To achieve this, Vorng has conducted an extensive programme of personal interviews and focus groups, mostly with people who are considered to be part of the middle-class but also with quite a few of the upper-class people who Thai people call ‘hi-so’ or high society. As the purpose of the research denotes, there are not many working-class voices to be found here. In general, the presentation of the findings is handled well and the secondary literature is integrated logically into the text. The best chapters are those which focus on behavioural issues, for example with respect to the calculations people make concerning which shopping centres would make them feel welcome and which are too intimidating to enter because they are clearly designed for more hi-so customers, as well as the understanding and uses of connections and privilege. Less

successful are the chapters in which there is a political element, such as the consideration of the ‘yellow shirt’ People’s Alliance for Democracy (PAD) occupations of parts of the city and airports, ostensibly in opposition to the democratically elected government. Whether for reasons of self-preservation, which would be understandable if she plans to work in Thailand again, she displays little awareness of the meaning of these events beyond a rejection by the middle-class of the voting power of the working-classes. Even so, there is certainly space for this kind of qualitative work in exploring class formation and the social relations of that process in a specific context.

Class formation and reproduction in Thailand is different from how it takes place in the west for a variety of structural reasons. One of these is the antecedent class system and its reliance on an extensive system of slavery. This was still in full operation when the period of colonization came to Southeast Asia and it meant that Thailand, Siam as it was then known, did not undergo an industrial revolution or transformation of its own. Instead, important connections of the absolute monarchy were given responsibility for specific economic activities under the prevailing *kin mueang* (‘eat the state’) concept, which allowed those given authority to use the revenues due to the state for their own purposes as long as the job is done. This enabled a number of Sino-Thai merchants to create financial dynasties which are in some cases still dominant today. Secondly, Thai Buddhists have a cosmological view in which all living creatures are arranged in order on a vast pyramidal frame. The position of an individual within that framework depends on good karma (*bun*) that has been accumulated during the course of numerous past lives and manifested in the social positions of the current life. People who are born into privilege deserve the deference of the lower orders not just because of their wealth, therefore, but also because of their superior spiritual nature. People born poor or deprived in some other way, therefore, deserve to be in that position because of lack of accumulated *bun* and any attempt to move up in society is to be treated as contrary to the principles of Buddhism. In neighbouring countries which underwent a Communist revolution, Laos, Cambodia and Vietnam, this could only be achieved through the eradication of this belief system and, since it is Theravadin Buddhism that is involved (i.e., right doing rather than right thinking), through the elimination of the monkhood. Religious conservatism in Thailand is, consequently, an important means of upholding the existing system of social relations. Within this superstructure, Vorng identifies areas of intense competition and contestation as middle-class Thais seek to improve their quality of life and extend their own networks. At times it all seems a little pointless and resembles nothing so much as one of the many British sitcoms featuring the blundering attempts of bourgeois couples struggling to achieve recognition in the slightly more rarefied social circle to which they aspire. It may not be that important but it obviously matters to those involved because they expend so much time and energy on the struggle. This book rather celebrates that struggle.

John Walsh, Krirk University

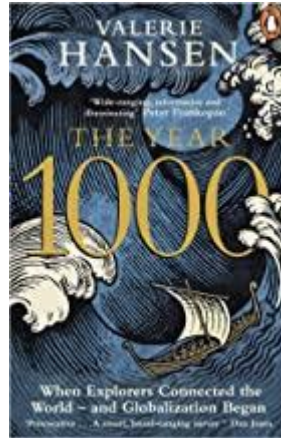
The Year 1000: When Explorers Connected the World

Valerie Hansen

New York, NY: Scribner, 2020

ISBN: 9-781982-144494

308 pp.



Globalization – the increasing homogeneity of production and consumption around the world – is often written of as if it began towards the end of the last century when, in reality, it has been taking place for much longer in one form or another. Quite how much longer has been a subject of debate. Some have considered the beginning of the period of European colonization to have been the spur to growth of this sort, although the developments were mainly limited to trade and investment for members of the same country, albeit with some scope for local actors to find a role for themselves. Proponents of world systems theory (e.g., Wallenstein, 2004) generally refer to the year 1450, at which the capitalist system is considered to have begun in earnest. Valerie Hansen, in *The Year 1000*, argues for an earlier date, as the title of the book might suggest. Her argument is that increased mobility through boat technology enabled some intrepid people more easily to move to every part of the world and to be able to insert themselves into pre-existing local trade and influence networks. As she puts it:

“The events set in motion by the year 1000 were a significant point in humanity’s evolution, and they’ve produced both good and bad effects. The blazing of global pathways caused fertilization and infection, intellectual enrichment and cultural fragmentation, the speed of new technologies and the extinction of traditional crafts. The pathway encouraged *both* fraternization and conflict. They opened some people’s eyes to possibilities they’d never glimpsed but also hastened the subjugation of those who were less able to fend off domination (pp.4-5).”

She correctly identifies this form of confrontation as leading to a form of Schumpeterian creative destruction, with winners and losers being created. This is presented through the prism of individual episodes: Vikings travel to North America (and possibly further south) and kill the first people they meet, while then apparently suffering the same fate in due course. Captain Cook, on the other hand (and sometime later), treats the Tahitian navigator Tupaia with respect and in return is given knowledge that allows him to draw a map with 130 island locations accurately depicted. There is, in other words, little ideology in these meetings other than individual virtue or vice (or perhaps a learned form of behaviour from a successful predecessor). No doubt there has always been a role for the actions of an individual but this approach does little to explain the creation of empires, the suppression of local people and the systematic extraction of resources that we have seen so many times throughout history. Instead, people are pragmatic – kings and rulers change religions based on what may bring them advantage rather than through conviction and their people tend to use the same calculus for their own decisions. There is extensive use of slavery (she seems to have been influenced in this regard by the recent work of Scott, 2017) but this is presented as a means of

solving a lack of labour. There are no slaves in China, therefore, because of the huge numbers of people who can be put to work when necessary. While she acknowledges the scale of the trade in slaves, it does appear that she has a tendency to see it, at least in part, as another example of the ingenuity of entrepreneurial establishment of new networks or by joining together new and existing networks. On the other hand, she does point out some of the instances of violence against the incomers and their agents who are associated with change and loss of privilege and status for some. However, these are also presented as being human nature and a more or less rational response to the situation as it exists.

The book takes the form of a travelogue around the world in the eponymous year. Of course, that actual year is somewhat symbolic as the date of the various events slides back and forth a little bit as it proves necessary. Hansen does not provide any explanation for why a global phenomenon such as globalization should have taken such an important stride forward in a single period of time and there does not seem to be any particular connection between, for example, the Viking expansions by sea to the west and by land to the east and the ability of South Sea islander people to travel beyond the horizon to previously unexplored islands. There have been more convincing attempts to explain change as the result of technology or diseases, for example in the case of the Mongol Empire and the creation of a post system that enabled information to flow across the length and breadth of the Eurasian land mass at unprecedented speed (Man, 2016). Being able to take advantage of that facility would enable a business leader to create competitive advantages in ways that are described by established international business models (e.g. Dunning, 2015).

The style of the book is one of popular history – the author is a Professor of History at Yale University and it is certainly welcome to see world-leading academics presenting their accumulated knowledge to the public in an accessible form. There are no footnotes. I know that it is often said that general readers do not like footnotes but here there are none at all when they might have been tucked away discreetly at the end of a chapter or even the end of the book. Instead, there is a section of endnotes with page numbers and the text which would have been given a footnote rendered in bold. Is this really better? I imagine the publishers must know what they are doing.

Overall, this is quite an enjoyable book to read and if it inspires a greater interest in history, especially global history, then that is surely a good thing. It is nevertheless true that the main premise remains flawed.

John Walsh, Krirk University

References

- Dunning, John H. (2015). “The eclectic paradigm of international production: A restatement and some possible extensions.” In: Cantwell, J. (eds) *The eclectic paradigm*. Palgrave Macmillan, London. https://doi.org/10.1007/978-1-137-54471-1_3.
- Scott, James C. (2017). *Against the grain: A deep history of the earliest states*. New Haven, CT and London: Yale University Press.
- Man, John (2016). *The Mongol Empire: Genghis Khan, his heirs and the founding of modern China*. London: Corgi Publishing.
- Wallenstein, Emmanuel (2004). *World-systems analysis: An introduction*. Durham, NC and London: Duke University Press.

The Care Crisis: What Caused It and How Can We End It?

Emma Dowling

London and New York, NY: Verso, 2021

ISBN: 9-781786-630346

250 pp.



***What Caused It and
How Can We End It?**

In this powerful, credible and well-argued book, Emma Dowling considers the issue of care, what it is, how it is provided and what good it does in the context of the UK. She begins with the impact of austerity and the concatenation of effects it has had in combination with Brexit and the coronavirus pandemic. This situation has revealed the insufficient staffing and resources available for the entire system of care, from that needed by the very youngest to the elderly. Care, she claims, is in crisis and this provides one of the main framing devices of the book:

“In an unequal world, no crisis affects everyone equally. To speak of crisis is thus to ask the question, a crisis for whom? It means to highlight class and inequality in the way the crisis is experienced, and in the way that care is organized to entrench division and pit us against one another. It means asking: who is cared for and who is not (p.6).”

The examination of care is, therefore, a deeply political issue because it involves the distribution of scarce resources – even scarcer because of the events mentioned above. Recent Conservative Prime Ministers (and there may be another one in post by the time this review is published) have made it very clear that the resources that do exist are distributed either for naked electoral gain or for ideological purposes which reward the rich and punish the poor. It is very clear that the distribution of resources reflects political choices and the conception of what is possible. Money is immediately found to bale out the banks but when it comes to hungry children and homeless people, there is, as Theresa May put it, ‘no magic money tree’ to provide the funds needed. However, for the current incumbent, Liz Truss, the magic tree can at once disgorge up to £65 billion in unfunded tax cuts that would overwhelmingly favour the rich and intensify both inequality and public squalor. It is a particularly timely moment, therefore, to consider in detail the impacts that these decisions have on actual people, focused particularly on the UK but with conclusions that are widely generalizable.

Care is, fundamentally, a social activity that has been historically provided mostly by women. It is part of the endless demand for domestic and emotional labour that households generate. In the premodern world, this demand would have been met unceasingly by women and a few others in an unchanging routine. However, modernity, defined here as the onset of economic development, meant important changes in social relations, not the least of which is the removal of women from the domestic workplace and their entry into the industrial workplace. As Dowling puts it, “As more women have entered the labour force without a significant transformation of the sexual division of labour, this reproductive resource has been depleted (p.194).” At the same time, the Taylorisation of work has meant that people who once had the time

and space to do their jobs properly have found both squeezed so that the social element of the process has been ended. This is done for the sake of efficiency. I know from an anecdotal basis how this has worked. My father spent most of his working life as a postal worker. For years, he had a round across local areas in Berkshire that were still mostly rural. He would ride his bicycle to sometimes remote communities or households where no one else might have visited all day. He would know the people on the round and they would know him – part of his job was to represent the state in its absence by checking whether everyone was all right or whether there was a need for extra help. Naturally, doing all of this took a little extra time. Technology and then neoliberalism demanded changes: deliveries could be done more quickly and fewer workers would be needed, thereby saving money for the taxpayer. Delivery staff would be moved from round to round so that relationships would not be established with customers that would slow down the process. Customers would be issued with a call centre number if they wanted to talk about the service they had received. This process is all the more intensive with the case of care because providing care properly requires not just time but the establishment of trust. Instead, care workers are forced to spend less time with each person, so their case load increases and the overall labour cost is decreased. It is now common for a care visitor to the house now to be required to spend less than 15 minutes inside. Even that is not enough for the sake of efficiency as the care worker is paid only for the time spent inside and not for the time travelling from place to place. The work has become precarious and fewer people are willing to endure these privations and the ones that do suffer extra stress and alienation. Dowling includes stories of care workers in residential homes who are called upon to deal with disruptive behaviour by some individuals. Low-paid workers with little motivation, who might even be agency staff with no connection to the home, would deal as best they could with the disruption on a daily basis. Previously, before the work became precarious, the care worker would have spent time with the disruptive individual to seek to identify the causes rather than the symptoms and thereby find a solution to the disruptive behaviour. This is happening at the same time that freedom of movement has been ended and contributed to a shortage of labour willing to work in such poor conditions and for such low wages.

Dowling's work is particularly strong when she considers these aspects of care and she is acute when it comes to identifying the creeping privatization of services and the necessary change of priorities that entails from providing good care to fellow citizens (well, subjects) and the extraction of profits from them. There is also a chapter on self-care and the relationship of the individual to the online world in that context which is interesting but feels as if it does not really belong with the rest of the book but was, instead, included in the book proposal and, so, here it is. There is, of course, a conclusion that seeks to draw together all that is covered and to provide some recommendations for how things might be made better, which suffers from the problems that all such prescriptions tend to encounter – it is not possible to say that we should go back to how things were before and the application of the now-you-see-it-now-you-don't magic money tree would be unconvincing. As a result, it is necessary to come up with some new ideas which non-specialist readers might struggle to imagine in detail.

The current situation in the UK is difficult enough (I am able to observe it from a distance) and it seems likely to become worse very quickly with an economy in which the markets are rapidly losing confidence, thereby adding transaction costs to nearly every agreement. The cost-of-living crisis is worsening and a difficult winter is looming in which the National Health Service may be facing an existential crisis. Dowling's work shows what is likely to happen to a whole range of essential public services, if they still continue at a meaningful level.

John Walsh, Krirk University

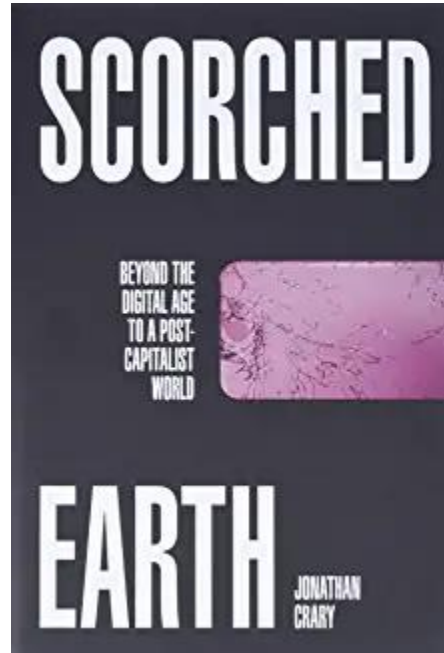
Scorched Earth: Beyond the Digital Age to a Post-Capitalist World

Jonathan Crary

London and New York, NY: Verso, 2022

ISBN: 9-781784-784447.

134 pp.



“If there is to be a livable and shared future on the planet, it will be a future offline, uncoupled from the world – destroying systems and operations of 24/7 capitalism (p.1).”

The penetration of the online world into every nook and cranny of our lives is so debilitating that the only hope for the future is for it to be eradicated in its entirety. That the online world is controlled by a small number of ‘sociocidal’ corporations means, inevitably, that all remaining aspects of social relations have been commodified, with our supposed leisure activities becoming work on behalf of the corporations and our presence a form of relentless competition to be liked and retweeted. The attack on the online world is not unusual – it was nicely done by, for example, Davies (2020) among others. However, most observers, while decrying the negative aspects of online activities, nevertheless assume that it must persist into the future with the hope that it could somehow be tamed and rehabilitated. It seems, after all, difficult to imagine moving towards a means of controlling the climate emergency without online meetings and communications, sharing of information to co-ordinate production and distribution and just generally living the lives to which we have rapidly become accustomed. Crary argues against this position: the Eurocentrism of the imposition of western technology not only intensifies the inequalities that are embedded within the logic of capitalism but also ensures that no one is permitted to escape the worldwide matrix of such unequal relations. Capitalism requires resources and, in a world of scarce resources that means that conflict is part of everyday life and must be presented as such. The neverendingness of the need for continued production and accumulation means a constant search and struggle for resources that results in the logical conclusion of scorched earth capitalism. To avoid the looming destruction of the Earth as a habitable planet, therefore, it is necessary to dismantle every part of the networks and platforms that support the corporations fulfilling their devastating destinies.

While I am open to this argument, on the whole, without necessarily agreeing with it, I find there are some epistemological issues which prevent me from engaging with it fully. Fundamentally, the problem is one

of evidence. It is possible to make an argument without a foundation of evidence (there are numerous examples of people doing just this using everyday media) but such arguments do not convince the sceptical mind and eventually will be dismissed. However, it is also possible to mount an argument based on evidence which is not visible to others and this can be just as unconvincing. When authors rely on a common core of agreed truths that do not need to be stated or even acknowledged – like Christian evangelists and the King James bible or Foucault's relationship to Marx – then those who are not part of the same system of belief wonder how assertions can be supported. This is not what Cray has done but the result is in some ways similar. Assertions are made, many provocative and controversial, without either direct evidence to support them or, so far as I can tell from inspecting the references provided, citations from other works which would provide that evidence. Instead, the argument is supported by conceptual and perhaps aesthetic means. Consider, for example, the development of the argument on pages 101-4 about seeing and the eye. Cray begins by discussing the ways in which platform capitalism requires the movement of the eyes and, at the same time, subverts the traditional and historical forms of eye movements that play such an important part of the establishment of social relations. The various forms of eye contact are gone through and then we reach this passage:

“How often have we noticed of someone we know well that the colo[u]r of their eye shifts in different light? A wonder of the iris is that, for an observer, it is never identical to itself: its colo[u]rs are not static and thus unpossessable. Hegel, in his Lectures on Art, remarked on the singular brilliance of the iris and declared that it could never be authentically depicted in art (p.104).”

This concludes the paragraph and the next begins with an excursion into the work of the art historian Hanneke Grootenboer who, like Hegel, does not appear anywhere else in the text. This form of development of a theme is what I describe as ‘aesthetic,’ in that they seem to rub along together reasonably well but are based on reasoning rather than science. The relationship between the different authors is not philosophical (or at least is not laid out along those lines) or evidential but imaginative. I do not want to think of myself (and would not want others to do so either) as a small-minded Anglo-Saxon empiricist but I want arguments to help mobilise movements to bring about an end to inequalities, commodification and the climate emergency that can be used in conflict of discourse and these I would find difficult to deploy.

I note that the author is a professor of modern art and theory and that this book is described, on the book cover, as an ‘essay’ and a ‘polemic.’ Certainly it does not have any great length to it. It seems to me to have, in terms of structure and method, to have a similarity to Benedict Anderson's (2006) *Imagined Communities*, which similarly skipped from one text or author to another, never to return, in order to construct a proposed model for understanding a previously little explored phenomenon. Anderson's book is more successful in this regard.

Scorched Earth is a powerful read with some innovative and insightful thoughts about the nature of capitalism and its destructive impact on the world. It should inspire many readers to think again about the way their everyday lives are constructed.

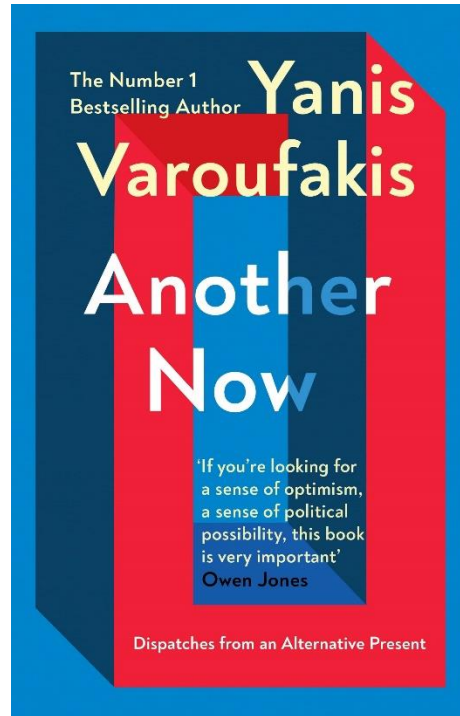
John Walsh, Krirk University

References

Anderson, B. (2006). *Imagined communities*. London and New York, NY: Verso [originally 1983].

Davies, W. (2020). *This is not normal: The collapse of liberal Britain*. London and New York, NY: Verso.

Another Now: Dispatches from an Alternative Present
Yanis Varoufakis
London: The Bodley Head, 2020
ISBN: 9-781847-92564-
234 pp.



The observation that “It is easier to imagine the end of the world than it is to imagine the end of capitalism,” often attributed to Slavoj Žižek, has been repeated so often that it has become something of a cliché. It almost plays into the claim of the Thatcherite neo-liberals that TINA – there is no alternative. Yet the limits of neoliberalism appear to have been reached with the clownish antics of the new British Prime Minister Truss and her old Etonian Chancellor Kwarteng. Their attempt to repudiate the previous 12 years of dismal misrule by their own party through a further lurch to their right, borrowing to offer unfunded tax cuts to the very richest while threatening to cut the already meagre benefits offered to the most vulnerable during a cost of living crisis led to the immediate crashing of the pound which then had a significant impact on UK government bonds which then threatened a number of pension funds with immediate closure and required the Bank of England to intervene with a program of asset-buying costing up to £65 billion. This must be paid for through higher mortgage payments for unknown years to come. It also led to a revolt within her party’s ranks which seems likely to extinguish her political career. This has been followed by more austerity for the poor and working people of the country. In short, there is a need to articulate what alternatives there might really be that would offer better, more inclusive and equitable futures that those currently available.

This book, by politician and economist Yanis Varoufakis, represents a detailed and thoughtful attempt to provide such an alternative, as indeed the title proclaims. Varoufakis has form when it comes to dealing with the so-called adults in the room when he was part of the Greek government facing down EU representatives wanting to bring his country to its knees as a consequence of failing to adhere to capitalist policies to the extent expected of them. As a result, he will at least have an incentive to think about the issues deeply.

The book itself is divided into three sections, more or less. In the first section, we are introduced to the three principal characters – the ace technologist, the investment banker and the professional protester – and then the first of these establishes companies and machinery that enable him to communicate with an alternative

version of himself from a parallel universe. This is quite carefully set up so that the amount of information that can be transmitted for reasons of cybersecurity rather than arbitrary plot devices (I rather suspect that editorial assistance has been provided for the first and third parts of this book in particular). This is the critical part in the narrative: the alternative dimension people have taken the opportunity provided by the banking crisis and subsequent crisis of austerity to make dramatic changes that, in our world, were ignored in favour of bailing out capitalism by squeezing more out of the working classes. Finding out how this was attempted and what ramifications flowed from it constitute the second part of the book and its conclusion involves decisions as to whether the principal characters and some of their close relations are willing to cross to the other side. The narrative is constructed largely from dialogue and draws upon the author's Greek heritage in terms of form and also some concepts and vocabulary. However, while Varoufakis is a thinker who can tell a complex story well, he is not really a poet and the best that can be said of the prose is that it is functional. That, though, is not how the book will be judged – it will be judged on the extent to which the alternative economic system appears to be persuasive. So what does it include?

Varoufakis purveys a society which has abandoned banking and share ownership in favour of a national, universal banking system which provides a guaranteed minimum income and savings fund which can be supplemented by participation in worker-owned companies, as well as government organizations. This solves a lot of problems relating to the existing capitalist system in that it enables resources to flow to deserving companies which provide excellent goods and services rather than the monopolistic competition we most commonly face. It also rewards good personal behaviour, such as the ability to get on with other people, to make decisions fairly and without bias and so forth (bonuses are awarded based on the votes of other employees). This system is elaborated upon and the main characters argue through constructive debate. As a result, the system that has been devised has become quite complex and nuanced. Would it work? Well, one of the tests of a revolution (sometimes it is a test to destruction) is what to do with those who refuse to accept that the revolution has even taken place? Those who, as we see so often these days in an age of hyper-polarisation, have no time for facts or objective reality? Those who are willing to turn to violence to prevent meaningful change, even if it would directly benefit them and their households? Such questions cannot really be answered because of the way that the situation has been constructed. It would, presumably, require a more extensive examination of the actually existing situation and how it might have developed differently. Such a book would be likely to occupy rather more than the nicely-spaced 234 pages of this volume and would be less likely to have many people reading it. The compromise between readability and comprehensiveness is a tricky one and the decision that has been taken here appears to have been just about well-managed.

John Walsh, Krirk University

