



**STUDY ON THE DEVELOPMENT OF HIGHER EDUCATION
SERVICES TRADE IN HAINAN --A CASE STUDY OF HAINAN
LINGSHUI LI'AN INTERNATIONAL PILOT ZONE**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE MASTER'S DEGREE IN BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY**

2023



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This Independent Study has been Approved as a Partial Fulfillment of the
Requirement of an International Master of Business Administration in International
Business Management

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Title: Study on the Development of Higher Education Services Trade in Hainan -- A Case Study of Hainan Lingshui Li'an International Education Innovation Pilot Zone
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11 / 9 / 2023
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ABSTRACT

The purpose of this study is to analyze the current development status of international students in higher education in Hainan, and to take the Li'an International Education Innovation Pilot Zone in Lingshui, Hainan as a research case in the context of the current development of Hainan Free Trade Port. The two objectives of this study are: 1) to understand the current development status of international students in higher education in Hainan; 2) Identify the problems in the development of international students studying in Hainan's higher education and provide suggestions.

This article adopts a quantitative research method, starting from the principle of comparative advantage, and takes international students from the Lingshui Li'an International Education Innovation Pilot Zone in Hainan as the research object. Through distributing and collecting questionnaire surveys, and organizing and analyzing the survey data of international students in the Lingshui Li'an International Education Innovation Pilot Zone in Hainan. After the study, the result founds that: Firstly, the educational products and teaching quality of Hainan's higher education lack competitiveness, and it is necessary to improve the specialization and diversification of educational products and teaching quality; Secondly, the economic and policy support system required for Hainan's higher education service trade is not perfect enough. It is necessary to strengthen the development of Hainan's economy and improve the relevant systems for international students in Hainan Province; Thirdly, the international influence and external publicity of Hainan's higher education are insufficient, and it is necessary to strengthen the international publicity of Hainan's higher education. I hope that this study can provide more experience and reference for other researchers, and be helpful for the development of international students in Hainan's higher education.

Keywords: higher education service trade, international students, hainan Lingshui Li'an International Education.

ACKNOWLEDGEMENTS

First of all, I sincerely express my gratitude to my tutor who is knowledgeable, self-disciplined, and innovative. His selfless work attitude and innovative spirit deeply influenced me. Secondly, I would like to say thanks to my classmates and friends who have been helping me, and have put forward many valuable suggestions in the thesis-writing process. Finally, I would like to express my special thanks to my family for their understanding and support. In a word, thank you for all you have done for me.

ZHOU WENLIU

2023



Declaration

I, ZHOU WENLIU, hereby certify that the work embodied in this independent study entitled “Study on the Development of Higher Education Services Trade in Hainan -- A Case Study of Hainan Lingshui Li’an International Education Innovation Pilot Zone” is the result of original research and has not been submitted for a higher degree to any other university or institution.

Wenliu Zhou

(ZHOU WENLIU)

Apr 1, 2023



CONTENTS

Abstract	I
ACKNOWLEDGEMENTS	II
Declaration	III
CONTENTS	IV
TABLE CONTENTS	VII
FIGURE CONTENTS	VIII
Chapter 1 Introduction	1
1.1 Background of the Study	1
1.2 Problems of the Study	3
1.3 Objectives of the Study	3
1.4 Significant of the Study	3
1.5 Limitation of the Study	4
Chapter 2 Literatures Review	6
2.1 Terms and Definition Used in This Study	6
2.1.1 Higher Education Services Trade	6
2.1.2 The Relationship between International Students and Overseas Consumer Services Trade in Higher Education.....	7
2.1.3 LingShui LiAn International Education Innovation Pilot Zone in Hainan	7
2.2 Literatures Review	8
2.2.1 The development history of education service trade in foreign countries.....	8
2.2.2 History of Development of Education Services Trade in China.....	10
2.3 Theory of Reviews	13
2.3.1 Comparative Advantage Theory	14
2.4 Research Relevant.....	15

2.4.1 Multi-sectoral study of China's higher education service trade	15
2.4.2 Multidimensional Research on China's Higher Education Service Trade	15
2.5 Research framework	18
Chapter 3 Research Methodology.....	19
3.1 Introduction.....	19
3.1.1 Quantitative Research Method.....	19
3.1.2 Survey Questionnaire Method	19
3.2 Research Design.....	20
3.3 Hypothesis.....	20
3.4 Population and Sampling	20
3.5 Sample Size and Data Collection.....	21
3.6 Data Analysis	21
3.7 Reliability and validity analysis of the scale.....	22
3.7.1 Reliability.....	22
3.7.2 Validity	22
Chapter 4 Result of the Study	24
4.1 Introduction.....	24
4.2 Results of the Study	24
4.2.1 Survey Content and Analysis.....	24
4.2.2 Survey Results Reflecting Issues	31
Chapter 5 Conclusion and Recommendation.....	34
5.1 Conclusion	34
5.2 Recommendation	34
5.2.1 Government support policies and natural environment	34
5.2.2 Diversify the channels for raising education funds and increase the support for scholarships and grants.....	35

5.2.3 Improving Hainan's policies for international students	36
5.2.4 Improving the Quality of Education Services in Hainan	37
5.2.5 Expanding Hainan's Education Service Export Market.....	39
5.2.6 Improving the management system for exporting educational services	41
5.3 Further Study	42
REFERENCE.....	43
Appendix.....	51



TABLE CONTENTS

Table 3. 1 Cronbach’s Alpha	22
Table 3. 2 Statistical Table of Expert Scores for Content Validity	23
Table 4. 1 Survey questionnaire for students studying in Hainan—A	25
Table 4. 2 Survey questionnaire for students studying in Hainan--B	27
Table 4. 3 Survey questionnaire for students studying in Hainan--C	28
Table 4.4 Table 4. 3 Survey questionnaire for students studying in Hainan--D..	30
Table 4.5 Survey questionnaire for students studying in Hainan--E	31

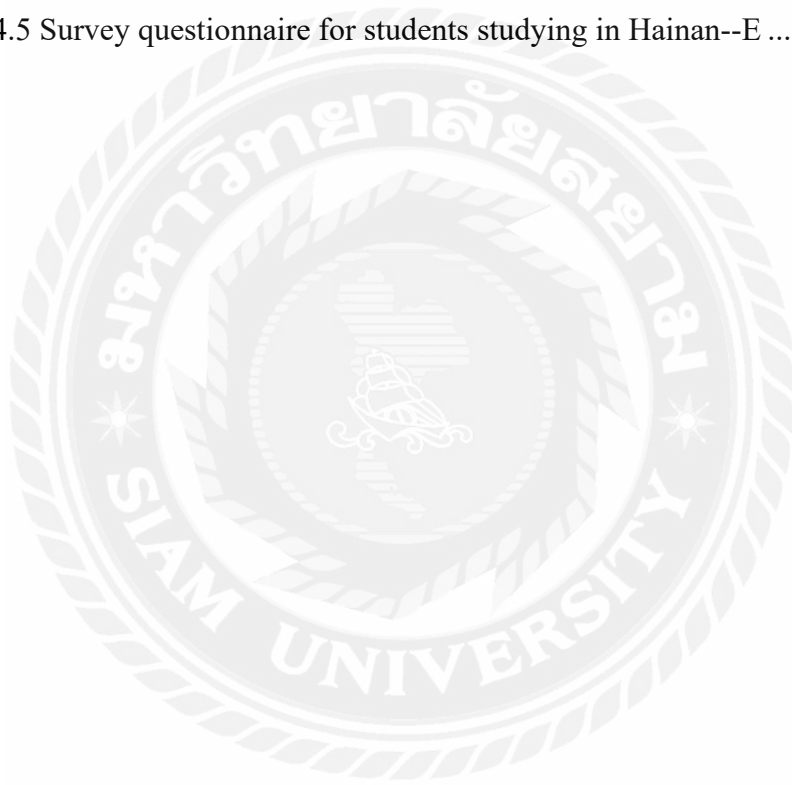


FIGURE CONTENTS

Figure 2.1 Research framework118



Chapter 1 Introduction

1.1 Background of the Study

With the deepening of economic globalization and the rapid growth of international trade in services, the economic benefits brought by higher education services trade have continuously attracted the attention of countries around the world. The trade scale has been expanding and the trade structure has been constantly optimized. As an important component of the service trade, education services trade has been occupying an increasingly important share in international trade in services and has become an important driver of economic growth for various countries (Cao, 2020). In terms of the import of higher education services in China, it is the world's largest source country of international students. From 2016 to 2019, the number of Chinese studying abroad was 2.518 million, of which 712,000 went abroad for study in 2019. China's higher education trade export, on the other hand, developed later compared to developed countries, with international exchanges and cooperation beginning in the 1980s and growing in the 1990s. After joining the WTO, China made great efforts to promote the export of higher education services. Although China's higher education attracted international students, with the number of international students increasing from 168,000 in 2008 to 369,000 in 2016, the growth of its share in the global market for international higher education has been relatively slow compared to the rapidly expanding global market (Huang, 2019).

With the improvement of China's education level and its increasing international influence, many young people from countries along the "Belt and Road" initiative have chosen to study and pursue higher education in China. In 2017 and 2018, the number of international students studying in China was around 490,000, with more than 60% of them coming from countries along the "Belt and Road" initiative (Zhang, & Lin, 2018). According to statistics from the Chinese Ministry of Education, the number of international students studying in China exceeded 440,000 in 2019, coming from 205 different countries and regions, which is a historical record. Currently, China has become the largest recipient of international students in Asia, and its appeal to students worldwide is gradually increasing. International students in China are becoming a large and influential group, playing a significant role in international cultural exchanges. (Wang, 2021).

In 2020, due to the impact of the COVID-19 virus, many students' study-abroad plans were forced to be put on hold, resulting in a decline in the number of international

students. However, the gap between the number of international students studying in China and those studying abroad is still significant. The standard of tuition fees in China is also lower than that of developed countries such as the UK, US, and Australia, resulting in a significant trade deficit in China's higher education services. (Li, 2021).

Currently, many countries have elevated the development of higher education services trade and the enhancement of higher education internationalization to a strategic level, becoming one of their important development strategies (Jiang, Zhong, & Zhao, 2017). On April 13, 2018, during the 30th anniversary of the establishment of Hainan Province and the establishment of the Economic Zone, the Central Committee of the Communist Party of China decided to support Hainan in building a free trade pilot zone and gradually exploring and steadily promoting the construction of a Chinese characteristic free trade port. At the same time, on June 1, 2020, the CPC Central Committee and the State Council issued the Overall Plan for the Construction of Hainan Free Trade Port, which further implemented the policy of expanding education opening up in the Hainan free trade port, starting with the field of higher education: "Allowing overseas high-level universities and vocational colleges in science, engineering, agriculture, and medicine to independently operate in the Hainan Free Trade Port" (Gong, 2019). The Chinese Ministry of Education will provide innovative institutional supply to support the rapid development of international education services trade in Hainan, making Hainan a new experimental field for China's higher education reform to break through the old system and mechanism development barriers under the background of the new era and further expand its openness to the outside world. (Li & Sun, 2021).

The Chinese Ministry of Education and the Hainan Provincial Government jointly planned to build the Hainan Lingshui-Lian Education Innovation Pilot Zone, strategically positioning it as a new highland for China's education opening up to the outside world. Specifically, it is refined into "two zones and two places," with "two zones" referring to the new era of China's education reform and opening up experimental zone and the concentrated display zone for demonstrating the teaching of famous schools at home and abroad. "Two places" refers to the important destination for students from countries along the Belt and Road and the future high-quality international innovation talent training base. (Du, 2022).

The education services trade is a friendly window for Hainan to open up to the world, and it is also an important means for Hainan to drive local economic development. It has significant economic and political significance, Hainan must pursue the internationalization of higher education. In the process of promoting the internationalization of Hainan's higher education services trade, it will present a completely new exploration model, and for this reason, we need to take a fresh look at

the research on the development of Hainan's higher education services trade overseas to consumption. (Rao, 2016).

1.2 Problems of the Study

China is actively building the Hainan Free Trade Port, which is a strategically important decision with profound implications, aiming at the development of a new pattern of domestic and international dual circulation. With strong support from preferential policies for higher education services trade in the Hainan Free Trade Port, it is expected to become a new hub for international development in higher education services trade (Li, Huang & Zhai, 2021).

Looking at the historical development of education in Hainan, the educational quality in Hainan has been lagging behind other provinces in China, and the development of international students in higher education in Hainan has been negligible in the past (Rao, 2016). However, the current situation contrasts sharply with the historical opportunities presented by the development strategy of the Hainan Free Trade Port. As the title of this paper suggests, it focuses on the development of international students in the Ling Shui Li'an International Education Innovation Experimental Zone. Based on the current status of international students in higher education in Hainan and conducting a questionnaire survey, this paper compiles advanced models of domestic and international experiences.

1.3 Objectives of the Study

This research aims to develop effective strategies and recommendations for the development of international students in higher education in the Ling Shui Li'an International Education Innovation Experimental Zone in Hainan. The main areas of research in this paper are as follows:

- (1) To determine the current status of international students in higher education in Hainan.
- (2) To identify the problems in the development of international students in higher education in Hainan and providing recommendations.

1.4 Significant of the Study

The significance of this study on the development of international students in higher education in Hainan can be summarized in the following two aspects:

Theoretical Significance: Higher education service trade, as an important mode of service trade, is a burgeoning and popular research field. The theoretical framework in

this area is still being further developed, and there are significant gaps in applying relevant theories to explore and study regional higher education in the context of international service trade (Rao, 2016). This paper conducts a comprehensive analysis of the current development of international students in higher education in Hainan, using the LingShui Li'an International Education Innovation Pilot Zone as an example, and examines the macro and micro-level aspects of their development. By thoroughly discussing the existing issues and advantages, it contributes to the improvement of theoretical perspectives in the field of higher education service trade.

Practical Significance: The competition involved in the education service trade is international in nature. Currently, developed countries highly value strategic planning for internationalization of higher education and actively attract global talent. However, China still faces imbalances in the development of outbound and inbound international education, with significant gaps compared to developed countries. The international competitiveness, influence, and attractiveness of China's higher education in terms of overseas consumption need to be enhanced. In this context, China considers Hainan as a showcase for its international education initiatives and gradually incorporates the education of international students into national strategic planning. Internationally, there is a high demand for quality in higher education export trade, and Chinese higher education products have relatively weak competitiveness and lack brand influence in the international market. Therefore, conducting an in-depth analysis of the current status and influencing factors of international students in Hainan's higher education, uncovering the underlying causes of export competitiveness disadvantages, and drawing lessons from the development experience of international students in developed countries are of great practical significance. It can help improve the quality of services for international students in Chinese universities, build the brand of "Study in China," leverage latecomer advantages, enhance international competitiveness, and promote the sustainable and healthy development of international students in Chinese higher education (Cao, 2020).

1.5 Limitations of the Study

There are still some areas for improvement in this article. When analyzing the current status of international students in higher education in Hainan, the incomplete nature of the relevant institutional systems in Hainan's higher education service trade resulted in limited data collection. The information obtained through surveys and interviews was only from a subset of participants with high levels of voluntary participation. This article also draws on numerous excellent research theories and practical foundations from existing literature. However, due to the author's limited

writing skills and research capabilities, there are still many shortcomings in the process of writing the paper. For example, the author's unfamiliarity with the SPSS analysis software used for data analysis and the feasibility of the proposed suggestions may need further consideration. These shortcomings may potentially affect the practical implementation of the proposed strategies and methods in the article. The author welcomes criticism and guidance from teachers and senior researchers regarding the shortcomings of this article and looks forward to engaging in deeper communication and exchange with them to contribute to the development of the higher education service trade in Hainan.



Chapter 2 Literatures Review

2.1 Terms and Definition Used in This Study

2.1.1 Higher Education Services Trade

Education services trade refers to the transactional activities and processes of educational services conducted between countries or regions in the form of educational input and output. Education services fall within the scope of services trade and are subject to the rules of the General Agreement on Trade in Services (GATS) by the World Trade Organization (WTO). The education services trade is classified under the 5th category of the 12 major service trades. According to the "Central Product Classification" by the United Nations, education services are classified into five categories: primary education, secondary education, higher education, adult education, and other education (Zhang, 2002).

Higher education services trade is an extension and development of the concept of education services trade in the field of higher education. The concept of international higher education services trade can be summarized as follows: activities of input and output of higher education products or materials conducted in a specific manner for economic purposes between countries (or regions) in the field of higher education (Pang & Ling, 2002).

GATS provides four modes of supply for higher education services trade from the perspective of services trade. These include cross-border payment, which refers to a member providing educational services to any other member without involving the cross-border movement of persons, primarily through distance education; consumption abroad, which refers to consumers moving to the country providing educational services to receive education, mainly through study abroad; commercial presence, which refers to education service providers establishing physical entities abroad to provide educational services; and movement of natural persons, which refers to individuals providing temporary educational services abroad (Xie, 2022).

Before understanding the concept of the higher education services trade, it is necessary to understand the concept of "education services trade." As education is a service activity, education services are the products of educational activities. International academia defines it as the transactional activities and processes of educational services between countries (Jin, 2005). With a deeper understanding of education services trade, the view of higher education as a service product gradually gained recognition in academia, stating that "international higher education services are typical service products with the characteristics of service" (Cheng & Tian, 2004). The commodifiability and tradability of higher education services have been accepted.

Through the consumption of higher education service products, individuals can enhance their labor skills and overall qualities, gain economic rewards and social status. The freedom of education consumers (students) to choose higher education institutions and the heterogeneity among higher education products lead to a competition for high-quality higher education services, which contributes to domestic and international trade in higher education services (Pang & Ling, 2002).

2.1.2 The Relationship between International Students and Overseas Consumer Services Trade in Higher Education.

Cross-border trade in higher education consumption services can be divided into import and export trade. Import trade refers to China purchasing higher education services from other countries, commonly known as studying abroad; export trade refers to China exporting higher education services and receiving international students to study and live in China, commonly known as studying in China (Wen, 2021). This article primarily focuses on the development of international students in China's higher education system, specifically the growth of outbound consumption and export trade in this field.

2.1.3 LingShui LiAn International Education Innovation Pilot Zone in Hainan

With the further development of China's higher education service trade and the implementation of the free trade port strategy in Hainan Province, the Chinese Ministry of Education and Hainan Province jointly issued the "Implementation Plan for Supporting Hainan to Deepen Education Reform and Opening-up." Taking the opportunity of building a free trade pilot zone and a free trade port with Chinese characteristics in Hainan, supports Hainan to undertake the historical mission of regional innovation experiment for education modernization, and creates a new benchmark for the open development of China's education in the new era. Based on the unique geographical advantages of Hainan, education is given priority in the layout to comprehensively enhance Hainan's status and role in the national strategic pattern and education modernization construction. The goal is to promote Hainan to build an international education innovation island. In 2020, the construction of the international education innovation island project was fully launched to promote the soundness of the education public service system with Hainan characteristics. It is expected that by 2025, the education system will be more vibrant, opening up to the outside world in a new way, and various systems will be more mature and standardized. By 2035, the modern education governance system in Hainan will be fully established. To this end, the Ministry and the Province jointly planned to build the LingShui LiAn International Education Innovation Pilot Zone, which is the only key park among the 11 key parks in the Hainan Free Trade Port with education opening up as its core mission (Cheng, & Hu, 2020).

The LingShui LiAn International Education Innovation Pilot Zone is located in Lingshui County, Hainan Province, with a planned area of 12.72 square kilometers. It belongs to a typical tropical monsoon climate, with a total area of 5.81 square kilometers in the entire pilot zone. The starting area is located in the central position of Phase I, covering about 1,200 mu, with a scale of 10,000 students, and officially enrolling students in September 2022. The second phase is the development scope for the integration of industry and education. The LingShui LiAn International Education Innovation Pilot Zone is planned and constructed based on the innovative concept of "large sharing + small colleges." Public facilities such as libraries, public teaching buildings, and sports venues are shared, and each university uses exclusive small colleges according to their disciplinary characteristics. Through the "large sharing" platform, it promotes international education integration innovation of "five mutuals and one co-creation," namely, mutual learning between China and the West, disciplinary integration, communication between humanities and sciences, course selection, mutual recognition of credits, and co-creation of management. Foreign universities can operate independently or in cooperation with Chinese universities, establish colleges or departments, offer only one major, or engage in joint education and course cooperation, and the mode of education is very flexible. Students can participate in international practice courses and international talent internships, realizing the vision of "studying in Hainan = studying abroad." It also provides more choices for Chinese students to study abroad in the post-epidemic era (Du, 2022).

2.2 Literatures Review

2.2.1 The development history of education service trade in foreign countries.

Research on the development and impact of education services trade.

Knight provided a detailed interpretation and analysis of the education service trade provisions in GATS, predicting and analyzing the impact of GATS on higher education in various countries, and suggesting that the role and function of the government in the education service trade transformation (Knight, 2003). Wagner analyzed the problems that exist in the development of education service trade liberalization, while also forecasting the future development trends and directions of education service trade (Wagner, 2003). Robertson, Bonal and Dale believed that GATS would have a certain impact on the formulation of education policies among WTO member countries, and that the education service trade provisions in GATS were binding and compulsory for all member countries, which sets it apart from other international organizations (Robertson, Bonal, & Dale, 2002).

James Giesecke focused on the development of higher education in the field of education service trade, proposing relevant measures to promote the development of higher education service trade in areas such as overseas consumption, talent mobility, cross-border payments, and international cooperation between schools (Giesecke, 2004). Knight also proposed that education, as a service trade, reflects the development trend of marketization in contemporary higher education, and higher education providers exhibit diversified and differentiated features. This situation poses both challenges and opportunities for the development of higher education in developing countries and requires careful handling of possible future situations (Knight, 2006).

Research on the Development Status of Overseas Consumer Education Service Trade.

In education service trade, overseas consumption is the most important mode of trade, and its development speed has been very significant in recent years. Governments and scholars from various countries attach increasing importance to overseas consumption service trade, and there have been many research achievements in this field. Dorothy Olsen and Bohm conducted comparative studies on the development of overseas consumption in Australia and other countries and suggested that strong support from the government and relevant institutions would have a significant promoting effect on the development of this field in Australia. From the government to university scholars, great attention has been paid to education for international students, and significant achievements have been made (Olsen, & Bohm, 2000).

Pederson studied the impact of economic trade between countries on overseas consumption service trade and believed that economic trade exchanges between countries have formed a connecting link between the two countries, which has reduced the cost of talent flow and is conducive to the development of international student education between the two countries (Pederson, Pytlikova, & Smith, 2004). Gregory C and others analyzed the growth of the number of international students in China, and believed that there is huge potential for the development of overseas consumption service trade in higher education in developing countries like China (Gregory, Chow, & Chen, 2006).

Yang R compared the education systems of Western and Chinese countries and identified the differences between different education systems. He believed that establishing a sound and efficient education system as soon as possible is an important measure to promote the development of the overseas consumption service trade in China (Yan, 2010). Weisser analyzed the financial input indicators in the higher education sector of various countries' governments and believed that the development degree of one country's higher education overseas consumption export trade is positively correlated with the country's financial input in higher education. The greater the degree of attention paid by the country to international student education, the higher

the level of the country's higher education export scale will be (Weisser, Bollig, & Doevenspeck, 2014).

International Competitiveness Study on Overseas Consumption and Trade of Higher Education

International competitiveness refers to a country's ability to gain a larger market share and provide more value-added compared to other countries in a certain industry in the international market. The study of international competitiveness can be traced back to Adam Smith's "The Wealth of Nations", in which he proposed that division of labor could increase labor productivity and used labor as the main factor to measure a country's competitive advantage in the international market, and put forward the theory of absolute advantage in trade (Smith, 1972). David Ricardo supplemented Adam Smith's theory of absolute advantage with his theory of comparative advantage in his work "Principles of Political Economy and Taxation" (1817) (Ricardo, 2009).

The theory holds that when a country exports goods that it has a relative advantage in and imports goods that it has a relative disadvantage in, both sides can save labor by specializing in their respective strengths and weaknesses, and obtain trade profits. Michael Porter proposed the theory of national competitive advantage in his book "The Competitive Advantage of Nations", which holds that whether a certain industry in a country or region has strong competitiveness in the international market depends on four decisive influencing factors: production factors, demand factors, related and supporting industries, and enterprise organization and structure, as well as two auxiliary influencing factors: government and opportunity (Porter, 1997).

Guruz based on the push-pull theory and believes that the factors that affect the international competitiveness of a country's overseas consumption and trade in higher education include two aspects: the exporting country and the importing country, and the most important factor is the exporting country, including its economic development level, national infrastructure construction, the degree of the government emphasis on internationalization of higher education, and the quality of higher education, etc. (Guruz, 2011).

2.2.2 History of Development of Education Services Trade in China

Research on the development of China's higher education export trade.

Mo Jiping analyzed the environment that China faced after joining the WTO and argued that China's international competitiveness in higher education must be improved by enhancing the quality of education, adopting a university brand strategy, and expanding the autonomy of universities. Mo also proposed measures such as opening up China's higher education market and strengthening the legal and regulatory construction of the higher education service trade (Mo, 2002).

Su and Huang analyzed the challenges that China faced after joining the WTO, such as the outflow of domestic students, the entry of advanced educational concepts and management models from abroad, and the loss of high-level talent resources. They suggested that China should pursue the path of educational industrialization and implement an efficient talent competition strategy (Su, & Huang, 2003).

Li Jingxian and Qu Shao discussed the development and existing problems of China's higher education service export trade from the perspectives of scale, structure, and other angles. They proposed that the government should increase publicity and provide policy support to promote the export of higher education services through international economic exchanges (Li, & Qu, 2006).

Zhang Guoju reviewed the development history and current situation of China's overseas consumption service trade from the perspectives of studying abroad and coming to China for study. He used the Michaely index and analyzed data from other countries to identify the problems China faced in this field and proposed improvement measures (Zhang, 2014).

Rao Suiqi analyzed the problems in Hainan Province's overseas consumption service trade from the perspectives of import and export. Rao argued that the lack of economic and policy support was hindering the development of the export trade. Rao proposed that the government and universities should formulate policies to attract international students to study in China and to support their work in China after graduation (Rao, 2016).

Tang Jialu analyzed data from the past 13 years and argued that the construction of the "Belt and Road" provides an opportunity for China's higher education export trade. Tang combined empirical research with data analysis and found that economic changes, educational development, policy support, and social changes had a significant positive impact on the development of higher education service exports. Tang suggested that China should deepen economic and trade exchanges with countries along the "Belt and Road," improve the quality of education, improve the policy support system, and promote related industrial cooperation (Tang, 2019).

Research on the export trade of developed countries/regions in higher education.

Deng Weikang analyzed the development of the world's study-abroad market and discussed the position of China in this market. Deng drew lessons from the experiences of Australia and Hong Kong in developing educational service trade and proposed ideas for improving China's competitiveness in the higher education study abroad market (Deng, 2006).

Cheng Jinkuan reviewed the relevant policies of developed countries such as the United Kingdom, the United States, France, and Australia and analyzed their advanced experiences in higher education service trade. Cheng argued that China should use its rich cultural heritage as a foundation, leverage comparative advantages, and actively

promote the teaching quality of professional disciplines such as traditional Chinese medicine, opera, martial arts, and the Chinese language. Cheng also suggested that China should expand its publicity efforts (Cheng, 2008).

Yu Yi selected data of Chinese international students in the past decade, and compared China with countries such as the United States, Canada, and Australia in terms of export market share, specialization index, and revealed comparative advantage index. This analysis exposes the problems and shortcomings of China's education industry and proposes corresponding development strategies (Yu, 2010).

Zhao Yi analyzed the development status and international competitiveness of China and Australia in higher education service trade by using relevant data and indicators. From the aspects of national policy support, the quality of higher education, the marketization of education service industrialization, the promotion of the national language, and highlighting thown characteristics and advantages, Zhao summarized Australia's advanced experience (Zhao, 2015).

Chen Xiaojia used Michael Porter's "Diamond Model" to analyze the factors affecting higher education service trade between China and the United States, and revealed the differences between the two countries from multiple perspectives, such as research funding, faculty allocation, higher education demand, education quality supporting facilities, and government policy subsidies (Cheng, 2016).

Research on the international competitiveness of China's higher education overseas consumption export trade.

Liu Bo and Zhang Li analyzed the distribution of the international higher education service trade market and pointed out that the market is dominated by a few developed countries. China has weak international competitiveness in this field and proposed promoting measures such as developing educational characteristics, adjusting educational structures, and talent development structures (Liu, & Zhang, 2005). Zhang Ya proposed factors that affect the international competitiveness of China's higher education industry based on the theory of competitive advantage, including production factors, demand factors, organizational efficiency, government policies, and cultural traditions (Zhang, 2006).

Wei Hao, Ji Ying, and Zhao Chun analyzed the development of China's overseas consumption service trade from multiple perspectives and used relevant data indicators to analyze the international competitiveness of China's overseas consumption service trade. They believe that although some progress has been made, there is still a large gap compared to developed countries. They proposed improvement measures from the aspects of developing advantageous disciplines, increasing international publicity, and changing education concepts (Wei, Ji, & Zhao, 2010).

Si Yu estimated China's export volume in the field of higher education overseas consumption export trade based on the calculation methods used by developed

countries such as the UK and the US and analyzed the international competitiveness of China's higher education service export based on the estimation results. They believe that China's competitiveness in the international market is weak and proposed suggestions from the perspectives of government policies, culture, and relevant systems of higher education (Si, 2011).

Shi Jie selected five indicators, namely the proportion of R&D expenses, the student-teacher ratio of higher education, the gross enrollment rate of higher education, per capita GDP, and the ratio of fiscal education expenditure, to analyze the competitiveness of China's higher education service trade and found that there are certain deficiencies in these five indicators. They proposed improvement measures at the government level (Shi, 2012).

Jin Niu studied the international competitiveness of China and India in the US overseas consumption export trade, believing that China's export competitiveness to the US exceeds that of India in terms of scale, but lags in terms of structure. They suggested that China should learn from India's development experience relying on economic development and formulating favorable trade policies to improve China's overseas consumption service trade competitiveness (Jin, 2016).

Ling Hao analyzed the factors affecting the international competitiveness of China's higher education service trade using relevant indicators and the gray correlation analysis method. They found that factors such as government fiscal input, social demand factors, the level of university faculty, the student-teacher ratio of universities, and a country's GDP level have a significant impact on the development of China's higher education service trade (Ling, 2018).

From the division of stages in China's education service trade development by domestic scholars, it can be seen that the development process of China's education service trade also exhibits distinctive features of the times, with the education service market gradually opening up and the development level of education service trade steadily improving.

2.3 Theory of Reviews

Through an analysis of previous research findings, it was discovered that both foreign and domestic scholars tend to concentrate on specific theories when studying education service trade, such as the theory of comparative advantage and the theory of competitive advantage. Based on the research objectives, this paper primarily adopts the theory of comparative advantage to investigate the development of international students in higher education in Hainan, building upon the existing research achievements of scholars in the field.

2.3.1 Comparative Advantage Theory

The comparative advantage theory was proposed by David Ricardo in his book "On the Principles of Political Economy and Taxation" (1817) as a supplement to Adam Smith's theory of absolute advantage. This theory suggests that when a country exports goods in which it has a relative advantage and imports goods in which it has a relative disadvantage, both trading partners can save labor through specialization and division of labor, and obtain trading profits. The theory of comparative advantage can explain the reasons for the emergence of overseas consumption trade in higher education: developed countries' higher education service products have an absolute advantage in the international market due to their advanced education concepts, sound education systems, high-quality education, etc. In this competitive environment, developing countries like China are also constantly expanding their exports of higher education services products by leveraging their comparative advantage of lower costs of learning and living. As the demand for higher education service products in various countries around the world continues to grow, and the higher education resources of developed countries such as the United States are limited, this has created opportunities for the development of our country's exports of higher education service products. (Ricardo, 2009)

Before the 1970s, the comparative advantage theory was considered the theoretical foundation of international trade, but it also has certain limitations, such as conducting only static analysis of the international market and ignoring the uncertainty of market competition, ignoring factors such as capital and land, and not considering the impact of factors such as government regulations, international exchange rates, and consumer preferences in different countries.

In summary, scholars have based their research on the development of higher education services trade on relevant theories from other fields and extended and expanded upon them by considering the specific characteristics of higher education services trade. Comparative advantage theory explains the dynamic causes of higher education export consumption trade, suggesting that all countries can utilize their comparative advantages to obtain economic benefits in the international market. National competitive advantage theory explains the factors that influence higher education export consumption trade in different countries. The Push-Pull Theory explains the factors that influence students' decision-making process in choosing to study abroad from both external and internal perspectives (Cao, 2020).

2.4 Research Relevant

2.4.1 Multi-sectoral Study of China's higher education service trade

Jin Xiaobai conducted a detailed analysis of the development of China's education service trade using relevant legal knowledge. It was found that China's insufficient understanding of trade openness in education has led to a significant trade deficit and serious legislative lag in the education service trade, which has affected the healthy development of China's education service trade. It was suggested that China should actively improve the legislative system and content of education service trade to protect and promote the national culture and promote the healthy development of education service trade (Jin, 2008).

Against the backdrop of the launch of the China-ASEAN Free Trade Area, Liu Yuanyuan provided a detailed overview of the commitments and barriers of various countries in education service trade in the economic sector. Drawing on the education service trade cooperation mechanism of the European Union and considering China's specific national conditions, relevant legislative suggestions were proposed to address the problems in China (Liu, 2010).

Cai Kun also analyzed and summarized the development of China's education service trade comprehensively from an economic perspective, and pointed out policy recommendations for accelerating development, changing trade deficits, and enhancing international competitiveness in China (Cai, 2006).

2.4.2 Multidimensional Research on China's Higher Education Service Trade

Many scholars have conducted longitudinal comparative analyses of China's overseas consumption of higher education service trade, reflecting the current status and problems of China's overseas consumption of higher education service trade through data such as the number of international students, distribution regions, source regions, and major distribution, and providing corresponding countermeasures and suggestions. Xin Lingmei believes that China's development of education service trade for overseas consumption has become increasingly urgent after China acceded to the WTO. However, China's education service trade for overseas consumption is imbalanced and geographically political, with high fees and clear political and economic influences. Therefore, Xin Lingmei suggests that China should change its concept and provide a relatively relaxed environment for the development of education service trade for overseas consumption, and solve the problem of tuition fees for international students (Xin, 2004).

Jiang Kai analyzed the number and distribution of international students coming to China in recent years and found that there are problems such as the lower education

level of international students compared to developed countries, the uneven distribution of their majors and source regions, the lack of attention to the strategic position of developing international student education, and some policies that are not suitable for the development needs of international student education. Therefore, Jiang Kai proposes that China should pay attention to the development of international student education to enhance China's soft power and drive economic growth (Jiang, 2010).

Liu Ming compared China's current situation in providing higher education service trade for overseas consumption with that of developed countries represented by Australia and the United States in terms of the source markets of international students and the ways of providing education service trade. Liu Ming pointed out that China has a problem with single development mode and suggests that China should learn from the experience of developed countries, adjust policies to attract more international students to study in China, and open up markets and encourage other ways of providing education service trade to achieve the goal of promoting trade development comprehensively (Liu, 2005).

In the competition of higher education service trade among various countries, the United States has always been in a leading position. Fu Songtao and Yang Xiao compared and analyzed the similarities, differences, and gaps between China and the United States in the main contents and ways of providing education service trade. Based on China's commitment to opening up the education service market after joining the WTO, they further proposed relevant countermeasures to improve and strengthen the development level of education service trade (Fu, & Yang, 2005).

Dai Xianfeng also regards the United States as a comparative object and believes that the advanced model of US international student education, which has actively adjusted policies to promote the economic development of international students after major historical events such as "9/11" and the financial crisis, and has insisted on welcoming outstanding talents from all over the world to study in the US, has reference significance for China to better promote international student education (Dai, 2012).

Gu Hailing used the UK as a comparative object and conducted a comparative analysis between China and the UK from the national and university levels. Gu Hailing believes that China should learn from the UK and promote the development of overseas consumption of higher education service trade from aspects such as strengthening intergovernmental degree recognition, increasing overseas publicity efforts, and accelerating the development of international cooperation in running schools (Gu, 2005).

Meng and Fang believe that the UK has adopted a series of policies, such as reducing tuition fees, strengthening promotional efforts, using innovative teaching methods, and improving standardized study abroad systems, to enhance the international competitiveness of higher education and attract more international

students to study in the UK, achieving significant results. They further suggest that China should draw lessons from the UK's experience and further improve its policies for educating international students (Meng, & Fang, 2008).

Li Dongmei argues that comparing China's education service trade in overseas consumption with that of Australia can visually reflect the problems that China faces, thus providing corresponding countermeasures for China's education service trade in overseas consumption (Li, 2009). Zhang Ruoqiong also compares China with Australia, believing that Australia's successful development of international education service trade is attributed to the government's guidance and strong support and that the main way to promote the export of educational services and international education development strategy is to establish a specialized management department, coordinate and solve problems encountered in the development process of educational services, and timely revise policy measures to make the types of educational services more diversified and improve the competition mechanism (Zhang, 2009).

Zhao Suping uses export market share, trade specialization index, and revealed comparative advantage index to compare the gap between China's education services and those of developed countries, and conducts an empirical analysis of their roles in economics and technology, to formulate reliable development strategies to effectively enhance China's international competitiveness in education services (Zhang, 2008).

Qiang Yongchang et al. measure the competitiveness of China's education service trade in overseas consumption using both theoretical and empirical methods and conclude that increasing investment in education, strengthening the construction of teaching staff, and improving the level of urbanization can improve the environment of education services and enhance the openness of the country, which can promote the development of education service trade in overseas consumption and increase the scale of international students (Qiang, Zhang, & Guo, 2007).

Based on a comparative analysis of the development of education service trade in the United States, Australia, Russia, and India, Song Yan concludes that GDP and increasing government investment can have a positive impact on the number of international students coming to China, but insufficient teaching staff conditions can have adverse effects on education services, and provides corresponding conclusions and suggestions (Song, 2010).

Scholars' research and analysis of education service trade from multiple angles have not only improved the relevant theories and research methods but also promoted the development of related theories. They have also made a significant contribution to the better application of education service trade theories to China's education service practice and provided powerful theoretical support for the government and education departments to formulate relevant policies.

2.5 Research Framework

This paper first defines the connotation of higher education service trade through an extensive review of literature, followed by a theoretical analysis of the development of international students in higher education in Hainan. The study focuses on international students in the Hainan LingShui Li'an International Education Innovation Pilot Zone, and based on the theoretical knowledge found, it formulates research questions and hypotheses related to the development of higher education service trade in Hainan. A questionnaire survey is designed based on the content of the research questions and hypotheses, and after distributing and collecting the completed questionnaires, the data is summarized and organized. Drawing upon the theory of comparative advantage, national competitive advantage theory, and push-pull theory, the survey data is analyzed to elucidate the current state of Hainan's higher education export services and identify the problems faced in the development of international students in Hainan. Finally, the causes of the identified issues in the development of international students in higher education in Hainan are explored, and recommendations for resolving these problems are proposed.

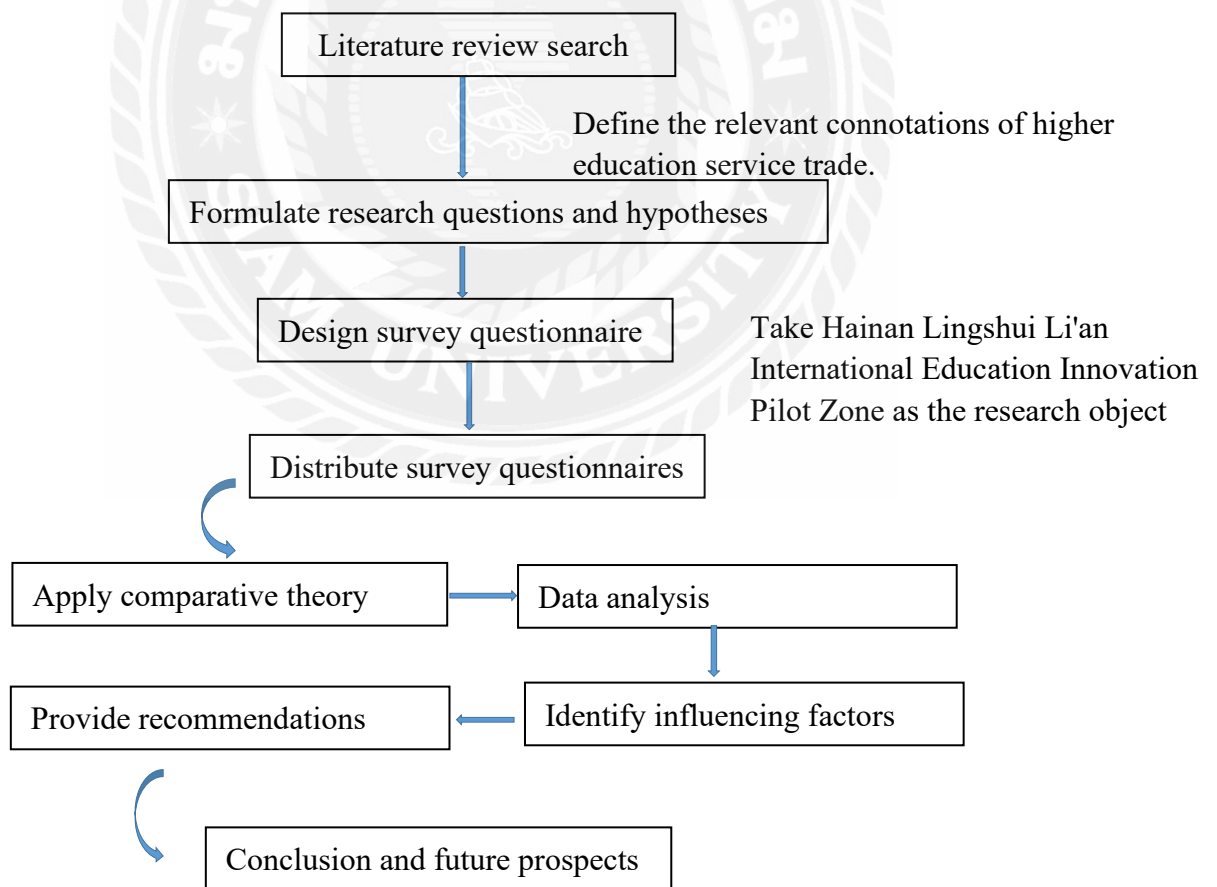


Figure 2.1 Research Fram

Chapter 3 Research Methodology

3.1 Introduction

3.1.1 Quantitative Research Method

This paper adopts the quantitative research method, which is one of the necessary research methods in the study of international relations, and also an important direction for current and future development in the Chinese academic community. The quantitative method is the process of statistical inference of empirical data to test theoretical hypotheses about the relationship between two or more variables with numerical values. "Statistical inference" refers to the process of inferring unknown things in probability form based on observed sample data, conditions, and assumptions of the problem (Zhang, 2022).

3.1.2 Survey Questionnaire Method

The questionnaire survey is widely used in the field of social science research due to its high efficiency and easy implementation, especially in the fields of sociology, psychology, education, and management. Self-report questionnaire survey is one of the main research methods (Wang, 1990).

Compared with experimental, observational, and interview methods, the biggest problems with self-report questionnaire methods are two aspects: the authenticity of the reflection and the lack of process control over the research object as a whole. The former problem is the focus of this study, while the latter needs to be addressed through qualitative research-oriented methods. The core of the authenticity problem lies in the need for cooperation from the subjects under study. In many cases, to maintain the independence and confidentiality of the subjects, the researcher either stays but does not intervene or is not present at all. Therefore, the reliability of the research results depends on whether the researcher answers the questions honestly and accurately. To solve this problem, on the one hand, the cooperation of the subjects is needed, and the interference of irrelevant variables should be minimized as much as possible. Currently, there is more research on questionnaire design issues, while there is less discussion on problems that exist in the implementation of the questionnaire method. This paper uses a questionnaire survey to conduct a statistical analysis of the development of Hainan's export of higher education overseas consumption services, analyzing the problems and causes of Hainan's export of higher education overseas consumption services trade, and proposing corresponding suggestions (Feng, 2002).

3.2 Research Design

The design concept of this questionnaire focuses on the micro-environmental factors that influence the development of international students in higher education in Hainan. The questionnaire consists of 30 survey questions, including 26 scaled questions and 4 open-ended questions, which were distributed for statistical investigation. The survey covers five aspects related to studying abroad in Hainan, including reasons for studying in Hainan, channels of studying in Hainan, living conditions in Hainan, learning conditions in Hainan, respondents' basic information, and plans for studying in Hainan. The questionnaire is based on the Lingao-Li'an International Education Innovation Pilot Zone in Hainan, and respondents are selected from the participating institutions in the zone to provide authentic feedback on the development of international students in higher education in Hainan. Based on the collected survey data, the influential factors in the development of international students in higher education in Hainan are analyzed using the comparative advantage theory (Li, & Liu, 2006).

3.3 Hypothesis

- H1: The impact of the development and economic situation of the Hainan Free Trade Port on the development of international students in higher education in Hainan.
- H2: The impact of local education quality, educational infrastructure, and international promotion of Hainan on the development of international students in higher education in Hainan.

3.4 Population and Sampling

LingShui Li'an International Education Innovation Pilot Zone is an education park jointly built by the Chinese Ministry of Education and the Hainan Province. Currently, 10 Chinese universities have signed agreements with the province or the park, including Peking University, University of Science and Technology of China, Southeast University, Nankai University, University of Electronic Science and Technology of China, Communication University of China, Beijing Sport University, Central University for Nationalities, and Southern University of Science and Technology. In addition, there are 12 foreign cooperative universities havents with the park, including University of Alberta in Canadthe a, University of Glasgow in the he UK, Rutgers University, Rice University, Michigan State University, Coventry University

in the UK, University of Abertay Dundee in the UK, HEC Paris in France, Stockholm School of Economics in Sweden, Cork University in Ireland, University of Lisbon in Portugal, and New York Film Academy in the US (Du, 2022).

In 2023, the surveyed area officially established five Sino-foreign cooperative institutions and had 3,000 international students. Based on the design and purpose of this questionnaire, the survey targets international students from the existing colleges in Lingshui Li'an International Education Innovation Pilot Zone. A sample of 200 participants will be selected for the survey through the distribution of paper questionnaires and interviews. To ensure the objectivity and authenticity of the survey results, the questionnaires and interviews will be conducted anonymously. As an education innovation pilot zone in Lingshui Li'an that focuses on international education development, the distribution of majors and student sources among international students is more diverse. Therefore, the students from the participating universities in Lingshui Li'an International Education Innovation Pilot Zone serve as representative samples for the survey.

3.5 Sample Size and Data Collection

The survey questionnaire for this study targeted international students in the LingShui LiAn International Education Innovation Pilot Zone in Hainan Province. A total of 200 survey questionnaires were distributed for this research. Out of these, 187 questionnaires were effectively collected, resulting in a response rate of 93.5%.

3.6 Data Analysis

The data analysis methods used in this study include descriptive data analysis, exploratory data analysis, chi-square test, and factor analysis. The SPSS analysis software was used to assist with the analysis. Descriptive analysis typically includes measures such as mean, median, mode, variance, quartile range, kurtosis, skewness, and frequency, which can be used to describe any type of data. The indicators for describing data's central tendency typically include mean, mode, median, and frequency; while indicators for describing data's dispersion usually include maximum and minimum values, range, variance, and standard deviation. Skewness and kurtosis are used to describe data distribution (Yang, 2011).

3.7 Reliability and validity analysis of the scale

3.7.1 Reliability

The reliability of the survey questionnaire refers to the degree of consistency or stability of the results obtained from the questionnaire survey when using the same method to measure the correctness and accuracy of the data. The reliability analysis of the questionnaire in this study used Cronbach's Alpha value to determine the reliability level of the variables and questions set in the questionnaire. Generally, the larger the coefficient, the better the correlation between the questionnaire items, and the higher the internal consistency reliability. If the coefficient is less than 0.7, it means that the reliability of the designed questionnaire is unreliable. If it is greater than 0.7 but less than 0.8, it is considered to have a certain level of reliability. If it is greater than 0.80, the questionnaire is considered to have high reliability. The reliability test results of each variable in this study are shown in the table below, and the Cronbach's Alpha value is 0.875, indicating that the sample data of this questionnaire has high reliability and can be used for empirical data analysis (Ru, & Zhang, 2011).

Cronbach' Alpha	Number of items
0.875	30

Table 3. 1 Cronbach's Alpha

3.7.2 Validity

Validity usually refers to the degree of accuracy of the measurement results, that is, the degree of closeness between the measurement results and the intended measurement target. Content validity evaluation indicators include item-level CVI and ICVI and scale-level consumer value index (SCVI). CVI is mainly calculated through expert ratings and provides four options. "1 = Not relevant, 2 = weakly relevant, 3 = strongly relevant, 4 = highly relevant." Each expert evaluates the item and calculates the proportion of experts who choose 3 or 4. For example, when 5 evaluators evaluate, and 4 choose 3 or 4 points, the I-CVI is $4/5 = 0.8$ (Zeng, & Huang, 2005).

This study invited a committee of 7 experts with over 8 years of experience in researching the development of international students in higher education to assess the content validity of the questionnaire on the development of international students in Hainan's higher education. The results showed that the I-CVI values of each item in the questionnaire were all >0.8 , with an average I-CVI value of 0.90, which exceeded the reference values of 0.78 and 0.9. This indicates that the questionnaire has good content validity. In addition, the expert committee agreed that the items in the questionnaire

were clearly stated and effectively reflected the current situation of international students in Hainan's higher education.

item	A1	A2	A3	A4	A5	A6	A7	I-CVI
Q1	3	4	4	4	4	4	4	1
Q2	4	3	3	3	3	3	2	0.86
Q3	3	3	3	3	3	3	3	1
Q4	3	4	3	4	4	4	3	1
Q5	4	3	4	3	3	2	4	0.86
Q6	4	3	3	3	3	3	3	1
Q7	4	4	3	4	3	2	3	0.86
Q8	3	3	4	4	4	4	4	1
Q9	2	4	3	4	3	4	4	0.86
Q10	4	3	4	3	3	3	4	1
Q11	3	3	3	3	3	3	3	1
Q12	3	4	3	4	4	4	3	1
Q13	4	4	4	3	4	3	4	1
Q14	3	4	4	3	3	3	2	0.86
Q15	3	3	4	4	4	4	4	1
Q16	4	3	3	3	3	3	3	1
Q17	4	4	2	3	3	3	3	0.86
Q18	4	3	4	4	4	4	4	1
Q19	3	3	2	4	4	4	4	0.86
Q20	2	4	3	4	4	4	3	0.86
Q21	4	3	4	3	3	3	2	1
Q22	3	3	4	3	4	4	3	0.86
Q23	4	4	4	4	4	4	4	0.86
Q24	4	4	3	2	3	3	3	1
Q25	4	4	2	4	4	4	3	0.86
Q26	3	3	4	3	3	3	4	1
Q27	3	3	3	3	3	3	3	0.86
Q28	3	4	2	4	4	4	4	0.86
Q29	3	3	3	3	3	3	3	0.86
Q30	3	4	2	4	4	4	4	0.86

Table 3. 2 Statistical Table of Expert Scores for Content Validity

Chapter 4 Result of the Study

4.1 Introduction

China's higher education trade presents a situation of "high output, low input," with a further increase in net outflow and a prominent phenomenon of a deficit in international higher education students. The structural characteristics of Chinese students include lower levels of study and significant geopolitical effects in terms of source countries. Despite the rapid growth of China's higher education services, its market share in the international market remains relatively low, and the increase in its market share has been relatively slow. (Wong, 2019).

Before the promotion of the development of the Hainan Free Trade Port, it was found from a summary of previous literature that Hainan Province was relatively backward in both education and economy among all provinces in China, and the number of students studying in Hainan was very small. However, according to the calculation of the Study Abroad Service Center, there are about 100 people who come to study in Hainan Province every year, and the scale of education service exports still has a considerable gap compared to developed provinces (Rao, 2016).

In the current Hainan government's promotion of the Hainan Lingshui-Li'an International Education Innovation Pilot Zone, it is expected that by 2035, dozens of well-known schools at home and abroad will settle here, hosting international education with a long-term enrollment scale of 30,000 students. This is a historical turning point and opportunity for Hainan's overseas consumption export of higher education services. The pilot zone is the object of investigation and analysis for the questionnaire survey.

4.2 Results of the Study

4.2.1 Survey Content and Analysis

4.2.1.1 Reasons for studying in Hainan

According to the survey in Table 4-1, 78.61% of students said they chose to study in Hainan because they have high hopes for the future development of the Hainan Free Trade Port. This also shows that the respondents are very much looking forward to the development of the Hainan Lingao-Li'an International Education Innovation Pilot Zone, and they hope to share learning resources and innovative education models with students and teachers from other universities in the park. This to some extent reflects the strong support of the Chinese Ministry of Education and the Hainan provincial government for higher education in Hainan in recent years and also indicates that China's international status is improving and its international attractiveness is

strengthening, which gives the respondents confidence in China's innovative education models. 25.13% of students believe that Hainan has very attractive study abroad policies, while 45.99% believe that Hainan's study abroad policies currently lack clear and attractive practical policies, indicating that Hainan's study abroad policies are still lacking a complete system to meet the needs of international students. At the same time, 82.35% of international students said they were attracted to Hainan by its pleasant climate and natural environment, which also indicates that Hainan's unique tropical climate conditions have a certain appeal and should be fully utilized in the future development of the education services trade. 40.64% of international students believe that the cost of studying and living in Hainan is more cost-effective than in European and American countries, which indicates that Hainan's study abroad costs are relatively selective and can attract more international students to study here.

Number	Independent variable - questionnaire item	Options	Number of selections	Total number	proportion of total
1	Q1: Like the climate and environment in Hainan.	Not applicable	154	187	82.35%
		Applicable	27		14.44%
		Strongly applicable	6		3.21%
2	Q2: Optimistic about the future development of the Hainan Free Trade Port.	Not applicable	7	187	3.74%
		Applicable	33		17.65%
		Strongly applicable	147		78.61%
3	Q3: Satisfied with studying in Hainan.	Not applicable	21	187	11.23%
		Applicable	60		32.09%
		Strongly applicable	103		55.08%
4	Q4: The cost of living for studying in Hainan.	Not applicable	40	187	21.39%
		Applicable	71		37.97%
		Strongly applicable	76		40.64%
5	Q5: Hainan's policies and regulations for international students studying abroad	Not applicable	86	187	45.99%
		Applicable	54		28.88%
		Strongly applicable	47		25.13%

Table 4. 1 Survey questionnaire for students studying in Hainan—A

4.2.1.2 Pathways to Studying in Hainan

According to the survey data in Table 4-2, 77.54% of students applied to study in Hainan through Sino-foreign cooperative universities. This indicates that in recent years, as the Chinese education service market gradually opens up and with strong support for Hainan to create an international education innovation island, the initial framework has taken shape, and Sino-foreign cooperative universities have settled in Hainan's educational parks. Over 78% of students reported that they have either visited or planned to visit other cities in Hainan to gain a better understanding of the island, indicating that international students are potential consumers of Hainan's tourism industry. If the student tourism market can be fully developed, it could not only promote Hainan's international image but also stimulate local tourism economies to some extent.

The survey also found that 64.17% and 55.08% of students or their friends had little knowledge about Hainan before coming to study there, and had not seen any relevant promotion of Hainan, suggesting that Hainan's overall international influence is relatively limited, and there are limited channels for external promotion. 28.34% of international students indicated that they would actively recommend their fellow countrymen to study in Hainan, while 34.22% of students said they would not actively promote Hainan, indicating that there is still significant room for improvement in Hainan's international education services. Therefore, in the future development of higher education service trade in Hainan, it is worth considering how to increase publicity efforts, expand overseas awareness, and attract more overseas students to apply for studies in Hainan.

Number	Independent variable - questionnaire item	Options	Number of selections	Total number	proportion of total
1	Q6: Understanding of Hainan before studying abroad	Not applicable	107	187	57.22%
		Applicable	57		30.48%
		Strongly applicable	23		12.30%
2	Q7: Willingness of hometown friends to study in Hainan	Not applicable	45	187	24.06%
		Applicable	70		37.43%
		Strongly applicable	53		28.34%
3	Q8: Understanding of Hainan by hometown friends or relatives	Not applicable	120	187	64.17%
		Applicable	50		26.74%
		Strongly applicable	17		9.09%
4		Not applicable	64	187	34.22%

	Q9: Will recommend hometown friends to study in Hainan	Applicable	70		37.43%
		Strongly applicable	53		28.34%
5	Q10: Visited Hainan for tourism before studying abroad	Not applicable	93	187	49.73%
		Applicable	50		26.74%
		Strongly applicable	44		23.53%
6	Q11: Previously learned about Hainan through related promotions	Not applicable	103	187	55.08%
		Applicable	46		24.60%
		Strongly applicable	38		20.32%
7	Q12: Came to study in Hainan through school cooperation	Not applicable	8	187	4.28%
		Applicable	35		18.72%
		Strongly applicable	145		77.54%

Table 4. 2 Survey questionnaire for students studying in Hainan--B

4.2.1.3 Living Situation of international students in Hainan

According to the survey in Table 4-3 shows that 12.30% and 52.41% of students have some Chinese language proficiency and dissatisfaction with the application management for studying in Hainan, respectively. This reflects that most students still need to improve their Chinese language skills and the government departments in charge of managing international student applications in Hainan need to continually improve their services. If they fail to keep up with improvements, it will create obstacles for international students coming to Hainan to study, which will hinder the development of international education in Hainan. Meanwhile, 87.56% and 56.15% of international students respectively adapt to their study and dietary habits in Hainan, while 47.59% and 14.44% report difficulty adapting. This indicates that the Lingao-Li'an Education Pilot Zone needs to understand the practical difficulties that these students face in their daily lives and provide timely assistance to help them adapt. Most international students are still exploring their studies and livingsituationson in Hainan. The main reasons for their adaptation difficulties are the insufficient infrastructure and management of the Lingao-Li'an International Education Innovation Pilot Zone. Therefore, the infrastructure and institutional management of the education pilot zone should be continuously improved and upgraded. Students also complain that the cafeteria prices are high, which suggests that Hainan's food can meet international students' needs, but

the prices are too high. The management of cafeteria prices in the education pilot zone needs to be adjusted. At the same time, 56.19% and 79.68% of students respectively need for scholarships and related part-time jobs, which can reduce the cost of studying abroad. This reflects that there are still many restrictions on scholarships and part-time jobs for international students studying in Hainan. Therefore, the Lingao-Li'an International Education Innovation Pilot Zone should provide more care for international students and establish a management mechanism to solve the problems they encounter in their daily lives.

Number	Independent variable - questionnaire item	Options	Number of selections	Total number	proportion of total
1	Q13: You have a certain foundation in Chinese.	Not applicable	73	187	39.04%
		Applicable	91		48.66%
		Strongly applicable	23		12.30%
2	Q14: Adapting to student life in Hainan.	Not applicable	89	187	47.59%
		Applicable	60		32.09%
		Strongly applicable	38		20.32%
3	Q15: Adapting to the dietary habits in Hainan.	Not applicable	27	187	14.44%
		Applicable	105		56.15%
		Strongly applicable	55		29.41%
4	Q16: Applying for a scholarship.	Not applicable	78	187	41.71%
		Applicable	61		32.62%
		Strongly applicable	48		25.67%
5	Q17: Having a part-time job demands while studying abroad.	Not applicable	38	187	20.32%
		Applicable	70		37.43%
		Strongly applicable	79		42.25%
6	Q18: Satisfied with the application and management of international students in Hainan.	Not applicable	98	187	52.41%
		Applicable	70		37.43%
		Strongly applicable	19		10.16%

Table 4. 3 Survey questionnaire for students studying in Hainan--C

4.2.1.4 Study Situation of International Students in Hainan

According to the survey in Table 4-4, 48.66% of international students expressed some concerns about the current teaching hardware facilities, such as multimedia, classrooms, libraries, etc. in the LingShui LiAn International Education Experimental Zone, stating that the teaching infrastructure is still in its initial stage. However, 51.34% of students are satisfied with the current situation and understand that the experimental zone is still in its early stages. They hope that while LingShui LiAn International Education Experimental Zone is gradually improving, the pace of smart campus construction can also be accelerated. 78.09% of international students indicated that they have adapted to the difficulty of the courses, either fully or to a large extent. Over 81.09% of international students have adapted to the teaching methods of their teachers, either fully or to a large extent. 58.29% of international students stated that the school's course offerings have met their psychological expectations, either fully or to a large extent. It can be seen that international students are generally satisfied with the study conditions in Hainan, and teaching and facilities can almost meet their psychological expectations. However, some international students pointed out that the LingShui LiAn International Education Experimental Zone is not yet able to achieve course sharing and credit recognition among the participating institutions, and there is no integration of students and teaching among the participating universities. This is also the goal for the future development of the experimental zone.

Regarding satisfaction with the quality of education in Hainan and the specialization of Hainan's characteristic teaching, 54.01% and 46.52% of international students expressed dissatisfaction, respectively. They do not feel that the quality of internationalized education and Hainan's specialized education are up to par with Hainan's education quality is high or that there are unique specialized courses available. This reflects a certain blindness of Hainan's universities in the development of higher education service trade, with the quality of early education services falling behind other regions, course offerings lacking highlights and local characteristics, and lacking attractiveness to international students. At the same time, 42.25% of students indicated that they have not participated in local cultural activities organized by the experimental zone, which is a pity. They hope to have a platform to experience the speed of Hainan's international education development. This greatly hinders international students from integrating into the local cultural environment and is also very unfavorable for political and cultural exchanges and communications between China and foreign countries, which seriously affects the views and acceptance of international students regarding Hainan's social, economic, cultural, and living environments.

Number	Independent variable - questionnaire item	Options	Number of selections	Total number	proportion of total
1	Q19: Satisfied with the teaching quality in Hainan.	Not applicable	101	187	54.01%
		Applicable	65		34.76%
		Strongly applicable	21		11.23%
2	Q20: Satisfied with the supporting facilities for teaching in Hainan.	Not applicable	91	187	48.66%
		Applicable	58		31.02%
		Strongly applicable	38		20.32%
3	Q21: Satisfied with the teaching style of the teachers in Hainan.	Not applicable	35	187	18.72%
		Applicable	102		54.55%
		Strongly applicable	50		26.74%
4	Q22: Satisfied with the specialized teaching programs in Hainan.	Not applicable	87	187	46.52%
		Applicable	67		35.83%
		Strongly applicable	33		17.65%
5	Q23: Participated in local cultural activities in Hainan.	Not applicable	79	187	42.25%
		Applicable	67		35.83%
		Strongly applicable	41		21.93%
6	Q24: Satisfied with the difficulty level of the courses in Hainan.	Not applicable	44	187	23.53%
		Applicable	83		44.39%
		Strongly applicable	63		33.69%
7	Q25: The course offerings in Hainan meet my expectations.	Not applicable	78	187	41.71%
		Applicable	63		33.69%
		Strongly applicable	46		24.60%

Table 4.4 Table 4. 3 Survey questionnaire for students studying in Hainan--D

4.2.1.5 Future Plans of International Students

According to the survey in Table 4-5, 62.57% of the surveyed students come from Southeast Asian countries, and 12.83% come from Europe and the Americas. 47.59%

are undergraduates, 45.99% are master's students, and 5.88% are doctoral students. This reflects that Hainan's education system has yet to attract more students from Europe and America, but it has been successful in attracting students from Southeast Asian and other countries. However, it is important to select high-quality international students.

Meanwhile, 52.41% of the international students surveyed do not plan to stay in Hainan after completing their studies, 26.74% will determine their future development opportunities before deciding, and 20.86% will consider staying in Hainan for their career development. This indicates that Hainan's current attractiveness to international students is not strong enough. Its economic development lags behind that of other Chinese cities, and development opportunities are relatively scarce, which leads to the loss of international talent. This feedback directly impacts the region's economic development and higher education overseas consumption and exports. It also reminds Hainan's relevant departments to pay more attention to the problem of how to retain high-quality international students and create a better future for Hainan.

Number	Independent variable - questionnaire item	Options	Number of selections	Total number	proportion of total
1	Q26: Where are you from?	Southeast Asian countries	117	187	62.57%
		Western countries	24		12.83%
		Other countries	46		24.60%
2	Q27: Would you like to stay in Hainan after graduation?	Not applicable	98	187	52.41%
		Applicable	50		26.74%
		Strongly applicable	39		20.86%
3	Q28: Gender	Male	89	187	47.59%
		Female	98		52.41%
4	Q29: Age group	Under 25 years old	101	187	54.01%
		25-30 years old	58		31.02%
		Over 30 years old	28		14.97%
5	Q30: Educational level	Bachelor's degree	89	187	47.59%
		Master's degree	86		45.99%
		Doctoral Degree	11		5.88%

Table 4.5 Survey questionnaire for students studying in Hainan--E

4.2.2 Survey Results Reflecting Issues

4.2.2.1 Policy Dividend Brought by the Development of Hainan Free Trade Port

According to the previous survey, most of the students came to Hainan for studying due to the strong support of Hainan International Education Innovation Island

under the construction of the Hainan Free Trade Port. Meanwhile, some students want to stay in Hainan for development by recognizing the development potential of Hainan Free Trade Port. Of course, most people hold a neutral attitude, whether to stay in Hainan or come to Hainan for study mainly depends on whether Hainan can bring development dividends under the policy support of Hainan Free Trade Port, which has a significant impact on the trade in higher education services in Hainan.

4.2.2.2 Lack of Competitiveness in Education Products and Teaching Quality

According to the previous survey, the unique discipline settings and teaching quality in Hainan are not the main reasons for international students choose to study in Hainan. Although the Chinese Ministry of Education currently gives strong policy support to the education industry in Hainan, due to the lag in the development of Hainan's higher education services trade, the types of education service products lack distinct features, the management system for international students is not perfect, and the current Hainan education innovation reforms, led by the LingShui-Li'an Education Innovation Pilot Zone, are in the initial stage, which is focusing on guaranteeing daily life and infrastructure construction. The educational institutions that have just settled in the pilot zone are in the stage of exploration and adaptation, making it difficult to effectively guarantee the quality of education services in the short term.

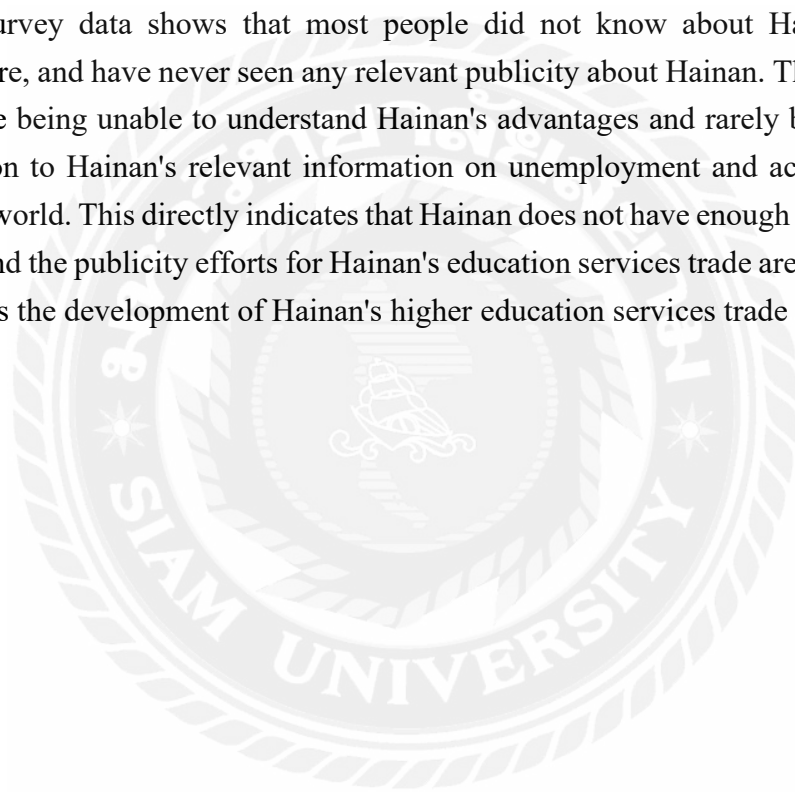
4.2.2.3 The economic and policy support system for the education services trade is not well established.

According to data, the education funds in Hainan Province are currently in the initial stages of construction. However, compared with first-tier and second-tier cities in China, Hainan is still a relatively economically underdeveloped province. This greatly limits the supply capacity of the Hainan higher education services market, as well as to some extent, the improvement of supporting facilities for universities and the integration of surrounding industries. Furthermore, compared to some developed countries and regions, Hainan Province's policies on scholarship settings for attracting international students to study in Hainan, providing opportunities for work-study, and medical insurance for international students are still relatively lagging. In addition, analyzing the work-study policy, China's 2000 regulations on the management of international students mentioned "allowing international students to work part-time," but other specific regulations on international students working are rarely seen. Relevant policies for international students after completing their studies in Hainan also urgently need to be improved. The previous survey showed that only 20.86% of international students have a strong intention to stay in Hainan for development in the future. This indirectly reflects that Hainan's policies on retaining international talents are relatively lagging behind. Many international students choose to leave Hainan

and go to other places for better development after graduation. The significance of developing education services trade not only lies in promoting local economic development but also in bringing high-level international talents to the local area. The lagging response of local governments in this regard and the lack of relevant policies for international students' employment and entrepreneurship have not only resulted in the loss of cultivated international talents but also brought adverse effects on local economic development. We can see that Hainan Province still needs to improve its measures to attract international students and increase its efforts.

4.2.2.4 Insufficient international influence and external publicity

The survey data shows that most people did not know about Hainan before studying here, and have never seen any relevant publicity about Hainan. This has led to most people being unable to understand Hainan's advantages and rarely being able to pay attention to Hainan's relevant information on unemployment and activity events around the world. This directly indicates that Hainan does not have enough international influence and the publicity efforts for Hainan's education services trade are insufficient, which limits the development of Hainan's higher education services trade export.



Chapter 5 Conclusion and Recommendation

5.1 Conclusion

Based on the aforementioned investigation and analysis, it is found that the development of the Hainan Free Trade Port has brought policy dividends to the development of international students in higher education in Hainan. However, there are also many shortcomings and lagging situations in the current state of higher education in Hainan. For example, education products and teaching quality lack competitive advantages, the policies and management mechanisms for international students are not optimized, local distinctive educational specialties are not highlighted, insufficient efforts in external promotion, inadequate international influence, and the local economic development has not kept up with the pace of development. These existing problems are interconnected. This strongly validates the two hypotheses mentioned earlier and leads to the following verification conclusions: (1) The development of Hainan Free Trade Port and the speed of Hainan's economic development have significant impacts on the export of educational services in higher education in Hainan; (2) The quality of education, educational infrastructure, and international promotional efforts in Hainan locally have a positive impact on the development of international students in higher education.

5.2 Recommendation

Exploration of Strategies and Suggestions for the Development of Higher Education International Students in Hainan Province. Given that the development of students studying in Hainan lags behind most other provinces in China, the Hainan government needs to prioritize the development of educational service trade and implement effective policy measures to maximize export development and reap the talent and economic dividends brought by educational service trade.

5.2.1 Government support policies and natural environment

Hainan Province is geographically similar to Zhuhai City, and in the process of developing the export of higher education services in Hainan, it can fully draw on the successful experience of Zhuhai City. In recent years, Zhuhai City, despite its small population, has vigorously developed the education industry, providing a large amount of land for many famous universities to use for free, and providing special zone subsidies to faculty and staff. More than ten famous universities such as Sun Yat-sen

University, Nankai University, Renmin University of China, and Jinan University have established campuses in Zhuhai. According to statistics, the scale of students in various universities in the University City of Zhuhai has reached more than 20,000, ranking second in Guangdong Province. The universities also recruit a large number of international students at their Zhuhai campuses, driving the development of Zhuhai's export of educational services. International students who live in Zhuhai for a long time have brought tremendous economic growth to the city. Their tuition fees and daily consumption are left in Zhuhai, and their tuition and living expenses are generally higher than those of Chinese students. In addition, the long-term fixed international students have brought about advertising effects and positive influences on society and the economy that short-term tourists cannot compare to. The family members and friends of international students also come to visit and travel because of their studies in Zhuhai, which has to some extent driven the development of Zhuhai's tourism industry (Yang, 2009).

On the other hand, Hainan Island can combine its unique and beautiful tropical island scenery and the special culture of the Li and Miao ethnic groups to attract a large number of domestic and foreign tourists to visit. Educational services trade and tourism are important components of the tertiary industry. If they can rely on Hainan's natural environmental advantages to promote and drive each other, they can definitely bring sustained vitality to Hainan's economy.

5.2.2 Diversify the channels for raising education funds and increase the support for scholarships and grants

Developed countries in education services attach great importance to the development of higher education services trade and promote exports through various means. Among the numerous policy measures, the most effective and attractive one is economic support. Developed countries in the education services trade have established a sound system of scholarships. However, Hainan's level of economic development lags behind and it does not place sufficient emphasis on education services trade, resulting in a single source of funding for economic support of international students in Hainan. Mainly through scholarships provided by the national and Hainan provincial governments, the support is limited in scale and narrow in coverage, which greatly restricts the development of education services in Hainan. Therefore to better promote overseas consumption exports, Hainan Province can learn from the advanced experiences of developed countries and regions, such as referring to the Australian government's support for education services trade, which includes policies on scholarships for overseas students. In addition to government scholarships, Australia also offers scholarships provided by various universities and research institutions. The basis for increasing investment in study abroad education funds, further expand the

channels for raising education funds, in order to expand the scope and amount of scholarship and grant support (Rong, & Li, 2012).

First of all, the government departments in Hainan can provide targeted support to cultivate a group of high-level international talents, which is not only beneficial to the image enhancement of the local government, but also conducive to the long-term development of the local economy, providing a strong talent driving force for the construction of Hainan Free Trade Port, and enabling the local government to fully enjoy the dividend of talents in the future. Secondly, promote the management system of setting up special scholarships for international students by Hainan enterprises, institutions, private organizations and business communities. Chinese private enterprises and foundations lack the concept of cultivating international students and rarely assist international students. With the acceleration of China's internationalization process of education services trade, the competition in education services trade between countries is extremely fierce, and the demand for international talent from various countries is increasing day by day. Government departments should strive to improve the ideological awareness of enterprises, institutions, private organizations, and other organizations in supporting the development of education for international students, and realize that investment in education can not only help enterprises shape a good international public welfare image, enhance their reputation and expand their influence, but also reserve international high-level talents for the future talent development of enterprises, thereby enhancing their competitiveness in the international market.

5.2.3 Improving Hainan's Policies for international students

5.2.3.1 Relaxing language requirements

Currently, most universities in Hainan have different requirements for international students, especially degree-seeking students, such as the score of the Chinese Proficiency Test (HSK) and academic credentials. In the process of developing higher education services for overseas consumption, Hainan should learn from Western countries and adopt a more lenient entry and strict exit approach. For example, language prep students or short-term students only need to be able to live in Hainan without any problems upon admission. For majors with high requirements in science, agriculture, medicine, etc., the HSK requirements should be appropriately lowered when applying. Many courses are now gradually becoming more international and taught in English, with less emphasis on Chinese language proficiency. Students only need to understand the teacher's meaning. In terms of study time, restrictions should be removed, and a cumulative credit system should be adopted, requiring international students to complete the required credits to graduate. Alternatively, courses for each grade could be separately designed, and professional certificates and degree certificates could be awarded based on the number of credits earned in different grades.

5.2.3.2 Providing international students with Opportunities for work-study

As higher education services for overseas consumption continue to develop rapidly worldwide, international students from economically underdeveloped countries and regions have become more rational in their consideration of the costs of studying abroad. Factors such as tuition fees, living expenses, scholarships, and work-study opportunities have become important considerations for parents and students when choosing a destination country for studying abroad. Currently, only a small percentage of international students in Hainan can apply for scholarships, so many hope to cover their expenses through work-study opportunities. Many education service-exporting countries and regions allow international students to engage in part-time work while studying, but China has few regulations in this regard. International students are only allowed to engage in activities related to their major or specialty, and the application process is relatively cumbersome. Facing intense competition in the education service industry, the Hainan government can refer to Australia's example. Australia's higher education services have developed rapidly, making it one of the most popular countries for studying abroad. Australia invests more than 5% of its GDP in education each year, and its policies for work-study opportunities for international students are very attractive. International students living in Australia can work up to 20 hours per week to earn money, and there are no restrictions on work hours during holidays (Rong, & Li, 2012).

The relevant departments should actively take countermeasures and make certain adjustments and revisions to the current regulations regarding studying abroad according to the actual situation in Hainan. They should consider allowing foreign students living in Hainan to engage in some part-time work-study activities, thus reducing the financial burden on their families. This would also be beneficial for Hainan to attract more self-funded international students to study in the province and enhance Hainan's competitiveness in the higher education service trade.

5.2.4 Improving the Quality of Education Services in Hainan

Hainan can learn from the UK government's practices in improving the quality of services for international students. The UK government has established a nationwide non-profit organization, HOST, to help international students adapt to life in the UK and gain a deeper understanding of its social and cultural aspects. HOST organizes events during holidays where international students can interact and live with local families, improving their English proficiency and understanding of the UK's politics, economy, and culture. This not only helps UK universities better manage and serve international students but also reflects a high level of human care for international students (Meng, 2008). Additionally, most UK universities have dedicated international

affairs offices to assist with recruitment and provide specialized education consulting services to international students. They also organize exhibitions in major source countries such as China, Singapore, and Malaysia, to provide more professional and personalized consulting services for students from these countries. Universities also have dedicated departments such as the International Program Office and laboratories to manage international cooperation projects and recruit international students (Gu, 2005).

Hainan can also learn from Hunan's education service quality. Hunan's universities prioritize ensuring teaching quality and leveraging their characteristics and advantages to create their own brands in the education service market. Hunan has established the International College of Traditional Chinese Medicine and the International Acupuncture Training Center, using modern industrial equipment, technology, and characteristic professional subjects to promote traditional Chinese medicine globally. They have also established cooperative relationships with some countries to enhance international exchanges and cooperation (Ouyang, 2006). By focusing on their professional characteristics and advantages, it is possible to truly improve the quality of education services and attract more international students, creating a favorable environment for the development of the overseas consumption of higher education service trade. In developing education service exports, Hainan should focus on building a solid foundation, developing its own advanced disciplines, and improving the quality of education services, stimulating the healthy development of education service trade exports fundamentally.

5.2.4.1 Improving the Recognition of Academic Qualifications

In recent years, higher education services in Hainan have been developing rapidly. More and more international students choose to study in Hainan, and the quality of education services provided by universities is gradually improving. However, the recognition of Chinese academic qualifications and degrees in the international community is still low. Although China has actively opened up the education services market and participated in the international market competition since joining the World Trade Organization, and has signed agreements with more than 20 governments and regions to mutually recognize academic qualifications and degrees, there are still some countries that do not recognize Chinese academic qualifications and degrees. This has become one of the important reasons that restrict the overseas consumption and export of education services in Hainan Province. In the process of developing overseas consumption of higher education services trade in the future, Hainan should actively improve its service quality, enhance international recognition, improve the recognition of academic qualifications, and eliminate negative impacts.

5.2.4.2 Regulating the Export Market of Education Services

Many educational institutions operate with some irregular behavior, such as charging high tuition fees for international students and providing them with low-quality education to make huge profits. These behaviors seriously affect the image of the destination country in the minds of international students, severely damage the interests of international students, and to a considerable extent, undermine the good order and regulation of the education services market. The Hainan government should attach importance to preventing the situation of unevenness in the education market, introduce corresponding laws and regulations to effectively regulate the education services market, and promote the healthy development of Hainan's overseas consumption and export of higher education services trade.

5.2.4.3 Improving the Quality of Education for International Students

The development of the education services trade in Hainan should fundamentally focus on improving the education level of universities themselves, which can attract more high-level academic qualification international students to study in Hainan. One of the important reasons why Hainan is currently at a disadvantage in the development of overseas consumption of higher education services trade is that the overall level of education and scientific development in Hainan is not high. To expand the market for international students in Hainan, the primary task is to increase investment, vigorously develop the strength of the teaching staff, and strengthen the internal construction of universities. At the same time, Hainan's universities should strengthen academic exchanges with international counterparts, send more teachers and scholars to study abroad, invite foreign experts to teach and exchange in Hainan, learn more about advanced teaching experiences abroad, and improve the quality of education services and the level of scientific research in Hainan.

In addition, Hainan government departments should further improve the qualification examination system for education services, establish a more comprehensive education quality evaluation system for international students, and be responsible for academic, international students, and education services provided by Hainan universities.

5.2.5 Expanding Hainan's Education Service Export Market

5.2.5.1 Building International Recognition

Hainan is taking proactive measures to establish international recognition for the development of its higher education services trade and overseas consumption. This is not only a window for Hainan to open up to the world through education services, but also a gateway for the world to open up to Hainan's economic development. Hainan can learn from Guangxi's practice. Guangxi Province has become very attractive to

ASEAN students due to its proximity to ASEAN countries, the establishment of the China-ASEAN Free Trade Area, and active trade cooperation and exchange activities between Guangxi and ASEAN countries. The reputation of Guangxi's universities abroad is not only due to media publicity, but also due to the word-of-mouth evaluation of overseas students living in Guangxi. In particular, for major source countries such as Thailand, Indonesia, and Vietnam, the Guangxi government and relevant departments have strengthened their promotion of studying abroad, educational exchange activities, and guaranteed the quality of education for international students, while also making efforts to provide them with good services and humane care, enabling them to adapt to their studies and life in Guangxi as soon as possible. In addition, various universities regularly listen to feedback and suggestions from international students, ensuring a high level of satisfaction (Yuang, 2013). Therefore, Guangxi has attracted many international students, especially from ASEAN countries, including some leaders of ASEAN countries, providing favorable conditions for Guangxi to enhance its international status.

The education services trade has brought economic growth to Hainan Province. At the same time, attracting international students can cultivate a large number of cooperative talents, ambassadors, and communication friends for Hainan, creating a favorable development environment for future international competition. For example, participating in global exhibitions of Chinese higher education, actively promoting the advantages and characteristics of schools, and enabling Hainan to have a deep understanding and recognition among foreign students. Learning from the experiences of other countries, setting up relevant enrollment agencies or educational centers in key areas abroad, regularly releasing enrollment information to students who are interested in studying abroad, and promoting Hainan's education services to international students. Strengthening the establishment and maintenance of Hainan's education service website, enhancing the promotion of Hainan's higher education services through network resources, and quoting some positive evaluations of Hainan's universities in research, education, and other aspects by the government and the public, fully introducing Hainan's education service advantages, honors, and other data. For major source countries such as Russia and Thailand, which come to study in Hainan, special web pages translated into their national languages should be set up to ensure smooth communication with students from these major source countries. Hainan's government should also organize Hainan's universities to actively participate in public welfare activities and academic exchange activities held domestically and internationally to enhance the influence and international status of Hainan's universities in the international education market.

5.2.5.2 Creating Distinctive Discipline Teaching

Hainan Province is focusing on developing its international education innovation park and actively promoting its distinctive discipline teaching to the world. The LingShui Li'an International Education Innovation Experiment uses the "Five Mutuals and One Common" international education integrated innovation concept of promoting mutual learning between Chinese and Western cultures, mutual integration of disciplines, mutual communication between arts and sciences, mutual selection of courses, mutual recognition of credits, and mutual consultation of management. This concept is used to create Hainan's distinctive disciplines, thereby expanding Hainan's education service export market.

5.2.6 Improving the management system for exporting educational services

5.2.6.1 Improving the management system for foreign students studying in Hainan

The management of foreign students is a complex foreign-related management work because there are significant differences in each student's background, religious beliefs, and lifestyle habits. This is closely related to the harmony and stability of schools and society, and the government and relevant departments must attach great importance to it. At the same time, the relevant government departments should develop special security measures and management methods for foreign students to ensure their safety during their stay in school and to promote the more harmonious and orderly development of educational services for foreign students.

5.2.6.2 Strengthening hardware construction and improving service quality

To develop educational service trade in Hainan, in addition to improving the management system for foreign students in Hainan, attention should also be paid to the construction and renovation of supporting facilities for educational services for foreign students. It is not only necessary to keep up with the construction of related facilities such as teaching, accommodation, and medical facilities, but also to fully consider the differences in foreign students' lifestyles and customs. In terms of education and life, efforts should be made to achieve internationalization to ensure the effective development of educational services. At the same time, full care and assistance should be provided to foreign students studying in Hainan, and feasible management systems should be developed based on their different characteristics.

5.3 Further Study

Since the implementation of the Hainan Free Trade Port strategy, the internationalization process in Hainan has made progress, and the development of higher education for international students has accelerated. However, when compared to developed countries and regions worldwide, as well as educationally advanced provinces and cities in China, there still exists a considerable gap in the quality and scale of educational services in Hainan. This article conducts statistical analysis of the data on international students enrolled in Hainan in recent years to gain an understanding of the overall development of higher education in Hainan at the macro level. Additionally, through detailed investigations and analysis of the circumstances of international students living in Hainan, it identifies the issues faced by higher education international students in Hainan, providing a detailed analysis and thoughtful considerations of the education service industry in Hainan at the micro level. Drawing on advanced educational development concepts from other countries, regions, and provinces in China, and considering its strengths and characteristics, feasible suggestions are proposed for the development of higher education international students in Hainan, to bring about new economic growth points for Hainan.

Looking ahead, I believe that with the advancement of the Hainan Free Trade Port strategy, the continuous improvement of Hainan's education internationalization level, the deepening research by experts and scholars, and the continuous refinement of policies, the development of higher education international students in Hainan will undoubtedly improve to a great extent.

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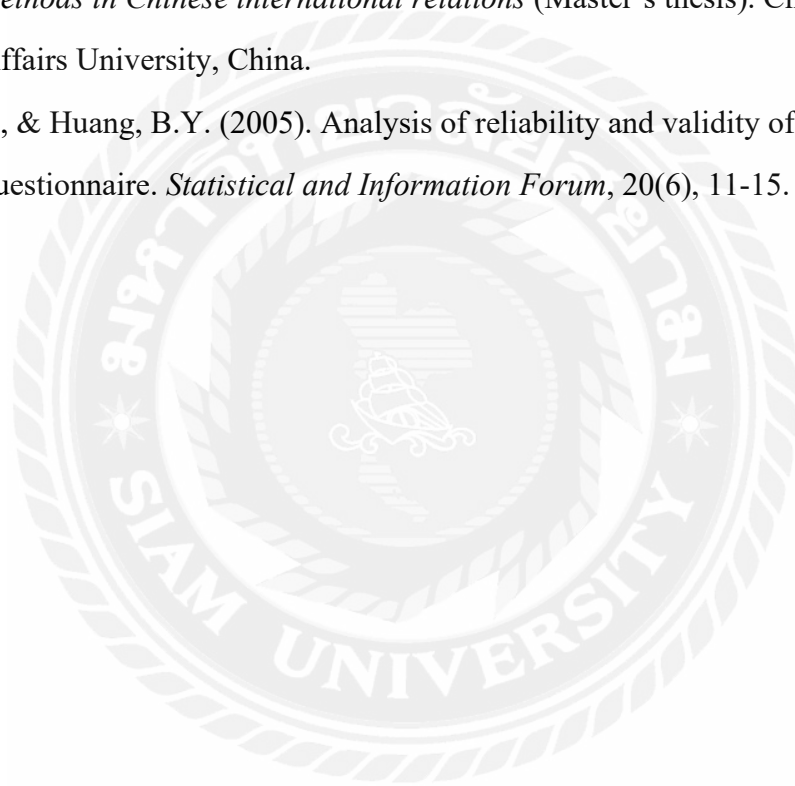
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Appendix

Survey Questionnaire on International Students in LingShui LiAn

International Education Innovation Pilot Zone, Hainan

Dear Sir/Madam,I am currently writing a research paper on the development of Hainan's overseas consumption of higher education services. In order to better understand the needs of international students in the LingShui LiAn International Education Innovation Pilot Zone, I would appreciate it if you could spare a few minutes to complete this questionnaire. This survey is anonymous and will be used solely for research purposes. Therefore, you can fill it out based on your most truthful situation and opinions, and your answers will be kept confidential. Thank you very much for your participation in this survey!

1. Like the climate and environment in Hainan:
① Not applicable ② Applicable ③ Strongly applicable
2. Optimistic about the future development of Hainan Free Trade Port:
① Not applicable ② Applicable ③ Strongly applicable
3. Satisfied with studying in Hainan:
① Not applicable ② Applicable ③ Strongly applicable
4. The cost of living for studying in Hainan:
① Not applicable ② Applicable ③ Strongly applicable
5. Hainan's policies and regulations for international students studying abroad:
① Not applicable ② Applicable ③ Strongly applicable
6. Understanding of Hainan before studying abroad:
① Not applicable ② Applicable ③ Strongly applicable
7. Willingness of hometown friends to study in Hainan
① Not applicable ② Applicable ③ Strongly applicable
8. Understanding of Hainan by hometown friends or relatives

- ① Not applicable ② Applicable ③ Strongly applicable
9. Will recommend hometown friends to study in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
10. Visited Hainan for tourism before studying abroad:
- ① Not applicable ② Applicable ③ Strongly applicable
11. Previously learned about Hainan through related promotions:
- ① Not applicable ② Applicable ③ Strongly applicable
12. Came to study in Hainan through school cooperation:
- ① Not applicable ② Applicable ③ Strongly applicable
13. You have a certain foundation in Chinese:
- ① Not applicable ② Applicable ③ Strongly applicable
14. Adapting to the student life in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
15. "Adapting to the dietary habits in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
16. Applying for a scholarship:
- ① Not applicable ② Applicable ③ Strongly applicable
17. "Having a part-time job demand while studying abroad:
- ① Not applicable ② Applicable ③ Strongly applicable
18. Satisfied with the application and management of international students in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
19. Satisfied with the teaching quality in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable

20. Satisfied with the supporting facilities for teaching in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
21. Satisfied with the teaching style of the teachers in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
22. Satisfied with the specialized teaching programs in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
23. Participated in local cultural activities in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
24. Satisfied with the difficulty level of the courses in Hainan:
- ① Not applicable ② Applicable ③ Strongly applicable
25. The course offerings in Hainan meet my expectations:
- ① Not applicable ② Applicable ③ Strongly applicable
26. Where are you from?
- ① Southeast Asian countries ② Western countries ③ Other countries
27. Would you like to stay in Hainan after graduation?
- ① Not applicable ② Applicable ③ Strongly applicable
28. Gender:
- ① Male ② Female
29. Age group:
- ① Under 25 years old ② 25-30 years old ③ Over 30 years old
30. Educational level:
- ① Bachelor's degree ② Master's degree ③ Doctoral degree