

Win-win or not? Factors impacting Chinese programs in Thai higher education under zero-game

Tan Yong* and Fuangfa Amponstira

School of Management, Shinawatra University, Pathum Thani, Thailand

Abstract

Chinese Programs, initiated by Thai Higher Education Institutes (HEI) in the context of the “One Belt and One Road” Initiative (BRI) proposed by Chinese President Xi Jinping in 2013, have been absorbing the increasing mobility of Chinese international students to help Thailand transit to the regional education hub. This paper applies mixed methods approaches to explore the characteristics of Chinese programs as follows: To know the global international market by documenting data collecting such as qualitative research, to analyze the macro environment both inside and outside of Thailand; To inspect the key factors on Chinese programs management by questionnaire data analysis of Chinese students’ satisfaction in Thailand as quantitative research. The results indicate this multi-stakeholder program is the effective approach to leverage both the inbound and outbound, public and private resources benefiting the mutual higher education cooperation between Thailand and China with rising marginal effect. This study unveils that 67% of Chinese international students are satisfied, and that there are 17 key factors affecting Chinese Programs operating on selecting Thai HEIs, Educating Process and Supporting Sectors to improve their satisfaction as a win-win deal.

Keywords: Chinese programs, Thai Higher Education Institute, regional education cooperation

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1. Introduction

China’s decades of opening up to foreign trade and investment as well as implementing free-market reforms since 1979 has not only greatly improved the livelihood of the Chinese people but also changed the global market and trend as the world second largest economy [1]. Thus, the study abroad and international student’s mobility have no exception.

UNESCO’s Asia-Pacific regional bureau for education in Bangkok noticed that the International Mobility of Students in Asia and the Pacific are increasing, and Global flow of Tertiary-level students are mainly Chinese international students; meanwhile, its report also unveiled that compared to the traditional students’ host countries in major English-Speaking countries, regional hubs play a more and more important role of attracting international students, especially the students from border areas or neighboring countries. The mobility of Chinese students stimulates local economies a lot (UNESCO, 2013)[2]. University of Oxford also emphasized that almost one in six international students of the global market is Chinese (Oxford, 2015)[3].

Thailand has been becoming a more favorable destination for Chinese students in continuing education and furthering their study. They have become the major source of foreign students in Thailand since 2006.

In 2012, there were 9,329 Chinese students to be found in Thai HEIs (46.4% of total foreign student population) (Hongzhi, Athapol, and Chenin, 2015)[4]. As the first foreign direct investor since China’s Opening up and in the context of BRI, Charoen Pokphand (CP) Group’s affiliated Panyapiwat Institute of Management (PIM) grafted its international programs with Chinese language instruction oriented to Chinese students in 2013 and greatly inspired followers among various Thai HEIs.

Due to the significant transition on the biographical side of Thai society, such as population aging and decreased fertility, more seats in Thai universities are spared to the international students, especially Chinese students who constantly occupies the lion’s share of global market. Chinese programs become the main drive to attract mobility from China by Thai HEIs.

Consecutively, Chinese programs are flourishing on Thai campuses and wooing Chinese tertiary education certificate or diploma pursuers. The Education Office of the Chinese Embassy in Thailand witnessed this great increase of Chinese mobility with an estimated 50,000 Chinese students before 2020 and define the Chinese Program as programs or schools that involve textbooks or teaching activities in the Chinese language and may accept Chinese students, including but are not confined to all-Chinese programs, Thai-Chinese programs, English-Chinese programs, and Thai-English-Chinese trilingual programs in all

*Corresponding author; email: tyswfc@126.com

Thai HEIs[5].

2. Literature Review

2.1 Global international student market as zero-game

Traditionally, the destinations of Northern countries, such as the United States and the United Kingdom remain strong magnets for international students seeking a high-quality education while new destinations from Southern countries and recent regional hubs are competing for a share of the mobility revenue and formed the zero-game as in and out. Based on a long term observation, UNESCO found the factors driving the growth and expansion in undergraduate and graduate education across Asia are key actors of regional international mobility, international program quality evaluation, strength and productivity in international collaboration, and opportunities for education policy makers (UNESCO, 2014)[6].

It indicated that international student mobility could follow this trend on two sides; the traditional global education centers and the emerging regional education hubs. The former remains strong on the abilities of English instructed education on traditional advantages, but the latter flourishes with potential and possibilities of knowing well on neighboring needs. However, it is still a gradual process for the emerging countries to achieve the ambitious goals and make the global international student market in tough competition. Many cooperated or collaborated higher educational programs are starting to result in more dramatic changes on the global international student's mobility and trend.

3. Research Objective

This research aimed to:

1. Study the situations of the Chinese program in Thai higher education and its satisfaction from Chinese international students.
2. Explore the key factors to develop the Chinese program as a successful tertiary educational program mutually benefiting Thailand and China.

3.1 Regional education hub as strategy to boost the economy

The conception of "Education Hub" was initiated by Malaysian Ministry of Education in an official policy document named Wawasan 2020 (Vision 2020) which dates back to 1990 and aims to develop Malaysia as "a world-class quality education which is flexible and innovative that in turn will make Malaysia a regional educational hub and a centre of educational excellence." [7]

One of the most important marginal effect phenomena is that many governments noticed the importance of public universities and the fast-emerging private

universities as the centers of education and research to yield positive economic returns to their country[6]. Meanwhile, short distance, better education, comparable costs are becoming the key factors for regional education hubs to attract the nearby international students and the advantage to compete with traditional destinations under the unstable and uncertain circumstances such as Brexit of UK [8], Trumponomics from USA[9], and racism in Australia[10]; China's Ministry of Education even consecutively for two years announced the NO. 1 Alarm of Study abroad on the high risk of COVID-19 and racism in Australia on June 9th of 2020[11] and February 5th of 2021[12] respectively.

4. Conceptual Framework

As the Chinese program in Thai HEIs specially orients itself to the Chinese international students and becomes the main drive to attract the Chinese mobility, this research conducts the survey on those students. Their satisfaction comes mainly from 21 indicators in the educational process inspecting the relationship by Pearson Chi-Square's analysis to sort out the key factors both inside and outside the Chinese Program.

5. Research Methodology

5.1 Research instrumentation and questionnaire design

This survey is divided into two parts to explore both the descriptive and statistical data as follows: Part I consists of demographic data of respondents and a rationale on selecting Thai HEIs: The first 8 basic information questions are descriptive statistics to unveil the respondent's name of their university, name of their program, primary residence (province) in China, average monthly expenses in Thailand, gender, program category, channels to know Thai HEIs, and their rationale to study in Thailand. Part II mainly focuses on internal indicators on the Education process and Supporting Sectors from the Chinese program: The following 9 to 25 choices marked by the scoring of the questionnaire will be analyzed by using a five-point rating scale or five-Likert scales (5 Very Satisfied, 4 Satisfied, 3 General, 2 Dissatisfied, 1 Very Dissatisfied)[13] are covered 16 internal indicators of Chinese Program including: General satisfaction, Quality, Facility, Management, Curricula, Instruction, Discussion & Communication, Equipment, Teaching Avenue, Library, Accommodation, Recreation (Sports & Fitness), Canteen or Dining, Location & Transportation, Academic & Research level, Teaching Planning & Organizing, and Assessment & Evaluation; which uses Pearson Product Moment Correlation Coefficient analysis to explore the relationship among student's satisfaction and other 20 variables (16 indicators plus

Table 1. Chinese students' satisfaction on study in Thai HEIs from 2016 to 2019 (n=468).

| Symbols | Predictor Variables | Very Satisfied | Satisfied | General | Dissatisfied | Strongly Dissatisfied |
|-------------|-----------------------------------|----------------|------------|------------|--------------|-----------------------|
| 9 | General Impression | 10.3% | 58.1% | 22.0% | 8.1% | 1.5% |
| 10 | Quality | 8.5% | 60.5% | 19.4% | 10.3% | 1.3% |
| 11 | Facility | 12.6% | 59.8% | 15.0% | 10.5% | 2.1% |
| 12 | Management | 8.1% | 56.8% | 23.1% | 10.3% | 1.7% |
| 13 | Curricula | 6.2% | 54.7% | 21.4% | 15.6% | 2.1% |
| 14 | Teacher's Instruction | 12.4% | 61.1% | 17.7% | 7.3% | 1.5% |
| 15 | Discussion & Communication | 12.0% | 63.3% | 15.0% | 7.9% | 1.8% |
| 16 | Classroom | 13.5% | 63.6% | 15.0% | 6.4% | 1.5% |
| 17 | Teaching Venue | 13.5% | 62.6% | 13.2% | 8.8% | 1.9% |
| 18 | Library | 21.8% | 46.4% | 21.6% | 7.6% | 2.6% |
| 19 | Accommodation | 9.7% | 43.3% | 23.5% | 17.5% | 6.0% |
| 20 | Recreation & Fitness Center | 10.6% | 53.2% | 19.4% | 13.6% | 3.2% |
| 21 | Canteen or Dining | 9.2% | 43.6% | 23.4% | 18.2% | 5.6% |
| 22 | Location & Transportation | 10.3% | 50.9% | 21.2% | 14.3% | 3.4% |
| 23 | Academic & Research level | 11.1% | 49.8% | 33.5% | 4.3% | 1.3% |
| 24 | Planning & Organizing | 9.6% | 57.3% | 23.3% | 8.3% | 1.5% |
| 25 | Assessment & Evaluation | 9.2% | 58.3% | 25.2% | 6.2% | 1.1% |
| MEAN | Total Average Satisfaction | 11% | 56% | 21% | 10% | 2% |

previous 4 basic indicators as Gender, Program category, Channels to know Thai HEIs and Rationale to study in Thailand) to explore the key factors.

5.2 Population and sample

The population of Chinese students involved into various Chinese programs are no more than 50,000 until 2019 [5], calculated by Yamane Formula [14]:

Where, $N(\text{population size}) = 50,000$ people
 $e(\text{error of 5 percentage points}) = \text{error allowed 5 percent} = 0.05$

$n(\text{sample size}) = 50,000 / (1 + 50,000 \times e^2) = 396.82$
 $53968253968 \approx 397$

Thus, the random sampling size should be larger than 397.

5.3 Data collection

In this study, 1470 questionnaires were distributed to 89 universities from the recommendation-list-of-Thai-universities from the Ministry of Education in China which lasted from 13 November 2016 to 9 December 2019 and touched all types of Chinese programs, such as exchange student, undergraduate, post-graduate, "3+1" or "2+2" students, etc.

468 respondents from 52 Thai HEIs (more than 66% are from Private Universities) were successfully and fully received which is a larger scale than the sample size of 397; which means valid to analyze.

The researcher collected data from 468 valid respondents to sort out Chinese students' satisfaction of studying in Thailand and followed the procedure of data input and analysis through the package software (SPSS: Statistical Package for Social Sciences) to unveil the significant indicators affecting their satisfaction, which also became the key factors of operating the Chinese Programs in Thailand.

6. Interpreting the Results

6.1 Satisfaction from Chinese students of Chinese programs in Thai Higher Education

The 17 Predictor Variables covered the major elements among the hardware, software and education process of Chinese programs provided by Thai HEIs; and the student's response to these variables are obvious indicators that imply the overall satisfaction from Chinese students and the efficacy of Chinese Programs.

The outcome of the survey unveils that 67% of Chinese students are satisfied with their studies in Thailand, whereas 21% neutral and 12% unsatisfied. This indicates that Chinese programs are greatly catering to Chinese international students at large. On the Educational hardware, Thai universities should be proud of their Library, teaching facilities and equipment, and Sports and Fitness Centers, which are highly catering to the needs of the Chinese students. On the academic level, small group and international instruction style are popular to the Chinese students, especially during the discussion and communication session; and the scheduled planned teaching process was also appreciated. Otherwise, the accommodation, canteen and dining with more than 20% dissatisfaction should be improved according to the varied demands from the supporting sectors.

Chinese students' satisfaction vividly demonstrates that a good study environment, specialized Curricula, and international instruction style with delicate management are the strength of Chinese programs, while the accommodation and other supporting sectors should be diversified.

6.2 *Demographic Characteristics of Chinese students in Thailand*

6.2.1 *Gender distribution*

There are more female (302 respondents, 69.6%) than male (166 respondents, 30.4%) Chinese students with the satisfaction rate of 69% and 64% respectively without distinctions.

This detail implies the distribution is closely related to the limited disciplines offered by Chinese programs in Thai HEIs, which are mostly focusing on Thai language, Management and devoid of STEM choices for males. On the contrary, male Chinese students spend much more than female by about 4,578.72 Baht each month in an academic year. Balanced Chinese programs in disciplines could amplify this kind of marginal effect.

6.2.2 *Most mobility provided areas from China*

Yunnan Province and Guangxi Zhuang Autonomous Region from The Great Mekong Sub-region (GMS) [15] contributed 60% of the Chinese students to Thailand while the others are more or less from the other parts of mainland China; which implies that the similar historical, cultural and ideological recognition and close relationships are the steady elements to keeping the mobility provider. As the regional international city Kunming, the capital of Yunnan Province was posed as the gateway orienting South Asia and Southeast Asia, and the Sino-Thai high speed railway [16] could be accomplished by connecting Bangkok and Kunming, a potential and promising market of Chinese international students is emerging. On the other hand, the Chinese partners and stakeholders of Thai HEIs also played very important roles in attracting the local Chinese student to Thailand, especially in the populous provinces such as Sichuan, Shandong, Hubei, and Henan. Students from these areas are more difficult to gain entry into a university in mainland China, and they are more likely to choose to study abroad as alternatives if they did not do well in Gaokao, the national college entrance examination.

6.2.3 *Education Categories*

“3+1” or “2+2” Program students are the mainstream chose by Chinese students in Thai HEIs and 64% of them are satisfied. Altogether with the exchange students, there are nearly 45% non-diploma seeking Chinese students in Thailand. These kinds of students are mainly learning languages or related majors; after short learning experience in Thailand, they could be the potential applicants for the next degree at Thai universities, and they could also spread their real experience as word of mouth to impact others. On the other hand, Undergraduate and graduate fellows, and the diploma seekers of Chinese consists of 55% of the total. Obviously, Chinese Program derived from International Program with the same curricula and instruction style; but surprisingly, short-term Chinese

students are more satisfied with the study experience in Thailand.

6.2.4 *Channels to Know Thai HEIs by intermediaries*

Compared to the ordinary recruitment of international programs, Chinese programs are more reliant on their Chinese partners and stakeholders which contribute nearly 80% of Chinese mobility to Thai universities. Traditionally and historically, Chinese stakeholders are easily found in Southeast Asia [17]. Thai groups or individuals are used to doing business with Chinese back in the Sukhothai period, especially connected to the mainland China affairs; consequently, Chinese are playing roles to bridge the complexities including culture, languages, policies, etc. The overseas Chinese are serving as the connection to China and playing an important role in informal trade activities between Thailand and China [18]. The emerging Chinese programs in Thai higher education currently witness more individuals or intermediary organs to help Chinese students better know and engage with Thai universities.

6.2.5 *Rationales to study in Thailand*

Experience inclusive culture (53%), international instruction style (28.8%), comparable & reasonable tuition fees (12%) and prestigious universities (6.2%) are four main reasons for Chinese international students to choose Thai HEIs. Thailand was consecutively regarded as the least miserable country out of 66 economies for the fourth year since 2015 by Bloomberg's Misery Index [19]. As the most visited tourism destination, travelling in Thailand and enjoying Thai style leisure times during study abroad is exciting to many Chinese students. Meanwhile, Thailand holds the only world-class universities in the Indochina Peninsula or Mainland Southeast Asia [20]. Chada Triamvithaya, an academic at King Mongkut's Institute of Technology Ladkrabang (KMUTL) told Reuters that Studying for an undergraduate business degree costs up to 120,000 baht (\$3,700) a year in Thailand, while tuition fees for a similar course can range from 8,000 in Singapore to over 60,000 a year at some U.S. universities [21].

6.2.6 *Expense from Chinese students*

Normally, there are at least two semesters in one academic year, and each semester consists of at least 16 teaching weeks and 2 exam weeks, and Chinese authorities require at least 9 months' stay for overseas study each year. Meanwhile, students should register at least two 3-credit courses each semester, and it could be on average 12 credits in one academic year while each credit needs at least 7,500 Baht. On the varied accommodation, 6,000 Baht are required for monthly rent and overhead fees; and this survey demonstrates that Chinese students (n = 425, male 130, female 295) spend other average amount

Table 2. Estimated economic contribution (Baht) from one Chinese student study in Thailand for one academic year (9 months, n = 425).

| Tuition | House Rent | Other Monthly Expense | Total Annual Expense |
|---------------------------|--------------------------|---------------------------------|----------------------|
| $7500 \times 12 = 90,000$ | $6000 \times 9 = 54,000$ | $8,918.75 \times 9 = 80,268.75$ | 224,268.75 (Baht) |

Table 3. 17 indicators affecting satisfaction among the 21 Variables in Chinese Program (n = 468).

| Symbols | Independent Variables | Dependent Variables | N | Asymp.Sig.(2-tailed) | Pearson Chi-Square |
|---------|-------------------------------|---------------------|-----|----------------------|--------------------|
| 3 | Province | Satisfaction | 468 | 0.852 | |
| 5 | Gender | Satisfaction | 468 | 0.341 | |
| 6 | Category** | Satisfaction | 468 | 0.001 | <0.05 Significant |
| 7 | Channel | Satisfaction | 468 | 0.187 | |
| 8 | Rationale | Satisfaction | 468 | 0.299 | |
| 10 | Quality** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 11 | Facility** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 12 | Management** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 13 | Curricula** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 14 | Teacher's Instruction** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 15 | Discussion & Communication** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 16 | Classroom** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 17 | Teaching Venue** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 18 | Library** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 19 | Accommodation** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 20 | Recreation & Fitness Center** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 21 | Canteen or Dining** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 22 | Location & Transportation** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 23 | Academic & Research level** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 24 | Planning & Organizing** | Satisfaction | 468 | 0.000 | <0.05 Significant |
| 25 | Assessment & Evaluation** | Satisfaction | 468 | 0.000 | <0.05 Significant |

** p_i 0.01 (Correlation is significant at the 0.01 level (2-tailed))

to 8,918.75 each month (male 12,096.92 Baht, female 7518.20 Baht).

Therefore, as the total amount of Chinese students surpass 50,000 at the end of 2019, the Chinese student community contributes at least 11,213,437,500 Baht (= 224,268.75 × 50,000), which was the greatest contribution to Thai Higher Education and related sectors. As Chinese Programs are differentiated and specialized for Chinese students, the cost is much higher than other programs; for instance, the same kind of Programs for Thai language instruction only cost half of the Chinese program while the International Program at 70% of the cost. To Thai HEIs, that means one applicant from the Chinese program could contribute economically twice as much as the Thai students and 1.5 times the international students. This is the strong evidence that Chinese Programs, or even Specialized Chinese Colleges are emerging in Thai Higher Education and steadily freed the marginal effect in Thai society.

6.3 Correlative analysis between 21 variables of Chinese Programs and the satisfaction from Chinese students

The 21 variables inside Chinese Programs will be analyzed in form Chi-square (X²): test using categorical data analysis, Confidence level = 95%, Sig lad < 5%(0.05); If Pearson statistic < 0.05, It is a significant result; If Pearson statistic > 0.05, not significant, that means there is no strong relationship.

Sorting out the 17 key factors, they are affecting Chinese Programs operation on Selecting Thai HEIs, Educating Process and Supporting Sectors as Figure 1.

7. Conclusion

1. Chinese Programs in Thai HEIs are greatly catering to the demand from Chinese international students; the mutual needs between Chinese students and Thai HEIs are the essence of sustainability in long-term benefit as a win-win deal.

2. Program managers are key persons in the Chinese Programs. Since Program and curriculum design are vital factors to attract Chinese students, program managers are required to keep close to the needs of Chinese students so as to differentiate a marketing strategy for the future.

3. Chinese student community in Thailand, whose population is estimated to surpass 50,000 in the end of 2019, greatly contributes to the Thai economy and related sectors at least 10 billion Baht every single year; this multi-stakeholder program is the effective approach to leverage both the inbound and outbound, public and private resources benefiting the mutual higher education cooperation between Thailand and China with rising marginal effect.

4. Chinese Programs enter into the Red Sea Market. As both public and private of Thai HEIs setup

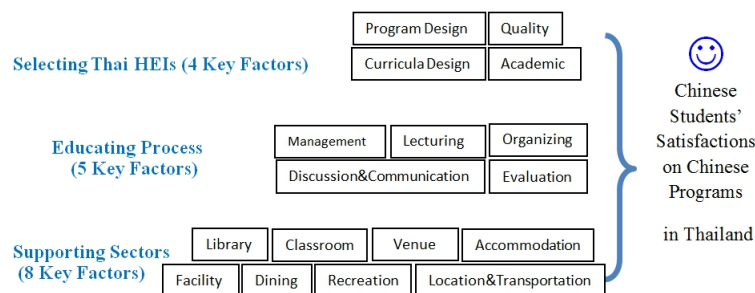


Figure 1: 17 key factors impacting Chinese programs in Thai higher education.

various Chinese programs to attract Chinese international students and compete with the traditional study abroad destinations, especially the changing policies under the outbreak of COVID-19, business in the international students market becomes a Zero-game at large.

8. Discussion

1. Chinese Program is a Win-Win Deal with Steady Returns. This kind of Program derived from the International Program with the same curricula and instruction style in quality, which is specialized to Chinese needs with 1.5 and 2 times the profit compared to the International and Thai Program respectively. Meanwhile, investment from Chinese shareholders could leverage and benefit to the higher education market in Thailand. The great contribution to the economy and relative sectors could reach more than 10 billion Baht each year. Chinese students market in Thailand could be the promising sector steadily benefited from China as the largest target market after Tourism, especially under the shock of the pandemic and economic depression.

2. Grafted and absorbed the experience of the International program, Chinese program has great potential and vitality to develop more disciplines for academic exchanges between China and Thailand in the long run.

3. Flexible and dynamic implementation of Chinese programs as a strategy could not only maintain the majority of international mobility in the changing world, but also builds Thailand as the regional education hub with competence in the global market.

4. Chinese Program is just the touchstone to display the international mobility between the regional study hub and traditional study abroad destinations which demonstrate the world trend of the global international student market at large.

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