

Importance-Performance Analysis for the Motivation of Choosing Dhurakij Pundit University as an Oversea Study Destination

Cheng-Yi Kuo

Department of Business Administration, Ming Chuan University, Taipei, Taiwan
Department of Tourism Management, Dhurakij Pundit University, Bangkok, Thailand
Email: ian780303@gmail.com

Jehn-Yih Wong

Department of Tourism, Ming Chuan University, Taipei, Taiwan
Email: jywong@mail.mcu.edu.tw

Abstract—The specific objective of this current study is to conduct an importance-performance analysis on the attribute of selecting Dhurakij Pundit University perceived as an oversea study destination. The analysis identified 15 of 17 attributes with significant differences, with two being importance exceeding performance. 250 questionnaires were retrieved via convenience sampling. The study result showed that education-related factors are considered the most important motivation, followed by cost, travel-correlated factor and reference group. Finally, practical implications and managerial suggestions are discussed.

Index Terms—importance-performance analysis, oversea study motivation, Chinese student, dhurakij pundit university

I. INTRODUCTION

In recent years, it has been extremely difficult to ignore the fact that Thailand with the great growth on both political and economic influence is the center of ASEAN. According to [1], Thailand is the second-largest economy in Southeast Asia, after Indonesia along with its GDP in 2018 being the highest since 2013[1]. Thailand turns out to be more and more modern, and the transportation becomes more convenient than years before based on its steadily-solid economic foundation, which explicitly sets out the plausible reason why Thailand draws up people's attention to be here for tourism, pursuit of education.

Reference [2] demonstrated that the growth rate of Thailand's international students in higher education reaches to 400% from 2003 to 2011.

Also, the latest encouraging report presented by the Ministry of Thailand Education, the accumulated number of oversea students in Thailand reached to 18,814 in 2013 while China, in terms of foreign students' nationality, accounted for 35.4% of total to be claimed as the main source of students in five years [3]. More than this, the data

collected from the Center for China & Globalization, CCG also showed that China is unanimously to proclaim the principal resource of oversea students' outputs in the world [4]. On the other hand, one of the fastest growing output destinations is Thailand because of the "Common Space of Higher Education" project accomplished by One Belt One Road Policy [4]. Therefore, understanding how Chinese students choose an oversea destination is an important topic for international recruitment.

Dhurakij Pundit University, DPU, is being viewed as the unique legal university to provide Chinese programs in Thailand, including International Business, Financial and Accounting, Tourism Management, Art and Design and Communication and Media to attract target group. Plus, both geographic and culture proximity are lead to less level of culture shock. Thus, the reasons for choosing DPU as an oversea study destination become quite different than before, and it is crucial to learn about this salient fact for future recruitment strategy.

The objectives of this study are as followed: (1) To examine the criteria that students used as overall quality in making the school selection for DPU; (2) To analyze the relative importance of these criteria to the overall quality judgment. (3) To assess the extent to which students' experience meet their expectation.

II. LITERATURE REVIEW

A. Motivation of Selecting an Oversea School

The motivation of selecting an oversea school has been discussed for years. Mazzarol explores the main success factors of international education marketing [5]. The success factors are divided into four categories by factor analysis. The first category appears promotion and recruitment, including "the use of private recruitment agents", "size of overseas advertising and promotion budget, possessions of offshore recruitment office", "use of government information offices overseas and the size of

international student enrolments". The second category lies in images and resources, including "the level of market profile or recognition, strength of financial resources", "reputation for quality, the size and influence of alumni and the range of courses and programs". The third category counts on people and culture, including "the level of innovation within the institutions' culture", "the level of customer orientation within culture", "effective use of information technology", "quality and expertise of staff and the level of technical superiority". The fourth category is built on coalition and forward integration, including "possession of international strategic alliances" and "possession of offshore teaching programs".

Mazzarol and Soutar used push-pull factors to explore the destination choices of international students [6]. The push factors include "the perception that an overseas course of study is better than a local one", "the student's ability to gain entry to local programs", "a desire to gain a better understanding of the West" and "an intention to migrate after graduation". The pull factors include "the reputation or profile of the destination country", "the understanding of the destination country", and "the parents' decision", for example, parents who study abroad had a closer affinity with that country; they were more likely to pose potentially significant influence on their children to attend the same university. Still, geographical proximity, and local expenses including direct costs such as living expenses, legal to work and indirect expenses such as the opportunity cost of studying at home or not attending school, the cost of air travel to the host country, the level of crime, the presence of racial discrimination, whether local schools can recognize diplomas in the country, whether there are enough international students at the university to seize more opportunities for social acceptability, local environment (climate, lifestyle, quiet, studios, beach and fun), opportunities for future employment include the reputation and quality of the university, the university's external cooperation, word of mouth reputation from alumni, professional teaching staff and the enrollment rate.

Aresi, Alfieri, Lanz, Marta and Moore developed a Multidimensional Motivation to Study Abroad Scale (MMSAS) for European Credit System students [7]. The results concluded nine factors for the motivation, the first factor is Personal growth, including "to know better myself", "to learn more about myself", "to encourage myself to change in some way". The second factor is believed to be better academic knowledge, including, "to experience a higher academic level", "to get a better university education" and "because it is an opportunity to continue my studies at a higher educational level". The third factor is involves with others' expectations, including "because others (relatives and friends) expected me to study abroad", "because others (relatives and friends) push me to do this" and "so that other people (relatives and friends) would be proud of me". The fourth factor associates with learning or improving foreign language skills, including "to learn/improve the local language", "because the host country language is useful" and "to

learn/improve a foreign language". The fifth factor depends on cross-cultural interest, including "to meet people from different countries", "to get in contact with people from other countries" and "to meet new people". The sixth factor relies on escaping away from home (domestic) environment, including "to get a break from usual surroundings", "to take a break from usual life" and "to escape day-to-day life". The seventh factor is deemed as career perspectives, including "to more easily enter the job market", "to improve career prospects" and "to expand my career opportunities". The eighth factor is regarded as the search for independency, including "to find greater freedom", "to gain independency" and "to find greater freedom". The ninth factor lands on leisure, including "to have exciting experiences", "to have an adventure" and "to have fun".

From the literature review, this study drew up the promising conclusion over the motivations of selecting an oversea school and divided those items into four dimensions. The first dimension relates to university-related factor, which is the primary factor under international students' consideration. Different from other university, DPU is allowed to provide oversea Chinese programs for Chinese students. Hence, this study gains a item that students may choose DPU as oversea study destination because of providing Chinese program. The detailed university-related dimension items are as followed:

- A chance to learn one major in Chinese in DPU
- Professionalism of academic staff in DPU
- A chance to experience different ways of learning in DPU
- Degree of difficulty to graduate from DPU
- The conditions for entry requirements for DPU
- Learning Thai language in DPU
- English-language entry requirements in DPU

The second dimension pertains to the cost. The cost, if specifically speaking, is not only on cash expenditure (e.g. the cost of courses, the cost of living and the travel cost) but also on social cost (e.g. the level of discrimination to Chinese).The detailed cost dimension items are as followed:

- The cost of courses in DPU
- Cost of living in Thailand
- Travel costs in Thailand
- The level of discrimination to Chinese

The third dimension is linked to travel-related factor, such as the need of travel (e.g. opportunity for travel during semester and a chance to experience Thai culture), city image (e.g. the degree of internationalization in Bangkok and the modernity of Bangkok) and transportation convenience (e.g. Transportation development in Bangkok).The detailed travel-related dimension items are as followed:

- Opportunity for travel during semester
- A chance to experience Thai culture
- The degree of internationalization in Bangkok
- The modernity of Bangkok

- Transportation development in Bangkok

The fourth dimension deals with reference group, such as the important persons' behavior (e.g. Friends/relatives also study in DPU and Established population of Chinese students in DPU), suggestion (e.g. Friends/relatives support you to study in DPU). The detail reference group dimension items are as followed:

- Friends/relatives support you to study in DPU
- Established population of Chinese students in DPU
- Friends/relatives also study in DPU

B. Importance-Performance Analysis

Importance-Performance Analysis was developed by Martilla and James to view how well a company performs to deliver attribute desired by their customer [8]. IPA use two thresholds to form a four quadrants figure to classify the importance and performance value. Each of quadrants presents different priority for manager to formulate and predict strategies. For example, the first quadrant represents to keep up the good work in high importance and performance; the second quadrant stands for that manager must concentrate on that factor because of high importance and low performance; the third quadrant indicates low priority because of low importance and low performance and last, the fourth quadrant demonstrates overkill on that factor because of low importance and high performance.

IPA was used in education domain for decades to evaluate university courses [9], [10], directing continuous quality improvement [11].

O'Neill and Palmer developed psychometrically and practically measurement into IPA [11]. They found that there were three important factors be considered when evaluating education service quality. The three factors are process (i.e. non-excessive waiting time; employees never too busy to respond), empathy (i.e. employee understanding of needs; employees had best interests at heart) and tangibles (i.e. good facilities to cater for students; staff appeared neat and professional). The research results showed that university should first improve process dimension which was considered in a high importance but with low performance quadrant.

Simpson and Tan used IPA to evaluate Chinese students' overseas study experience [9]. They stressed on the in-school factors to measure service quality through IPA. They found that there were six important factors be considered when evaluating education service quality. The six factors are administrative support (i.e. availability of facilities and equipment), academic staff quality (i.e. communications skills of academic staff), qualification integrity (i.e. quality of academic institution), personal compatibility (i.e. level of English-language entry requirements), curriculum quality (i.e. range of courses offered) and campus quality (i.e. accessibility and convenience of campus). The research found that the top five importance ratings are relative to individual variables rather than university-related elements. Finally, they suggested that tertiary institutions are not only emphasis on qualifications and courses but also stress on physical environment.

Kuo, Chang and Lai used Kano model and IPA to examine the courses' outcome in hospitality and tourism programs [10]. They found that there were five important factors for students to take into account when evaluating education service quality. The five factors are teaching (i.e. teachers can teach and guide me using a structured), reward and response (i.e. teachers assess the academic performance of students in a true, correct, and reasonable way), organizational trust (i.e. teachers and staff deserve the respect and trust of the students), student-teacher interaction (i.e. teachers advocate further education and provide guidance) and teaching equipment (i.e. The department provides a good classroom environment, including adequate lighting, good ventilation, and good sound insulation). Research suggested that the two most important elements perceived by students were: 1) teachers assess the academic performance of students in a true, correct, and reasonable way, and 2) teachers can provide students with information on future employment [10].

III. METHODS

A. Population and Sampling

China-ASEAN International College, DPU, is comprised of five programs including International Business Management (IB), Accounting and Financial Management (AF), Tourism Management (TM), Art & Design (AD) and Communication and Media (CM). To have the accurate responses for the reasons that choosing DPU as an overseas school, this study selected first year of students as research population to avoid error responses because of the time memory. This study surveyed 250 participants via convenience sampling and proportional-to-size allocation according to all departments respectively. Thus, distribution the number of questionnaire in IB is 101, AF is 94, TM is 29, AD is 16 and CM is 10.

B. Instrument Construction

The instrument of this study was a self-administered survey questionnaire with three sections, in first part, this study integrated literature review and concluded overall motivation for selecting an overseas school. After getting the motivation items of importance-performance for the scale, in second part, a pilot test was conducted to assess internal consistency and comprehension of the questionnaire items for 30 respondents. Finally, in third part, this study surveyed 250 participants to assess importance-performance factors and the factors were measured by 5-point Likert-type that ranged from 1 (strongly NOT important/performance) to 5 (strongly important/performance). The questionnaire was developed in Chinese and checked by three of CAIC faculty members who come from China to ensure that the wording and instruments satisfy China students with goal-clear understanding and valid responses. The primary data collection effort involved on-site questionnaires to DPU students in every major. Student participants were requested to complete the questionnaire in class, and make

sure that all participants were allowed and given at least 20 minutes to accomplish the survey task.

C. Data Collection & Analysis

The study was conducted in China-ASEAN International College of DPU. The unique legal Chinese program in Thailand and academic degree is recognized by China official institution. 250 questionnaires were distributed to understand important and performance factors from 1 Jun to 30 June, 2018. The scale is conducted over Survey Cake website, the Internet scale to meet students' habit, and can be finished through their Smartphone devices. Description analysis was used to frequency distribution for demographics; IPA was used to view overall quality that meets Chinese students study motivations; paired t-test was used to view the relative importance with motivation items.

IV. RESULTS

Table I presents the demographic characteristic of first year students in DPU. Over than half (60.4%) of the participants are male respondents. The age distribution is around 17-22. The reason that why DPU freshmen are overage is due to different admission systems. Some students have studied basic subjects at domestic university for half-to-two year. Some others started to work after graduate from senior high school. Just over two-third (70%) of freshman were born in single-child family because of early population policy in China. Most of students (78%) study in international business program and financial and accounting program according to population size.

TABLE I. FREQUENCY DISTRIBUTION FOR DEMOGRAPHICS

	Frequency	Percentage (%)	Mean(Standard Deviation)
Gender			
Female	99	39.6	
Male	151	60.4	
Total	250	100	
Age			
17	9	3.6	
18	28	11.2	
19	38	15.2	
20	33	13.2	60.6 (1.76)
21	42	16.8	
22	60	24.0	
Above23	40	16.0	
One Child			

TABLE II. COMPARISONS OF IMPORTANCE AND AGREEMENT SCALE RESPONSES

Key Attribute Scale Statement	Importance ^a Mean (SD)	Performance ^b Mean (SD)	Significance Test
Cost			
The cost of courses in DPU	3.5800 (1.04)	3.5400 (1.09)	t=0.512
Cost of living in Thailand	3.5400 (0.97)	3.5640 (1.10)	t=-0.298
Travel costs in Thailand	3.4120 (1.00)	3.6120 (1.06)	t=-2.489*
The level of discrimination to Chinese	2.8440 (1.35)	3.4720 (1.21)	t=-5.814***
Average	3.344	3.547	

Family		
Yes	175	70
No	75	30
Major		
IB	101	40.4
FA	94	37.6
TN	29	11.6
AD	16	6.4
CM	10	4.0

A. Importance-Performance Analysis of Key Attribute

The key attributes were conducted from the literature review. There are four attributes including cost, university-related factors, travel-related factors and reference group to explain the motivation for selecting DPU as an oversea school. Paired-T test was used to examine the significance between importance and performance match attributes.

In terms of the importance of the motivation attributes, a chance to learn one major in Chinese in DPU (M=4.22, SD=.98) was the most important motivation for selecting DPU as an oversea university, followed by professionalism of academic staff in DPU (M=3.61, SD=1.10), the cost of courses in DPU (M=3.58, SD=1.04), a chance to experience different ways of learning in DPU (M=3.548, SD=1.2). It showed that all attributes that Chinese students concern were around educational domain.

The top four attributes in terms of DPU performance include a chance to learn one major in Chinese in DPU (M=4.11, SD=0.95), degree of difficulty to graduate from DPU (M=3.80, SD=1.00), a chance to experience different ways of learning in DPU (M=3.78, SD=1.06) and opportunity for travel during semester (M=3.76, SD=1.12). It showed that three of four items were in DPU-related factors and the other was in travel-related factor.

A series of paired t-test were used to conduct the importance-performance analysis. 15 of the 17 comparisons were significant. 1 resulted in a higher importance rating than performance measure, indicating that DPU should focus to improve their performance and better provide what are important to Chinese students. Although learning one major in Chinese in DPU is the highest item in performance factor, but still not reaching to students' expectation, that is because in despite of students are studying in Chinese program, they remain have English and Thai courses to help them adopting a foreign environment. (Table II).

DPU-correlated factors			
A chance to learn one major in Chinese in DPU	4.2280 (0.98)	4.1120 (0.95)	t=2.449*
Professionalism of academic staff in DPU	3.6160 (1.10)	3.7320 (1.05)	t=-2.069*
A chance to experience different ways of learning in DPU	3.5480 (1.20)	3.7880 (1.06)	t=-4.116***
Degree of difficulty to graduate from DPU	3.5400 (1.01)	3.8080 (1.00)	t=-3.686***
The conditions for entry requirements for DPU	3.5080 (1.11)	3.6880 (1.03)	t=-2.624**
Learning Thai language in DPU	3.3880 (1.26)	3.5240 (1.22)	t=-2.175*
English-language entry requirements in DPU	3.1280 (1.29)	3.6720 (1.09)	t=-6.560***
Average	3.565	3.760	
Travel-correlated factors			
Opportunity for travel during semester	3.5440 (1.18)	3.7640 (1.12)	t=-3.508***
A chance to experience Thai culture	3.5160 (1.14)	3.6840 (1.15)	t=-3.133**
The degree of internationalization in Bangkok	3.4320 (1.07)	3.5920 (1.06)	t=-2.979**
The modernity of Bangkok	3.2440 (1.12)	3.5240 (1.08)	t=-4.935***
Transportation development in Bangkok	2.7840 (1.20)	3.2160 (1.20)	t=-6.381***
Average	3.304	3.556	
Reference group			
Friends/relatives support you to study in DPU	3.5200 (1.23)	3.6760 (1.16)	t=-3.168**
Established population of Chinese students in DPU	3.4160 (1.08)	3.5480 (1.13)	t=-2.302*
Friends/relatives also study in DPU	2.5440 (1.58)	2.7680 (1.55)	t=-3.262**
Average	3.160	3.330	

^aMeasured on a scale of 1 = not at all important to 5 = extremely important

^bMeasured on a scale of 1 =strongly disagree to 5 = strongly agree

*p<0.05, **p<0.01, ***p<0.001

V. DISCUSSION

The purposes of this study are: (1) To examine the criteria that students used as overall quality in making the school selection for DPU; (2) To analyze the relative importance of these criteria to the overall quality judgment, and (3) To assess the extent to which students' experience meet their expectation. IPA in this study is successfully examining participants' motivations to study in DPU. This study identifies that education-related factors remain as the chief concern for Chinese students to select an overseas school [5]. In addition, having a chance to study one major in Chinese is an important factor to pull students for pursuit of higher education overseas. DPU holds a strength position in promoting Chinese program in Thailand, and even builds up a China village around school. The current study suggests that university should further recruit more international students from nearby country by making great use of the good environment for learning Chinese. The second important factor is tightly connected with professionalism of academic staff in DPU. The results

showed that human capital is a key to develop sustainable management in higher education. DPU should do more efforts on research publications, teaching quality monitor.

In this study, there are two items that important rating is lower than performance rating. The first one is the cost of courses in DPU, this study suggests that university should build up an open channel for introducing cost-related regulation. The second one is a chance to learn one major in Chinese in DPU. In despite of the fact that students are studying in Chinese program, attending English and Thai courses appears to practically help adapt themselves to a foreign environment. Furthermore, this study suggests that DPU should provide differentiation courses in the basis of students' foreign language ability, rather than use the class as a unit to learn.

It's worth noting that the mean of travel-related factors and reference group are close to education-related factors, it showed that students under language-free learning environment have other potential consideration; therefore, this study suggests that DPU should combine learning and traveling into subjects to meet students' expectation. On

the other hand, reference group is an indirect way to prompt more relative/friends to study in DPU. This study suggests that DPU could publicize recruitment information by building up alumni association.

The results of the IPA reveal practical application for education managers. After implementing any changes or enhancements to a quality measurement base on IPA, future study may shed a highlight on longitudinal survey of performance to compare its outcome changes. Also, other international students could be taken as the research target participants, and discover the differences in motivation among various nations.

A few limitations of this study are addressed. First, in order to obtain accurate response, this study focuses on the first year students as sampling-selected participants. Second, DPU is the unique Chinese program provider with majors in Thailand. Simply stated, the research results, due to the two abovementioned causes, could merely be applicable to Chinese program in DPU- CAIC without generalization being made to other universities' Chinese program in Thailand.

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Cheng-Yi Kuo is the doctoral candidate from the Department of Business Administration at Ming Chuan University in Taipei, Taiwan. He is currently a full-time instructor in the Department of Tourism Management at Dhurakij Pundit University, Bangkok, Thailand. His research interests are in the areas of tourist behavior, consumer behavior and tourism marketing.



Jehn-Yih Wong received his Ph.D. from the University of Tsing Hua in Hsinchu, Taiwan. He is currently a Professor, and serves the position as Dean of Tourism College, Ming Chuan University. His research interests cover human resource management, consumer behavior, and decision-making analysis.