

A CAUSAL MODEL OF FACTORS INFLUENCING THE UNIVERSITY CHOICE OF INTERNATIONAL STUDENTS IN THAILAND*



Kumutinee Jaroenrat**
Dr. Surath Chaichompu***

ABSTRACT

The purposes of this research were 1) to explore the relationships between factors influencing the university choice of international students in Thailand and 2) to propose and test a causal model of factors influencing the university choice. Six latent variables which were university characteristics, socioeconomic status, country characteristics, significant persons, students' aspiration, and students' university choice were used in this research. A simple random sampling technique was employed to obtain a sample of 255 undergraduate international students in 18 universities. The University Choice Questionnaire was employed to collect the data. The SPSS and LISREL programs were used for data analysis. The causal model of this research was tested using structural equation modeling.

The research results explore that there are relationships between university characteristics, significant persons, students' aspiration, and students' university choice in Thailand. The university characteristics and significant persons are considered as moderately influential factors for international university choice, while students' aspiration is highly influential factor. The research findings also show the overall parsimonious goodness of fit model fitted to the empirical data. The model indicates that the Chi-square goodness of fit test is 70.94, $df = 33$, $RMSEA = 0.067$, $GFI = 0.95$, $AGFI = 0.90$, $CFI = 0.98$. The major research finding is students' aspiration has a significant direct effect on students'

* Dissertation for the Degree of Doctor of Education in Educational Administration Faculty of Education, Burapha University

** Doctoral Student in Educational Administration Faculty of Education Burapha University

***Dissertation Advisor of Innovative Administration and Educational Leaderships Center Faculty of Education, Burapha University

university choice, whereas university characteristics and significant persons have indirect effects. It is concluded that an international student's university choice derives from her or his aspiration, which is influenced by the university characteristics and significant persons.

KEYWORDS: Causal model of factors/ University choice of international students

Statements and Significance of the Problems

The decade of a rapidly changing world of technological, social and economic change is a challenge in today's knowledge-based economy. Obviously, many parents are making many efforts to endure any financial burden to provide a good education for their children, because education contributes a wide range of benefits to their children's future (Chatterji, 1998; UNESCO, 2005; Yang, 2007). The graduate with a foreign degree is usually considered as having more marketable skills and being more employable in the market place of industry (Gareth, 2005). Therefore, many students have traveled to other countries to obtain a higher education and earn a degree from reputable institutions to improve the opportunities for their future lives (Kritz, 2006). Since the number of international students studying outside their home countries is growing rapidly, the internationalization of higher education has emerged as a major trend in the globalization era (UNESCO, 2005; Yang, 2007). The international higher education sector has become more popular and is constantly on the rise, driven largely by Asian students' demand, especially the Chinese and Indian students, who make up over half all international students in the international education sector (Australian Education International [AEI], 2005; Clark & Sedgwick, 2005; IDP, 2003).

The numbers of foreign students in Thailand have increased substantially from 3,339 in 2002 to 16,361 in 2008. The international higher education's contribution to the Thai economy has generated as much as 2,481 million baht in 2003. In the year 2007, there are approximated 16,361 foreign students enrolled in 96 Thai higher education institutions (Areesorn, 2005; Chang, 2004; Commission on Higher Education [CHE], 2007b; CHE, 2008; UNESCO, 2005). In anticipation of the positive spin-offs for the economy and society, the ambitions of Thai higher education policy are to establish Thailand as a center for international education in South-East Asia (UNESCO, 2005). This policy corresponds to Thailand's Long-Range Plan for higher education development (2000-2014) and the Royal Thai Government policy in an effort to promote Thailand as a regional education hub for neighboring countries and the region (Chang, 2004; CHE, 2005a). The International Education Handbook (2005) has revealed that Thailand is an affordable choice for international students. Further supported by Chang (2004), Thailand possesses excellent



strengths in terms of the living and studying cost, diversity, and international environment. To succeed in the international higher education market, Thailand should consider the way to make the country a more competitive player in the global export education market. In order to have a great competitive advantage in the marketplace, the entrepreneurs or marketers have to understand consumer behavior and realize which target group is the real purchaser of that particular product (Jaroenrat, Sidthipong, & Arunyanart, 2001).

Several reasons make an examination of factors that international students have considered when making a decision to study abroad very important. This research will investigate a causal model of factors influencing the university choice of international students in Thailand. It makes an effort to introduce a new conceptual model by which to examine and understand the international students' university choice. Developing a university choice framework gives the opportunity to focus on key factors: university characteristics, country characteristics, socioeconomic status, significant persons, and students' aspiration.

Objectives

1. To explore the relationships between factors influencing the university choice of international students in Thailand; and
2. To propose and test a causal model of factors influencing the university choice of international students in Thailand.

Research Questions

1. Were any relationships between university characteristics, socioeconomic status, country characteristics, significant persons, students' aspiration, and the university choice of international students in Thailand?
2. What was a causal model of factors influencing the university choice of international students in Thailand and does it adequately fit to the empirical data?

Conceptual Framework

The conceptual framework of this research was derived from the model of Chapman (1981), Cabrera and La Nasa (2000), and Mazzarol and Soutar (2002). Consequently, the prevalent influential factors on university choice can be grouped into five main categories. The university characteristics, country characteristics, socioeconomic status, significant persons, and students' aspiration have all been posited as important sources of direct and indirect influence on the university choice of international students in Thailand.

Hypotheses

1. There were statistically significant relationships between university characteristics, socioeconomic status, country characteristics, significant persons, students' aspiration, and the university choice of international students in Thailand.
2. The causal model of factors influencing the university choice of international students in Thailand was adequately fit to the empirical data.

Scope of Study

1. Scope of content

This research was focused on a causal model of factors influencing the university choice of international students in Thailand. It was composed of five main factors which were university characteristics, socioeconomic status, country characteristics, significant persons, and students' aspiration.

2. Population and sample

The population of this research was 10,663 international students who are enrolled for undergraduate degrees in universities or colleges that offer international programs in Thailand. The sample size of this research was 255 undergraduate international students who enrolled in 2009 academic year.

3. Variables

The latent variables of this research were exogenous and endogenous variables. The latent exogenous variables were university characteristics, country characteristics, and socioeconomic status. The latent endogenous variables were significant persons, students' aspiration, and students' university choice.

The observed exogenous variables were tuition fees, reputation of university, quality of education, financial aid & scholarship, academic majors, geographic proximity, cost of living, safety, culture & social, parental education, and family income. Besides that, the observed endogenous variables were family, friends, counselors, educational aspiration, occupational aspiration, and degree of certainty.

Research Instruments

The research instrument was a university choice questionnaire. This research used a questionnaire as the instrument to evoke and test a causal model of the factors influencing the university choice of international students in Thailand. Questionnaire was composed of two sections and utilized a combination of a 5-rating Likert scale and check list questionnaires. The quantitative instrument was composed of a total of 72 items developed around

factors known to influence students' university choice. In the stage of finding content and construct validity of the questionnaire, a panel of five experts was requested to evaluate research instrument. In addition, the index of item objective congruence (IOC) technique was also applied for the research's content validity. The research instrument was included a tryout study on 30 undergraduate international students who were not involved in the research. Furthermore, the instrument was tested for reliability using the Cronbach alpha statistic.

Data Collection Procedures

After the approval from Graduates School of Burapha University, the data collection permission letters from Faculty of Education of Burapha University were brought to 18 random universities. Then, researcher mailed a packet to each university and questionnaires were administered to the instructors who administered them in class. Next, international students who were willing to participate in the research were given the questionnaires to be answered. Upon completion of the questionnaires gathering, they were asked to return them via the researcher's post address.

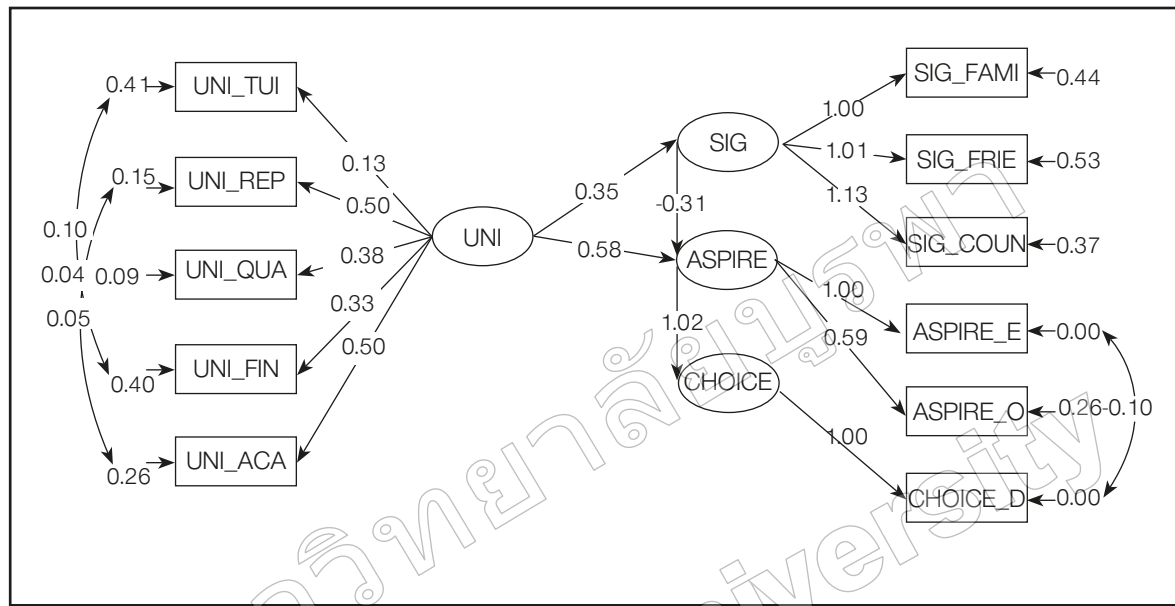
Data Analysis

The data were analyzed using descriptive statistics such as frequencies, percentages, means, standard deviation, skewness, kurtosis, and coefficient of variance. In this research the 5-rating Likert scale was incorporated in the instrument. Furthermore, the hypothesized models were tested using structural equation modeling (SEM). The SEM analyses were conducted using LISREL program for solving the causal model.

Results

The data was analyzed by using SPSS and LISREL programs. The research results explored that there were relationships between university characteristics, significant persons, students' aspiration, and students' university choice in Thailand. The university characteristics and significant persons were considered as moderately influential factors for international university choice, while students' aspiration was highly influential factor. The research findings showed the overall parsimonious goodness of fit model fitted to the empirical data. It indicated that the Chi-square goodness of fit test was 70.94, $df = 33$, $RMSEA = 0.067$, $GFI = 0.95$, $AGFI = 0.90$, $CFI = 0.98$. In particular, the university characteristics had a positive direct effect on significant persons and students' aspiration. The significant persons had a negative direct effect on student's aspiration. Lastly, the

students' aspiration had a positive direct effect on student's university choice. It was concluded that an international student's university choice derived from her or his aspiration, which was influenced by the university characteristics and significant persons.



Conclusions and Discussion

1. About 57% of respondents were male and most of them were second-year Chinese students who were studying business administration (44%) in universities of Thailand. It was corresponding with the data record of the Commission on Higher Education about international students in higher educational institutions in Thailand that China was the largest source country for higher education by volume of enrolments (CHE, 2004; CHE, 2008). China was considered the world's most populous nation with 1.3 billion people in 2005 and became the leading source of international student enrolment in many countries (Banks, Olsen & Pearce, 2007). Since the demand for domestic higher education in China is unmet and there are not enough institutions in the place they live, it makes Chinese students the most mobile group in the world (Banks, Olsen & Pearce, 2007; People's Daily Online, 2009). The most popular field of study for international students in Thailand is business administration (CHE, 2008). Obviously, the international student enrolment number by field of education illustrated that almost one out of every four international students (23%) was enrolled in business and administration/management program in countries with available data (UNESCO Global Education Digest [UNESCO GED], 2009).

2. The research results explored that there were relationships between university characteristics, significant persons, students' aspiration, and students' university choice in Thailand. The university characteristics and significant persons were considered as moderately influential factors for international university choice, while students' aspiration was highly influential factor. Regarding the research findings, it was found that university characteristics were considered as a moderately influential factor for international university choice. This factor included tuition fees, reputation of university, quality of education, financial aid & scholarship, and academic majors. Specifically, the quality of education was found as the highest influential factor, followed by reputation of university, academic majors, tuition fees, and financial aid & scholarship, respectively ($t = 3.85, 3.58, 3.53, 3.25, \text{ and } 3.10$). The significant persons that included family, friends, and counselors were considered as a moderately influential factor for international university choice. Family, friends, and counselors were revealed as the moderately influential factor for international university choice with $t = 3.18, 3.29, \text{ and } 2.63$ respectively. The students' aspiration was considered as a highly influential factor for international university choice. This factor included educational aspiration and occupational aspiration. An educational aspiration ($t = 3.75$) is definitely highly influential on student's university choice, whereas occupational aspiration ($t = 3.47$) is a moderately influential factor.

3. Concerning the correlation matrix, it was found that more than half of the observed variables' correlations were statistically significant. The direction of most correlations was positive. The strongest correlation was between the reputation of the university and academic major. Given that, the KMO test index ranged from 0.50 to 0.71 and the Bartlett's test of sphericity was significant ($p < .001$), it was indicated that those observed variables had significant relationships and were appropriate for an analysis. Applying the SEM model, the findings revealed that the parsimonious model fitted satisfactorily the data. More specifically, the chi-square value was 70.94, with 33 degrees of freedom. Its corresponding p-value was < 0.001 . The goodness-of-fit statistics: GFI, AGFI, RMR, and RMSEA were respectively 0.95, 0.90, 0.034, and 0.067 indicating a good model fit. The structural paths of the SEM model were revealed as follows:

3.1 The students' aspiration had direct effect on students' university choice, which accounted for 75% of variance. The finding of this research follows the college choice theoretical model of Chapman (1981), which posited that the level of educational aspirations has led students to their college choice. Likewise the model of Cabrera and La Nasa (2000), it has examined the influence of students' educational and occupational aspirations, availability of information about college, cost of attendance, and financial aid

on their college choice decision. The extent to which this research's parsimonious model explains the influential factors on students' university choice is remarkable that students' aspiration is a key predictor of international students' university choice. Thus, it is clear that students' aspiration was associated with students' university choice; the higher the level of educational and occupational aspiration, the higher the degree of certainty in the choice of university.

3.2 The university characteristics factor had a significant indirect effect on students' university choice. More specifically, this research found an indirect effect of university characteristics on students' university choice through: 1) significant persons and students' aspiration; and/ or 2) students' aspiration. As far as the intervening factors of significant persons and students' aspiration were concerned, it was confirmed by the study of Smith & Matthews (1990). The finding of a survey on admitted students in 1990 revealed that reputation of a university had an effect on the decision to attend college, but this reputation was relayed through the recommendations that students received from their friends. In a related vein, the push-pull model was found to explain and used to understand the international student's choice of a country. Especially, the pull factors are generally positive enough to attract international students to the destination country (Chen, 2007; Mazzarol & Soutar, 2002). As pull factors operated within the host country and made that country attractive and appealing to international students, consequently, the significant pull factor affecting the international students' university choice of this research were the university characteristics which included tuition fees, reputation of university, quality of education, financial aid & scholarship, and academic majors.

3.3 The influence of significant persons on students' aspiration: this research finding revealed an indirect effect of significant persons on students' university choice. Interestingly, despite an indirect effect of significant persons on students' university choice, it was found that significant persons have a negative effect on students' aspirations. Regarding this research finding, the significant persons included family, friends, and counselors who were negative influences on students' aspiration. This is a congruent finding to the report of Zhou (2004), who analyzed longitudinal data to explore the impact of parental encouragement on students' educational aspiration, finding the impact of parental involvement on educational aspirations was less for Asians and Hispanics compared to Caucasians. Besides that, Singham (2003) found that peers can have a negative influence on educational aspirations, and Perna (2000) reported that peer encouragement is not related to college enrollment for African Americans, Hispanic, or White students. About school counselors, the study of Ceja (2000) found that majority of Chicana students in-

licated that it was difficult for them to receive proper college guidance from counselors because there were simply too many students seeking out the efforts of the one college counselor available at their school. Indeed, in order to understand the influence of parents on students' university choice, it is necessary to detail the characteristics of the millennial generation and the helicopter parents. According to Elam, Stratton, and Gibson (2007), the helicopter parents hover over their children and are protective advocates of their children's success, including college preparation. In accordance with further online survey by Veritas Prep (2009), the paper presented the finding that sixty-seven percent of admissions officers surveyed said that parents are more involved in their children's applications than they were five years ago. The helicopter parents are overly involved in everything about their children's lives. They have changed from the proud, supportive parents who provided passive encouragement, to become the aggressively protective parents who assume an active role in their child's educational experiences (Brownstein, 2000; Elam, Stratton & Gibson, 2007; O'Reilly & Vella-Zarb, 2000). It was demonstrated that millennial children are frustrated, exhausted, and struggling to resist pressure from their helicopter parents. Consequently, it was concluded that the role of their helicopter parents may be the main cause of this negative effect.

The summary effects of the causal model showed that students' aspiration was a significant direct effect on students' university choice, whereas university characteristics and significant persons were indirect effect on students' university choice. In summary, the structural component of this research model demonstrated that a student's university choice derived from her or his aspiration, which was influenced by their significant persons and the university characteristics.

Suggestions and Recommendations

Suggestions for Practice

1. The results of this research revealed that university characteristics factor was considered as a significant influential factor for international students in their university choice in Thailand. Therefore, the university must have excellent performance in quality assurance and improvement. In the viewpoint of this researcher, the Thailand Quality Award (TQA) is a key performance indicator in the university quality assurance process. In addition, the university must attempt to learn from best practice and benchmarking for quality assurance from the leading universities around the world. In a sense, therefore, the quality and reputation of a university in Thailand is the significant role of pull factor in the choice of an overseas higher education of international students.

2. By understanding the role of university characteristics in the international student's university choice in Thailand, the university practitioners or administrators must be concerned with targeted students by providing information directly and individually. It is noteworthy that, to target the millennial international students the university in Thailand needs plugged-in marketing such the communication tools like website pages, instant message (live chat and MSN), and social networking (Facebook, MySpace, and blogs) are necessary communication tools for universities.

3. It was found that the biggest proportions of international students in Thailand are Chinese. Therefore, the marketing strategic plan and action plan of universities in Thailand have to be focusing on Chinese students as a major target group and also putting considerable resources into the recruitment process.

Suggestions for Policymakers

1. It is interesting to note that a university characteristic, especially the quality and reputation of university was a highly influential factor on students' university choice. Therefore, the government and university policymakers have to work together to present the high reputation quality of Thailand's international higher education programs in order to compete in the world market of international higher education services. More specifically, the university has to promote a view of quality assurance as an integral part of itself. In the meanwhile, the government policymakers have encouraged international higher education institutions of Thailand to build a reputation of a quality education image.

2. Regarding this research finding, it was revealed that international students are attracted by a strong pulling factor, university characteristics, which is related to the quality of education, reputation of university, academic majors, tuition fees, and financial aid & scholarship, respectively. Therefore, government and university policymakers have to emphasize the reputation for quality of Thailand's international higher education, which is a key success factor in the competitive global market. For Thailand's future sustainability and growth in international education services, the government and the international higher education sector should offer international students government scholarships, university grants, or educational loan programs, provide various academic programs that meet student needs, create or build up a strategic plan to encourage undergraduate international students to earn their graduate degrees in Thailand, and offer the employment opportunity of international students in Thailand after their graduation.

Suggestions for Future Research

1. The future research should be conducted using a qualitative research method such as the focus group and in-depth interview techniques to explore different information

and also provide a greater opportunity for international students to give perspectives on their choice of university.

2. In order to increase the understanding about international students' aspiration and/or influential factors on students' aspiration, further studies should be concerned with the causal model of international students' aspiration on university choice/ or the overseas study decision.

มหาวิทยาลัยบูรพา
Burapha University

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มหาวิทยาลัยบูรพา
Burapha University

