

Determinant Factors Contributing to Student Choice in Selecting a University

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Abstract

Interested in discovering what factors influence students' choice of university, the authors of this study review the various elements that go into decision-making vis-à-vis university choice. A sample of 261 respondents from central Thailand contributed to the study. Initially, an interview questionnaire was developed based on a qualitative research approach, discussing with a smaller group of students what factors are important in making choices regarding their university of choice. From this information, a survey of 45 statements was developed and the survey was then completed by a cohort of additional students. All respondents were either high-school seniors or students who had just enrolled for the first time at the university of their choice. From this study, five factors emerged as being those that significantly influenced decision-making on which institution of higher learning to attend. These include support systems, both physical (e.g. bookstore, guidance/counselling office) and non-physical (scholarships, credit transferability, spiritual programming); secondly, learning environment (modern learning environment and facilities, reputation, beautiful campus, library and computer lab) and job prospects i.e. high rate of graduates being employed; thirdly having good sporting facilities; fourthly, a strong student life program (health care services, residential accommodation) and activities (wide range of extracurricular activities) and finally a safe and friendly environment (safe campus as well as supporting faculty). The study indicates that students use a variety of factors in making their final selection of university with the five listed above as the criteria making the greatest impact on choice.

Keywords: University choice, determinant factors, international universities, private education, independent institutions

Introduction

Institutions of higher education are facing ever-increasing difficulties in attracting students. With tertiary-level educational choices increasing in conjunction with the emergence of newly developing nations, the pool of institutions viewed as viable options has increased along with an amplified student interest in international education, many institutions are facing greater competition for enrollees.

For universities to be successful in attracting students, institutional enrolment management needs to more clearly understand the factors which impact student choice and tailor recruitment efforts and other organizational marketing procedures to increase the chances of students selecting their university as the school of choice. The results also serve students since they need to consider all the relevant factors as they make informed choices for their post-secondary career.

A wide range of studies across the international spectrum of nations has revealed much regarding factors which influence students' choice of universities. There are common factors which span national territory and specific factors emerge when reviewing specific nations. It was evident that there were several gaps in understanding determinant factors especially with regards to private or independent institutions as well as universities which focus on international education. Along with these areas, it was also apparent that studies of this nature were limited in the nation of Thailand. Using the criteria of private international universities in the nation of Thailand, the study sought to provide information to help bridge this gap in the available research. While limited in scope, the data and results provide an informative picture and reveals factors which help students decide in this specific context. While there were some overlapping factors consistent with other studies, the importance of differing factors of choice and the emergence of priority of the factors provide insight into the specific milieu captured within the scope of the study.

Literature Review

The factors which impact choice of university involve significant decisions which set the foundation for success in life and career. The choice process has changed significantly during the past half-century as a result of changes in student demographics as well as the development of institutional admissions and marketing practices (Kinzie, et al., 2004).

A review of studies of university choice factors indicate that there are common elements across nations in that mass-media, parental preference, influence of peers, location, cost and characteristics of the host countries are significant, with the top factors being learning environment, political environment, concern for students, cost of education, facilities, and location in descending order. (Baharun, et al., 2011). It has been shown that students do not make this life-changing decision in isolation.

Familial groups such as parents and relatives along with those with influential significance such as teachers all have an impact on school selection (Oosterbeek, et al., 1992; Hossler, et al., 1999). Along with these elements affecting choice, Hagel and Shaw (2008) provide a similar set of characteristics which include academic reputation, course availability, location, tuition costs as well as campus amenities with the most important three attributes being study mode, tuition fees and the university itself, this last factor being especially important for international students. Focusing specifically on reputation Drewes et al. (2006) indicates that applicants with lower grades make significantly different choices than those with exemplary grades as the students in the former group would not apply to prestigious universities where there is little chance of admission.

Ciriaci and Muscio (2011) agree with this last factor as they argue that “good” universities may act as a magnet for good brains. Kusumwati et al. (2010) suggests that the reputation of the institution was the most significant factor in a student’s decision for further study. Johnson and Ford (1997) indicate that similar factors on student choice most important to students include degree program flexibility, academic reputation and prestige reflecting national and international recognition, physical aspects of the campus such as the quality of the infrastructure and services, career opportunities upon completion, location of the institution and the time required for the completion of the program. Heller (1997) indicates that income or the socioeconomic status of students are also primary determinants. The academic achievement of high school students based on their grades or standardized examination results is also significant (Braxton, 1990). Excellence in teaching is also viewed as a strong determinant of choice (Keskinen et al., 2008; Sidin, et al., 2003; Soutar & Turner, 2002). Drewes, (2006) has found a negative correlation between research performance and applications indicating that applicants expect that the boast as being a top research institution conversely means that the institution does not have faculty who are fully engaged with their teaching.

On the contrary, Ciriaci and Muscio (2011) argue that research quality has a positive effect on employability upon graduation.

Finances are a basic consideration for students and the effect of school fees varies. Studies show that demand for private universities tends to be at a higher level of price sensitivity than public ones (Bezmen & Depken, 1998).

Heller's (1997) research results are intuitive in that they indicate high-income students are less sensitive to price changes than those are lower income students. Long's (2004) study, illustrates that the relative importance of price depends on the income and quality of the student, as measured by their Scholastic Aptitude Test (SAT) score. Scholarships have a desired impact on student choice although it is usually limited to the high school scholar group due to the fact that those with lesser grades would find these less relevant to their situation (Drewes & Michael, 2006). A concomitant factor with finance is distance from home to the selected institution. Gibbons and Vignoles (2009) assert that students from the lower socio-economic backgrounds have a lower attendance rate of high quality research institutions largely because these universities are usually further from home which increases costs. Drewes (2006) indicates that students prefer universities closer to home as the additional costs of living away make further afield institutions less attractive. Gibbons and Vignoles (2009) claim that commuting or re-location costs are important choice factors with lower income students and may deter some students from attending university at all. Although the same study indicates that locale usually does not have a negative impact on participation but rather where the students will attend, with the nearer institutions receiving the higher rate of attendance.

Gender differences have also been reported as a significant determinant factor (Paulsen, 1990; McDonough, 1997). Baharun et al., (2011) indicated that women view safety as an important determinant factor of choice while men place more importance on scheduling and sporting activities. As well, females preferred information regarding institutions from close social connections more than males and Joseph and Joseph (2000) indicate that females also prefer information provided by the institutions above males. Institutions that provided smaller class sizes were preferred by females but not males (Drewes & Michael, 2006).

Drilling deeper into the research studies specific to individual countries, representative results from a cross-section of nations were found.

In a research report on Indonesian students' perceptions of choice criteria, the top five factors were cost, reputation, proximity, job prospects, and parents (Kusumawati, Yanamandram, & Perera, 2010). In Malaysia, the most important criteria for student selection of university included academic quality, facilities, campus surroundings, and personal characteristics (Sidin, Hussin, S. & Soon, T., 2003).

In Turkey, the population of the city in which the university is located, academic performance of the university and language of instruction are the top determinants (Cokgezen, 2012). Reputation of the institution was one of the determinants as evidenced in English-speaking college choice in Quebec, Canada (Isherwood, 1991). In Italy, attending a private university is seen as highly desirable with a significant payoff at the end, depending on field of study (Ciriaci, 2011). Interestingly, a study of American students indicates that students in the US are willing to accept large tuition fee increases in exchange for increased quality in education (McDuff, 2007).

The literature further reveals that factors can be categorized into determinant dimensions of choice. External interested parties have an impact on choice as well and can be categorized as economic, including employers and industries; societal which entails families, potential students and community organizations; along with educational which includes specific academic disciplines and other educational providers (Houston, 2008). A significant external force is a national governments initiative to meet national goals regarding participation in higher education. According to Tan (2002), in the Malaysian context four national goals are taken into consideration in an attempt to provide an effective option to students. These include the necessity to produce the essential human resources for the nation's needs, to export post-secondary education, to staunch the flow of students studying offshore and specifically to ensure that 40% of Malaysian student-age cohort will be in tertiary level education with the aim to advance the nations development. Other categories include facilities or infrastructure which takes into account such items as accommodation, library, laboratory, cafeteria, and student union buildings. Another category included elements of the academic staff such as teaching quality, staff qualification, medium of instruction, reputation and institutional image (Tang, Tang & Tang, 2004).

When considering students who select international education, Mazzarol and Soutar (2002 & 2008) indicate that factors influencing choice include lack of access to higher education in certain regions such as parts of Africa and Asia, a commonality of languages as well as availability of technology based programs. As well, the reputation of the supplier country and its educational institutions are major factors which impact the selection of international institutions of higher learning.

Methodology

The study employed a survey research design using a self-developed questionnaire to collect the data. To assure for content validity of the questionnaire, items on the survey were based on results and theoretical perspectives from the literature review as well as in-depth interviews with eight first-year university students and five students in their final year of high school. The number of persons that were interviewed was based on the saturation of the information, being that there was no new information with the thirteenth interviewee. From these in-depth interviews and the literature reviewed, 56 survey items were constructed for use in the survey. These items were then tested with a preliminary group of 50 respondents to determine their construct validity and reliability. Items that received less than .30 on the Item-Reminder Coefficient (Spector, 1992) scale were removed. Out of the original 56 items, 11 were removed which left 45 valid items remaining on the survey instrument. The resulting valid questionnaire then was then provided to the respondents for completion.

Respondents were selected from university freshmen and high school students in their last year of studies. A total of 441 respondents participated in this study. These students who provided answers came from both private and public universities and secondary schools. However based on the respondent consistency coefficient (Kountur, 2011), 180 were considered as biased in that their responses were not consistent in the answering of the questionnaire. These surveys of these 180 respondents were then removed from the data. The remaining 261 questionnaires were used for the analysis.

In answering the first research question, exploratory factor analysis with principal factor extraction was used. In answering the second research question a chi-square statistical formulation was used with significance level of .10.

Results

In the investigation to find which factors influenced decision-making in selecting a university or college and which factors accounted for the most variance, the method of principal factor extraction with varimax rotation was performed through XLStat on 23 items from the self-developed questionnaire from the sample of 261 respondents.

In applying the Kaiser-Meyer-Olkin's (KMO) overall measure of sampling adequacy (MSA), a score of .876 was recorded which is in the acceptable range based on a KMO overall MSA greater than .60 being considered acceptable (Tabachnic & Fidel, 2013).

Five determinant factors were extracted from the data. As indicated by Cronbach's alpha, three factors were internally consistent and well defined by the variables, two factors scored 0.60 and 0.64 with Cronbach's alpha, which are considered slightly weak in internal consistency. Cronbach's alpha of .70 and above indicates that the variables in the factor are internally consistent or measuring the same thing (Saunders, Lewis, & Thornhill, 2012). The five strongest factors contributing to choice of school from this study are (1) support systems, (2) learning environment and job prospects, (3) sporting facilities, (4) student life and activities, and (5) a safe and friendly environment. Table 1 indicates the internal consistency based on Cronbach's Alpha Measure.

Table 1: Cronbach's Alpha Measure of Internal Consistency

	Cronbach's alpha
Factor 1 – Support Systems	0.72
Factor 2 – Learning Environment and Job Prospects	0.80
Factor 3 – Sporting Facilities	0.60
Factor 4 – Student Life and Activities	0.75
Factor 5 – Safe and Friendly Environment	0.64

Together, these five factors explain 40.28% of the variance which influence university students' and potential students' decision-making as it relates to choosing which university or college to attend. This loading is relatively small since there are approximately 60% other factors which are still unknown.

Support systems account for 9.36% of the variance, learning environment and job prospects account for 10.06% of the variance, sporting facilities account for 6.76% of the variance, student life and activities for students account for 9.29% of the variance, and a safe and friendly environment account for 4.81% of the variance.

Loadings of variables on the five factors are shown in Table 2. Variables are ordered and grouped by size of loading to facilitate interpretation.

Since substantial loading is achieved when the score is above .45 (Tabachnic & Fidel, 2013), those that had a loading lower than .45 then were removed. The variables "have many choices of academic programs" and "teachers' qualifications" were removed. Interestingly, the presence of a bookstore ($r = .771$) and presence of a guidance and counseling office ($r = .672$) indicated the highest loading on the first factor relating to support systems. Having a modern learning environment ($r = .795$) and institutional reputation ($r = .602$) have the highest loading in the second factor which is learning environment and job prospects. Having a sport complex ($r = .974$) and good sporting facilities ($r = .497$) are the deciding factors relating to sporting facilities. Teachers from different nationalities ($r = .865$) and having health care service inside the campus ($r = .797$) have the highest loading on student life and activities. Safe on-campus environment ($r = .744$) and supportive teachers ($r = .689$) have the highest loading on safe and friendly environment.

Table 2: Loading of Variables on Factors after Varimax Rotation

	F1	F2	F3	F4	F5
Presence of bookstore	0.771	0.130	0.127	0.158	0.110
Presence of guidance and counseling office	0.672	0.244	0.072	0.219	0.300
Provide scholarships	0.561	0.386	0.373	0.306	0.027
Credits transferable	0.503	0.169	0.016	0.238	0.046
Provide spiritual programs	0.475	0.179	0.190	0.155	0.319
Have many choices of academic programs	0.416*	0.075	-0.014	0.247	0.234
Have modern learning environment	0.366	0.795	0.213	0.192	0.090
Reputation is important	-0.073	0.602	0.178	0.111	0.133
Beautiful campus	0.022	0.561	0.115	0.178	0.370
Modern facilities	0.271	0.547	0.028	0.376	0.317
Friendly students	0.105	0.512	0.221	0.277	0.295
No. of books in library	0.190	0.493	0.132	0.246	-0.032
Graduates have high rate of job prospects	0.449	0.490	0.112	0.244	0.112
Have updated computer lab	0.316	0.467	0.295	0.276	0.139
Teachers' qualification	0.264	0.442*	0.181	0.165	0.090
Have sport complex	0.117	0.122	0.974	0.107	0.100
Have good sporting facilities	-0.052	0.340	0.497	0.023	0.308
Have teachers from different nationalities	0.011	0.195	0.052	0.865	0.125
Have health care services inside campus	0.324	0.148	0.097	0.797	0.293
Have a lot of extracurricular activities	0.490	0.190	0.311	0.573	0.119
Have accommodation for students	0.315	0.116	0.321	0.549	-0.223
Safe on-campus environment	0.215	0.166	0.139	0.292	0.744
Students have good support from teachers	0.199	0.196	0.283	0.226	0.689

F1 = Support systems; F2 = Learning environment and job prospects; F3 = Sporting facilities; F4 = Student Life and activities; F5 = Safe and friendly environment*Removed

As indicated in Table 3, support systems may be described in terms of (a) physical facilities such as presence of a bookstore, guidance and counseling office; and (b) non-physical facilities such as provision of scholarships, the ability to transfer credits along with spiritual programming. The second factor, learning environment and job prospects may be described in terms of have modern learning facilities and environment, a beautiful campus, developing and maintaining a good reputation, along with the amount of books available in library, an up-to-date computer lab as well as and high rate of job prospects for the graduates. Sporting facilities may be described in terms of the campus having a sport complex and other good sporting facilities.

Student life may be described in terms of (a) having health care services and good accommodation inside the campus; and (b) activities such as extracurricular activities and support from international teachers. A safe and friendly environment may be described in terms of safe on-campus environment and supportive teachers.

Table 3: Factors Affect Selection of University/College

Factor 1 Support Systems	Factor 2 Learning Environment and Job Prospects	Factor 3 Sporting Facilities	Factor 4 Student Life and Activities	Factor 5 Safe and Friendly Environment
<p>Physical Facilities</p> <p>42. Presence of a bookstore 43. Presence of a guidance and counseling office</p> <p>Non-physical Support</p> <p>27. Provision of scholarships 4. Transferable credits 41. Provision of spiritual programs</p>	<p>Learning Environ</p> <p>21. Have modern learning environment 22. Reputation 35. Beautiful campus 36. Modern facilities 19. Friendly students 32. No. of books in library 33. Have updated computer lab</p> <p>Job prospects</p> <p>44. Graduates have high rate of job prospects</p>	<p>29. Campus has a sports complex 20. Campus has good sporting facilities</p>	<p>Facilities</p> <p>38. Campus has health care services 31. Campus has accommodation for students</p> <p>Activities</p> <p>37. Teachers come from a variety of different nationalities 39. The campus has a wide variety of extracurricular activities</p>	<p>9. Campus provides a safe on-campus environment 8. Students have good support from teachers</p>

Subsequent analysis of the data attempted to determine the possibility of other factors with the goal of understanding whether other contributing factors of the respondents' relate to their characteristics. When respondents are grouped into the contributing factor which they belong, further analysis was completed to see whether the contributing factors of respondents relate to their (a) student status, (b) gender. A chi-square test of independence was calculated comparing the frequency of contributing factors in each category of student status and gender.

No significant relationship was found between contributing factors and student status ($\chi^2(4) = 9.488, p = .204$). Respondents' contributing factors appear to be independent as related to student status.

No significant relationship was found between the contributing factors and gender ($\chi^2(4) = 9.488, p = .765$). Respondents' contributing factors also appear to be independent as related to gender.

Discussion of Findings

While the study was limited in scope to prospective students and first-year students in Thailand the results may show factors which extend beyond this geographical context and may be applicable to other settings as well as they relate to international and/or independent institutions. The results of the study show that learning environment as well as the potential of good job prospects (Factor 2) was the strongest factor for university selection among the respondents. This indicates that students favour those institutions which provide for an updated learning environment and modern facilities as well as pleasing aesthetics of the campus. Reputation of the institution is also important to prospective students along with the indication that upon successful completion of their selected program there will be a high probability that jobs will be available for them. Institutions would be prudent to ensure these features are not only in place but also made apparent to students before the final selection of university is made. While reputation of an institution is built over time, it would be important to ensure that efforts are being made to establish a positive reputation within and beyond the immediate context in which the university is located.

Factor 4, student life and activities, ranked as the second strongest determinant factor regarding university choice. Having faculty from a wide spectrum of national backgrounds was viewed as important to students.

If a university purports itself to provide an international education, this is a vital characteristic in attracting students. These institutions should be wary of having only a few nationalities represented in its faculty or a faculty dominated by only a handful of nationalities. It is deemed important to prospective students to have a broad range of nationalities represented in the teaching faculty when considering an international education. Also, in relation to their lives on campus, the data shows that students regard their basic needs of accommodation and health care as important.

Institutions should take note and prioritize well-kept, attractive and clean accommodation choices for students, many of which are away from home for the first time. Along with this, students feel that when they need medical attention, they will have adequate health care available to them. Universities should note this basic need and make provisions for an adequate health care system on campus. A variety of extra-curricular activities are viewed by students as desirable as well. Student life coordinators would do well to note this interest by students and provide a range of activities which will meet the students' interests and needs for physical and social growth.

Support system (Factor 1) was also an important determinant factor. Students expect basic services to be available to them such as a bookstore to provide them with textbook along with the basic essentials of academic life as well as other necessities for life on campus. Prospective students also considered the presence of a guidance and counselling office as an important factor. Institutions would do well to note these non-academic service areas are viewed as attractive by students. The provision of scholarships and the transferability of credits also were also deemed as valuable characteristics of an institution. Universities would show foresight in attracting students by providing for these for the students they are attempting to attract. On an interesting note, some of the respondents were from a faith-based institution and the provision of spiritual programming was an important element for these students. For similar institutions, it would be important to provide these types of programs for students.

For non-religious institutions, the concepts of moral and ethical education may be considered as important as well, since these are parallel concepts and usually supported by parents, although further study would have to follow up on this assertion.

As noted earlier, some of the factors were not as strong as others and from the data, Factor 5, a safe and friendly environment as well as Factor 3, sporting facilities, were deemed marginally weaker than the previous three. A safe on-campus environment was considered as important to the respondents but it may have been a factor that students would expect as a basic provision from any university. Good support from teachers was also desirable to the respondents. Faculty members should realize that support for students within their classes needs to be balanced with the other pressures which make demands on their time such as research or service. While Factor 3 was the lowest of the five factors, within this factor the presence of a sports complex was deemed extremely important.

Students realize that they need other activities outside of their academic pursuits and so institutions should be aware of this as they review their master plans for campus facilities.

Several limitations of the study must be noted. The respondents of this research study were limited to grade twelve and university first year students. It is recommended that further research be conducted involving not only grade 12 students and university freshmen but also at lower grades of high school, and involve other college students namely sophomores, juniors and seniors. This will provide a more comprehensive picture of the factors that may affect students' choice. The sample of this research study was limited to institutions in central Thailand. It is recommended that a future study include a wider geographic area involving a wider sample of high schools and universities.

Conclusion and Recommendation

This study reveals five factors that affect students' final selection of a university. Learning environment and job prospects ranks at the top, reflecting the importance of elements such as modern campus, updated computer laboratories and well-stocked libraries. Included in this factor is the desire for a degree programs which lead to good job prospects upon completion.

The second highest determinant relates to student life and activities which shows that students seek appropriate accommodation and a variety of extra-curricular activities. The third strongest factor is support systems, both physical (bookstore, guidance and counselling office) as well as non-physical (scholarships, transferability of credits).

The fourth and fifth factors have lesser weighting but are still considered significant. These included a safe and friendly environment and sporting facilities.

Considered together, these variables have the strongest impact on students' selection of a university. Higher learning institutions that are interested in increasing their enrolment will do well to give special attention to these factors.

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