Pertanika J. Soc. Sci. & Hum. 8(1): 1 - 6 (2000)

ISSN: 0128-7702
© Universiti Putra Malaysia Press

Marketing Analysis of the Higher Education Service Sector in Malaysia: Consumer Perspective

SITI RAHAYU HUSSIN, TAN HO SOON &
SAMSINAR MD. SIDIN

Faculty of Economics & Management, Universiti Putra Malaysia
43400 UPM, Serdang, Selangor, Malaysia

Keywords: marketing strategies, consumer perceptions, consumer decision-making, higher learning institutions

ABSTRAK

Seperti mana organisasi servis yang lain, institusi pengajian tinggi mungkin mahu menyemak semula strategi pemasaran mereka supaya boleh bersaing di dalam pasaran masa kini. Adalah sangat penting bagi institusi pengajian tinggi untuk memahami tanggapan dan jangkaan pelajar-pelajar dan menterjemahkan pengetahuan ini kepada pembangunan aktiviti-aktiviti pemasaran yang boleh menarik dan mengekalkan pelajar-pelajar di institusi pengajian tinggi. Objektif kajian ini adalah untuk meneroka pandangan pelajar-pelajar tentang kriteria utama dalam membuat pilihan institusi pengajian tinggi. Temu ramah dengan 210 pelajar telah dijalankan di institusi pengajian tinggi awam dan swasta di Semenanjung Malaysia. Angkubah yang digunakan termasuk program akademik; staf akademik; kemudahan; harga; dan promosi. Data telah dianalisis menggunakan Analisis Faktor dan Perbandingan Min. Berdasarkan kajian yang telah dijalankan, pelajar-pelajar menganggap bahawa faktor personal (peluang pekerjaan, kursus yang disediakan, masa yang diperlukan untuk tamat pengajian, pengajian separa masa yang ada,dan nilai pasaran ijazah); kualiti akademik dan kemudahan yang ada (kualiti pengajaran, koleksi perpustakaan, reputasi institusi, kemudahan, struktur program); kampus (saiz dan rupa bentuk kampus); sosial (aktiviti luar, peluang bertemu rakan-rakan); dan bantuan kewangan serta prosedur (biasiswa/ bantuan kewangan, prosedur dan polisi); sebagai faktor penting dalam memilih institusi pengajian tinggi. Berdasarkan Perbandingan Min, angkubah yang mempengaruhi keputusan pilihan institusi mengikut kepentingannya adalah seperti berikut: kualiti pengajaran, reputasi institusi, reputasi ijazah yang ditawarkan, peluang pekerjaan, yuran pengajian, struktur program, masa untuk menamatkan pengajian,kemudahan, kursus yang disediakan, dan keperluan kemasukan.

ABSTRACT

Like many other service organizations, higher education institutions may want to review their marketing strategies in order to complete in the increasingly competitive market. It is crucial that higher learning institutions understand the perceptions and expectations of students and translate them into marketing activities that would attract and retain students. The objective of the reasearch is to explore student view on important criteria in selecting higher education institutions. Personal interviews with 210 student from both public and private higher learning institutions in Malaysia were carried out. Variables used include: academic programme, academic staff, facilities, pricing, and promotion. Data were analysed using Factor Analyis and Comparison of Means. Based on the study, students consider personal factors (job opportunities, availability of course, time required for completion, entry requirements, availability of part-time studies, marketability of degree); academic quality and facilities (quality of teaching, library collection, institution's reputation, facilities, programme structure); campus (campus size and layout, campus attractiveness, number of students); socialization (extra curricular activities, opportunity to meet friends); and financial aid & procedures (scholarship/financial aid, procedures and policies) as important criteria in selecting a higher learning institution. Based on Comparison of Means, rankings of variables influencing college choice decision by importance are as follows: quality of teaching, institution's reputation, marketability of degree, job opportunities, tuition fees, programme structure, time required for completion, facilities, availability of courses, and entry requirements.

INTRODUCTION

According to the Ministry of Education, the number of private higher educational institutions (PHEI) in Malaysia has increased to 415 as of June 1997 when compared to only 354 in 1996. These institutions offer pre-university courses, professional, semi-professional streams, and university courses in various disciplines. The enrollment in the private tertiary education in 1995 constituted around 25% of the total enrollment in tertiary education in local public and private universities. The demand for private higher education is expected to increase substantially in view of the significantly higher cost of education abroad and limited funding available to students.

Tertiary education is arguably a high-involvement product (Kolter 1976). For many students and their parents, it represents a substantial investment in monetary and temporal terms. Hence, prospective students and their sponsors would look carefully into the options available in the market. Educational marketers must therefore be able to answer these fundamental questions in their marketing attempts: why do students select a particular college or university from the large number of alternatives? In evaluating the many options available to them, how would students (and their sponsors) come to a purchase decision? On what criteria would they appraise their options? What are students' perceptions and expectations of Public and Private Higher Learning Institutions in Malaysia?

In light of these issues, the objectives of this study are:

1. To determine the criteria with which prospective students select the college or university of their choice.
2. To establish the rank of importance of the influencing factors in selecting a higher learning institution.
3. To recommend marketing strategies for higher education institutions based on the needs and wants of the customers.

LITERATURE REVIEW

Marketing of higher education institutions is moving toward student orientation. As competition among universities intensifies, a need for thorough understanding of the student perception is becoming more vital. Thus, the marketing of higher educational institutions is gaining more prominence among university administrators. In order to survive, these administrators need to understand how various student segments differ in their decision-making behavior (Coccari and Javalgi 1995). They also need to develop some degree of understanding on international students, and what these students will expect once they arrive in the Malaysian campus (Shank *et al.* 1996).

For service marketers, it is critical to understand which cues or attributes of the service offering are most valued in the decision-making process of current and potential customers. Students were found to select those colleges that match their selection criteria academically, socially, and financially (Brown 1991). Plank and Chiagouris (1998) reported that the choice of college to enroll depends on five components: i) academic programs offered, ii) leadership opportunities in college, iii) perceived good job after graduation, iv) financial aid, and v) value for money.

Webb *et al.* (1998) conducted a study suggesting ten criteria used by students in selecting a college namely i) academic programs available, ii) academic reputation of institution, iii) the marketability of the degree conferred, iv) faculty contact time, v) accreditation, vi) campus employment, vii) financial aid, viii) placement reputation, ix) completion time, and x) library size.

Seventeen college images were identified in a study using students at Ball State University (Brown 1991). These components were measuring the importance of each in predicting a student's selection of a college or university. They were as follows:

1. quality of education
2. recreational activities
3. educational facilities
4. faculty
5. advising
6. reputation
7. hospitality/friendliness
8. cost
9. job placement
10. physical attractiveness
11. social activities
12. campus organizations
13. convenient and accessible location
14. arts and entertainment
15. community surroundings
16. intercollegiate athletic facilities
17. intercollegiate athletics

Twenty-nine college image components were identified in a study of university students at the University of North Alabama (Absher *et al.* 1993). These components were further investigated by measuring the importance of each in predicting a student's selection of a college or university. Some of these factors include:

1. convenience and accessible location
2. types of academic programs
3. community in which college is located
4. overall quality of education
5. size of school
6. small size classes
7. faculty qualifications
8. low cost of attending school
9. availability of financial aid and/or scholarships
10. overall reputation of school

In a study on service quality in higher education, Joseph *et al.* (1997) found six factors to be important to students. They are programme issues, academic reputation, physical aspects, career opportunities, geographical location (of institution), and time (i.e. duration of studies). Plank and Chiagouris (1998) suggested that overall perceived quality of higher education is thought to have considerable impact on the decision making process to attend higher education institutions. It was found that a student's socio-economic background – such as family income; parental education, occupation, and encouragement aptitude and high school achievement-were directly related to college-aspiration formation.

METHODOLOGY

A survey was conducted through personal interviews, with students from both public and private higher learning institutions in Malaysia. The questions asked comprised a) respondent's personal characteristics, b) college choice decision factors, and c) institution's factors. The investigated variables include academic programme, academic staff, facilities, pricing, and source of information/promotion.

A total of 210 respondents, all of them full-time students enrolled in Malaysian public and private institutions of higher education were used in this study. The sample came mostly from eight institutions of higher learning, four of which were public universities and the other four, private institutions (Table 1). The respondents were drawn from various ethnic backgrounds. The higher number of Chinese students were found due to the fact that they form the majority among students in private institutions. There was low participation from Indian students but it was reasonable and also reflects the demographic structure of Malaysian population.

TABLE 1
Respondents' profiles

Variables	Frequency (N=210)	Percent (%)
Institution		
UPM	35	16.7
UKM	20	9.5
UM	19	9.0
UTM	9	4.3
Other public colleges	1	.5
UNITEN	31	14.8
INTI College	36	17.1
Taylor's College	17	8.1
Stamford College	26	12.4
Other private colleges	16	7.6
Ethnicity		
Malay	60	28.6
Chinese	126	60.0
Indian	24	11.4
Age		
Below 18	8	3.8
18 and 19	65	31.0
20 and 21	87	41.4
22 and 23	33	15.7
24 and above	17	8.1
Monthly Family Income		
RM 1000 or less	27	12.9
RM 1001 – 2500	79	37.6
RM 2501 – 4000	52	24.8
RM 4001 – 6000	29	13.8
RM 6001 or More	23	11.0
Academic Qualification		
F5/SPM/O-Level	76	36.2
F6/STPM/A-Level	69	32.9
Diploma	42	20.0
Bachelors degree	13	6.2
Others	10	4.8

Comparison of means was carried out to establish the ranking of these factors according to students' point of view. Then, the factor analysis was used to determine the most important factors for students in selecting a particular college/university.

RESULTS

Variables Influencing College Choice

Comparison of means was carried out to establish the order of importance of the criteria when selecting higher learning institutions in Malaysia. Table 2 lists only the top ten variables that influence students' decision making. When making a selection, students appear to be very concerned about the quality of teaching, the institution's reputation, and the marketability of the degree with mean values of 4.55, 4.20 and 4.19, respectively. The lowest factor in the list was entry requirements with a Mean value of 3.86. The lowest ranking variable influencing institution choice with a mean value of 2.58 (not in table) was the availability of part-time studies. This supposedly did not concern the respondents, as they were all full-time students.

TABLE 2
Ranking of variables influencing institution choice decision by importance: top ten factors

Ranking	Variables Influencing institution choice	Mean value
1	Quality of teaching	4.55
2	Institution's reputation	4.20
3	Marketability of degree	4.19
4	Job opportunities	4.16
5	Tuition fees	4.11
6	Program structure	4.03
7	Time required for completion	4.01
8	Facilities	4.00
9	Availability of courses	3.99
10	Entry requirements	3.86

** Only top ten factors listed. Other lower ranking (i.e. less influencing) factors have been omitted.*

Institution Choice Decision Factors

Table 3 indicated the factors affecting students' choice. Based on chi-square results, the findings show that four items were significant in affecting college choice decision. The four items were facilities, procedures and policies, entry requirements and extra curricular activities. Five characteristics were also found to be significant at 0.1 significant level. These factors were library collection, scholarship/financial aid, availability of courses, job opportunities, and availability of part time studies.

Institution's Factors

Factor analysis was used to analyse the interrelationships among the variables (college selection criteria). Through this analysis, five major components were extracted from the 20 variables. These components represent 60.19% of the variance. Only factors with eigen values of more than 1.00 were selected. Table 3.4 presents the five factor components as derived from the Varimax rotation method of factor analysis with each given an 'interpretative' name. Only sum of squared of more than .300 are considered.

TABLE 3
Chi-square results of college choice decision by various college characteristics

Characteristics	Chi-square	Significance
Institution's reputation	12.404	0.301
Library collection*	3.207	0.062
Facilities*	1.457	0.044*
Quality of teaching	9.356	0.202
Procedures and policies*	1.216	0.031*
Scholarship/financial aid*	1.947	0.096
Availability of courses*	1.835	0.076
Time required for completion	28.449	0.365
Tuition fees	9.748	0.146
Job opportunities*	4.374	0.074
Program structure	9.231	0.205
Entry requirements*	1.303	0.035*
Availability of part-time studies*	6.339	0.053
Campus location	5.366	0.145
Campus size and layout	14.659	0.252
Campus attractiveness	8.599	0.125
Number of students	15.189	0.205
Extra-curricular activities*	1.959	0.048*
Opportunity to meet friends	9.234	0.100
Marketability of degree	9.887	0.176

**Statistically significant factors*

Table 4 shows that the first institution choice decision factor has been named as "Personal factors" because the fact that every student has his/her own set of circumstances quite independent of others, hence the word 'personal'. There are 7 variables in this factor component, namely 'Job opportunities'; 'Availability of courses'; 'Time required for completion'; 'Tuition fees'; 'Entry requirements'; 'Availability of part-time studies'; and 'Marketability of degree'. In total, they account for 15.567% of the variance.

The second factor has been named as "Academic quality and facilities" to reflect variables such as 'Quality of teaching', 'Library collection', 'Institution's reputation', 'Programme

TABLE 4
Institution choice decision factors and variables

Institution choice decision factor	Institution choice decision variables
1. "Personal factors"	• Job opportunities • Availability of course • Time required for completion • Tuition fees • Entry requirements • Availability of part-time studies • Marketability of degree
2. "Academic quality and facilities"	• Quality of teaching • Library collection • Institution's reputation • Facilities • Programme structure
3. "Campus"	• Campus size and layout • Campus attractiveness • Number of students
4. "Socialization"	• Extra-curricular activities • Opportunity to meet friends
5. "Financial aid and procedures"	• Scholarship/financial aid • Procedures and policies

structure', and 'Facilities'. This second factor group explains 15.31% of the total variance.

The third group representing 12.71% of the variance, is named "Campus" as it contains variables such as 'Campus size and layout', 'Campus attractiveness', and 'Number of students'. The fourth factor, "Socialization" refers to extra curricular activities on the campus as well as the opportunity to meet friends. It represents 8.34% of the variance. And the fifth factor includes variables such as 'scholarship/ financial aid' and 'procedures and policies'. This explains 8.265% of the total variance.

CONCLUSION

The study aims to establish the important criteria for student selection when choosing a particular higher learning institution. Based on comparison of means, variables influencing college choice decision in order of importance are as follows: quality of teaching, institution's reputation, marketability of degree, job opportunities, tuition fees, programme structure, time required for completion, facilities, availability of courses, and entry requirements. From the factor analysis results, five factors were significant in their decision for selecting higher learning institutions:

- Personal factors (job opportunities, availability of course, time required for completion, entry requirements, availability of part-time studies, marketability of degree).
- Academic quality & facilities (quality of teaching, library collection, institution's reputation, facilities, programme structure).
- Campus (campus size and layout, campus attractiveness, number of students).
- Socialization (extra curricular activities, opportunity to meet friends).
- Financial aid and procedures (scholarship/ financial aid, procedures and policies).

The study also tested the hypothesis that students' perception of the characteristics of higher learning institutions influenced their choice of these institutions in Malaysia. It is established that, in order of importance, students consider quality of teaching, institution's reputation, marketability of degree, job opportunities, and tuition fees to be most important in making decisions before they actually select a higher learning institution.

University and college authorities must be aware of the requested student's needs and students' selection criteria. College and universities should strive to ensure that students are given a holistic educational experience and

not just paper qualification. In doing all these, higher learning institutions must deliver quality services that will serve the needs and expectations of students.

Using the criteria mentioned above institutions of higher education could revise their strategy in marketing services. Higher institution administrators and policy makers can now check how far they are providing their services in terms of customer orientation. With current strategies, are they serving the needs of students (and in most cases their parents and sponsors)? What areas should they improve in order to provide better education for future generations? Findings from the study can help policy makers and administrators of public and private institutions develop a better marketing strategy in attracting and retaining students.

Thus, several marketing strategies for the higher learning institutions in Malaysia are recommended:

1. To serve the customers' needs, the quality of teaching, institutions' image and campus surroundings must be considered by college operators in order to attract students.
2. Holistic exposure – offer unique experience to students. This includes a chance to meet a wider spectrum of students, especially those from other faculties and to take part in a whole range of college activities. This is especially lacking in private institutions. As indicated in the survey, opportunities to meet friends and to take part in extra-curricular activities feature strongly in students' college choice selection. Thus, when attempting to attract students to enroll, public and private institutions should publicise social or charitable events designed for them such as sports carnivals, charity sales, blood donation campaign, etc.
3. Image and reputation – promotion should be targeted to relevant groups such as the students, and their friends and families.
4. Information dissemination – TV, radio, education fairs, nationwide tours by institution representatives, etc.
5. Facilities – the increasing use of multimedia technology and/or information communication technology in all aspects of education service delivery.
6. Academic staff – emphasis on recruiting and training high caliber staff with extensive background in research, and business experience.

Future studies should use focus group or in-depth study to probe into the 'marketing thinking' of the institutions. Researchers could also consider looking into other aspects of a student's decision making process, such as personal factors, family background, academic achievements, etc. Another issue that is worth exploring is the relationship between college choice and post purchase behaviour, academic achievements, and satisfaction levels.

BIBLIOGRAPHY

ABSHER, K., G. CRAWFORD, G. and K. P. GATLIN. 1993. Identifying College Selection Factors among Students of a Regional University. In *Southwest Business Symposium Proceedings*, p. 419-430.

BROWN, J. D. 1991. Identifying benefit segments among college students. *The Journal of College Admission* Spring: 30-33.

COCCARI, R. L. and R. G. JAVALGI. 1995. Analysis of student's needs in selecting a college or university in a changing environment. *Journal of Marketing for Higher Education* **6(2):** 69-90.

JOSEPH, M, B. JOSEPH and J. B. FORD. 1997. Importance-performance analysis as a strategic tool for service marketers: the case of service quality perceptions of business students in New Zealand and the USA. *The Journal of Services Marketing* **13(2):** 171-186.

KOLTER, P. 1976. Applying Marketing Theory to College Admissions. In *College Entrance Examination Board, A Role for Marketing in College Admission*, p.54-72. New York: College Entrance Examination Board.

PLANK, R. E. and L. CHIAGOURIS. 1998. Perceptions of quality of higher education: an exploratory study of high school guidance counselors. *Journal of Marketing for Higher Education* **8(10):** 55-67.

SHANK, M. D., M. WALKER and T. J. HAYNES. 1996. Cross cultural differences in student expectation. *Journal of Marketing for Higher Education* **7(1):** 17-32.

WEBB, M. S., R. L. COCCARI, A. LADO, L. C. ALLEN and A. K. REICHERT. 1998. Selection criteria used by graduate students in considering doctoral business programs offered by private vs. public institutions. *Journal of Marketing for Higher Education* **8(1):** 69-90.