

THE RELATIONSHIP BETWEEN SERVICE QUALITY AND STUDENT SATISFACTION IN HIGHER EDUCATION SECTOR: A CASE STUDY ON THE UNDERGRADUATE SECTOR OF XIAMEN UNIVERSITY OF CHINA

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ABSTRACT

The objectives of this research are to study the relationship between the overall service quality and student satisfaction, and to study the relationship between the sub variables of service quality, as nonacademic aspects, academic aspects, teaching methods, industry links, program issues, reputation, access, and cost, and student satisfaction of undergraduate students in Xiamen University of China. 22 undergraduate students from each of the 19 faculties of undergraduate program were surveyed. Totally 397 questionnaires out of 418 were valid and usable. The result showed that the overall service quality and its eight sub variables are all positively related to student satisfaction of undergraduate students in Xiamen University of China.

INTRODUCTION

Nowadays, higher education is driven toward commercial competition by the development of global education markets. A university has to focus on what society values in the skills and the competencies of its graduates, as well as the evaluation of educational experience of its students. Students are the “customers” of university, they are the consumers of educational service, and they decide from which university to get this service. Thus, it becomes important to identify the determinants of service quality from the standpoint of students being the primary customers. According to Seymour (1993), developing satisfied customers should be a primary goal of higher education. Thus, focusing on enhancing customer satisfaction at universities is crucial in developing customer value and reaching the strategic objectives of universities more effectively.

This study focused on the undergraduate sector in Xiamen University of China, which has 2,337 full-time faculty and professional researchers, now has a total enrollment of over 37,000 full-time students on campus, including 20,466 undergraduates, 14,227 master students, 2,352 doctoral students, and over 2,000 international students. The major objectives of this study are:

(1) To study the relationship between overall service quality and student satisfaction of the undergraduate students of Xiamen University of China.

(2) To study the relationship between sub variables (nonacademic aspects, academic aspects, teaching methods, industry links, program issues, reputation, access, cost) of service quality and student satisfaction of the undergraduate students in Xiamen University of China.

LITERATURE REVIEW

Service Quality in Higher Education

Service quality is the exclusivity of experiences students engage in as part of their whole-person development. Firdaus (2005) designed HEdPERF (Higher Education Performance) which categorized 5 determinants of service quality in higher education. They are non-academic aspects, academic aspects, reputation, access, and program issues. Non-academic aspects refer to aspects that are essential to enable students to fulfill their study obligation, and relate to duties carried out by non-academic staff. Academic aspects refer to aspects include positive attitudes, good communication skills, sufficient con-

sultation, regular feedback to students, and outstanding ability of the teaching staff which relate to the responsibilities of academics. Reputation is an overall perception of an organization, what the organization stands for, what the organization is associated with, and what products or services the organization is supposed to provide. Reputation of university is the professional image projected by the university. Access is the availability, approachability, and convenience of both academic and non-academic staffs. Firdaus (2005) suggested that the dimension “access” is one of the most important determinants of service quality in higher education. Program issues were defined as offering wide ranging and reputable academic programs or specializations with flexible structures and health services. Ford, Joseph and Joseph (1999) included program issues in the determinants of service quality when they compared students’ service quality perceptions in New Zealand and the USA.

Teaching methods refer to the principals and methods of instruction used by teaching staffs. Cheng and Tam (1997) proved that teaching methods were often used as indicators of education quality. Harvey (1995) and Hill (1995) found out that teaching methods are one of the antecedents of student satisfaction. Industry links refer to the help students receive in making links with industry (Joseph

& Joseph, 1997), including helpful career guidance and industry contacts provided by a university. It is suggested that the university should, as a priority, find ways to improve the future job prospects of its student. Cost refers to the tuition costs, living cost, accommodation cost, sports and recreational facilities cost, when students study in the university. Ford, Joseph and Joseph (1999) agreed cost was one of determinants of perceived service quality in higher education. This includes cost of housing, housing facilities, sports, recreation, and, the most important, educational tuition.

Student Satisfaction

Student Satisfaction is students’ short-term attitude, derived from the evaluation of the received education service (Elliot & Healy, 2001). Howard and Seth (1969, p. 145) defined customer satisfaction as “the cognitive state of the buyer about the appropriateness or inappropriateness of the reward received in exchange for the service experienced”. Cronin et al., (2000) interpreted customer satisfaction as customers’ response to fulfillment. It is a judgment of “a service feature, or service itself, and provides a pleasurable level of consumption related fulfillment” (Zeithaml & Bitner, 2000).

RESEARCH FRAMEWORK

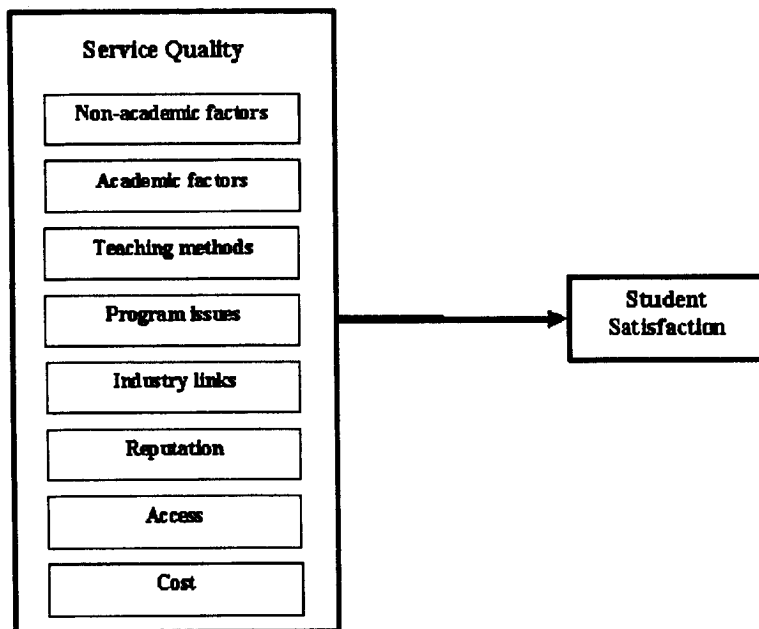


Figure 1: Research Framework

METHODOLOGY

In this research, the target population was undergraduate students in Xiamen University of China. Stratified sampling was used in selecting respondents. There are 19 faculties in the undergraduate program. Since the sample sized in this research was set as 418, 22 undergraduate students (from each of the 19 faculties) were surveyed. Two sections are categorized in the questionnaire. Section A is the main part of the research. It includes all the questions of dependent variable and independent variables. All indicators are measured on a seven-point Likert-scale, with “1” indicates the strongly disagree, “7” indicates the strongly agree. Section B contains questions to collect the respondents’ personal information, including the gender, grade and faculty.

FINDINGS

In the 397 respondents, 54.4% (216) were male, 45.6% (181) were female. 28.7% (139) were junior students, 24.6% (119) were senior students, 15.3% (74) were freshman students, and 13.4% (65) were sophomore students. The finding indicated all the null hypotheses were rejected, so it can be concluded that there is a relationship between overall service quality and student satisfaction of undergraduate students in Xiamen University of China, and there are relationships between the sub variables of service quality, such as nonacademic aspects, academic aspects, teaching methods, industry links, program issues, reputation, access, and cost, and student satisfaction of undergraduate students in Xiamen University of China. The hypotheses test results are tabulated in Table 1.

Table 1: Hypotheses Test Results

Hypotheses	Sig.	r
H1a: There is a significant relationship between overall service quality and student satisfaction of undergraduate students in Xiamen University of China.	.000	.876
H2a: There is a significant relationship between service quality and student satisfaction in terms of non-academic aspects of undergraduate students in Xiamen University of China.	.000	.861
H3a: There is a significant relationship between service quality and student satisfaction in terms of academic aspects of undergraduate students in Xiamen University of China.	.000	.905
H4a: There is a significant relationship between service quality and student satisfaction in terms of teaching methods of undergraduate students in Xiamen University of China.	.000	.784
H5a: There is a significant relationship between service quality and student satisfaction in terms of program issues of undergraduate students in Xiamen University of China.	.000	.621
H6a: There is a significant relationship between service quality and student satisfaction in terms of industry links of undergraduate students in Xiamen University of China.	.000	.749
H7a: There is a significant relationship between service quality and student satisfaction in terms of reputation of undergraduate students in Xiamen University of China.	.000	.557
H8a: There is a significant relationship between service quality and student satisfaction in terms of access of undergraduate students in Xiamen University of China.	.000	.798
H9a: There is a significant relationship between service quality and student satisfaction in terms of cost of undergraduate students in Xiamen University of China.	.000	.826

According to the analysis of results, there is a strong positive correlation between the overall service quality and student satisfaction, which is consistent with the findings of Anderson and Sullivan (1993), that satisfaction is a function of perceived service quality. The descriptive statistics shows the undergraduate students perceive a good service quality in Xiamen University of China, but the rate fell in the slightly agree level (mean = 5.27). Nonetheless, there were some students, who thought the university does not provide excellent service.

Nonacademic aspects is a critical indicator of service quality (Firdaus, 2005), they are irreplaceable antecedents of student satisfaction as well (Harvey, 1995; Hill, 1995). The research results showed that the relationship between nonacademic aspects and student satisfaction is positively strong. The undergraduate students in the Xiamen University did not perceive excellent service quality in the nonacademic aspects since the mean of the overall performance of nonacademic aspects is 5.19 which fell in the slightly agree level. In the 16 unit description of this indicator, the highest rating was strongly agree, although, there were students who responded in the disagree and strongly disagree level.

Firdaus (2005) confirmed that academic aspects are a critical service quality indicator. This research finding confirmed the previous conclusion. The academic aspects have very strong positive relationship with student satisfaction. The student satisfaction will increase greatly when there is an improvement in the academic service quality. The mean of overall perception of academic aspects is 5.22, which indicates that the undergraduate students slightly agree that the university provides excellent academic service.

Hill (1995) found that teaching methods are antecedents of student satisfaction. The research showed that there is a positive strong relationship between the teaching methods and student satisfaction. The mean of this aspect was 5.28, which indicated that the undergraduate students slightly agreed that the academic staffs applied excellent teaching methods.

Firdaus (2005) noted that program issues played an important role in determining service quality in higher education. Moreover, Kuh & Hu (2001) found that program issue is a predictor of student

satisfaction. This research showed the relationship between the program issues and student satisfaction of undergraduate students in Xiamen University was moderately positive. These results are similar to what Ford, Joseph and Joseph (1999) found for students in New Zealand and USA. It means the student satisfaction will increase with the improving effort in program issues. In the eyes of undergraduate students of Xiamen University, the quality, the range of selection, or the structures of the program were not good enough, since they responded in the "slightly agree" level.

"Career opportunities" is an important dimension of service quality in higher education. It will lead to student satisfaction (Ford, Joseph and Joseph, 1999). According to the research results, the correlation coefficient is 0.749, which indicates there is a strong positive relationship between "industry links" and student satisfaction. These results are consistent with the findings for postgraduates by Angell, Heffernan and Megicks (2008).

University status and prestige is an important indicator of satisfaction (Franklin and Knight, 1995; Kuh and Hu, 2001). The findings confirmed that there is moderate positive relationship between the university's reputation and student satisfaction. Higher satisfaction will bring greater reputation in the eyes of undergraduate students in Xiamen University of China.

Firdaus (2005) suggested "access" is one of the most important determinants of service quality in higher education, which is also an antecedent of student satisfaction (Hill, 1995). The findings reflected there is strong positive relationship between access and student satisfaction of undergraduate students in Xiamen University of China. But it is still not good enough for the undergraduate students in terms of the convenience, availability, approachability of academic staffs and non-academic staffs. The students need more convenience in contacting their teachers and administrative staffs. They required more consultation services on both the academic aspects and non academic aspects.

Cost is an important in determining service quality in higher education (Joseph and Joseph, 1997), especially for postgraduate students (Angell, Hefferman and Megicks, 2008). The research findings showed that the undergraduate students thought the tuition

fees and accommodation are acceptable. Nevertheless, there were students who thought that tuition and accommodation fees were too high.

RECOMMENDATIONS

Xiamen University should essentially apply the student-oriented principles under the changing nature of the higher education marketplace. Improving service quality and increasing student satisfaction will be obtained by treating the related critical factors. Owing to the fact that academic aspect has a very strong relationship with student satisfaction, this aspect should be considered first. More attention should be paid to the academic staffs' ability and expertise in the course content, communication skills, attitudes and manner toward students, consultation provision, and feedback to students. The university must ensure that it employs highly qualified professors. In house training on the attitudes, manners, and communication skill of academic staffs toward students must be administered. In addition, more consultation services and studies feedback on the academic aspects should be provided to the students. In reference to the non academic aspects; offering more useful facilities and equipment to supplement or enhance the quality of campus life is critical and necessary. More special training for the administrative staffs' manners, attitudes, and knowledge of the working system are necessary, especially for the staffs who have direct contact with the students. It is also important to increase the administrative staffs' problem solving skills so that to increase their effectiveness when dealing with the inquiries or problems from students.

Employing effective and efficient methods to teach the theory and practice in the various subject areas is very important and necessary. The discussion and extension on the subjects need to accord to the different study aims. The way of instruction should be adjusted to be more "student-centered". Concentrate on what do students do, why do they do that, and what do they learn by doing that. The teachers should manage teaching activities according to students' behavior, so that teachers and students could communicate with each other on the subject, and ensure the students focus on the sub-

ject issues by themselves rather than being forced by lecturers.

Flexibility of courses is a predictor of student satisfaction (Franklin & Knight, 1995; Kuh & Hu, 2001). The findings evinced that there is positive relationship between the program issues and student satisfaction. The university could focus on offering wide range of degree options; flexibility in allowing switching of majors; the structure and content flexibility of the degree program; flexibility of entry requirements; and practical components in the degree programs.

Ford, Joseph and Joseph (1999) proved that career opportunities were a critical factor in service quality perception of both New Zealand and US students. The research results were consistent with this conclusion. More updated career opportunities must be offered to the graduates. Regular meetings with career counselors must be developed and maintained. This effort may influence the decision of the graduates on whether to go to work or pursue a higher academic degree.

Reputation management is effective for attracting new students and student retention (Standifird, 2005). As Fombrun (1996) interpreted, the organization, brand names, products, or services form its reputation. Xiamen University should improve its professional image by means of better management, highly qualified graduates, or excellent services, to increase student satisfaction.

The ease of contact with both academic staffs and non academic staffs in the university must be improved. Making sure the students can access any staffs by ways of telephone, email, or personal contact as well as making appointment and other ancillary services convenient for the students needs to be done.

Costs play a major role in decision making related to choosing a university (Guilding and McManus, 2002). The university should offer financial aid for the students who are in need, especially for the students from the rural areas. More special scholarships for the students could be an effective way to increase student satisfaction.

FURTHER RESEARCH

Future research could be conducted on other

universities within the same context, since there are nearly 900 public universities in China, which are following the Chinese educational system and structure. Besides, further research can be conducted to identify the drivers of student satisfaction. This could be very useful because administrators could know what are the shortfalls related to the student satisfaction in comprehensive aspects. In addition, it is interesting to conduct longitudinal studies on changes in student satisfaction from first grade to graduate level, or a comparison study of difference in student satisfaction from different grades or degrees. And the perception of service quality and customer satisfaction from other groups, such as employers, society, community, parents, and government, could be researched. That could help recognize the shortfalls of the service quality more clearly and specifically so that substantial improvements in quality can be achieved.

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