SERVICE QUALITY AT THE MEDICINE FACULTIES OF SANA'A UNIVERSITY & THE UNIVERSITY OF SCIENCE AND TECHNOLOGY AS PERCEIVED BY STUDENTS IN BOTH UNIVERSITIES: AN ANALYTICAL COMPARATIVE STUDY

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Abstract

The purpose of this study is to investigate the type of service quality provided to students of Medicine Faculties at Sana'a University (henceforth, SU), which has general and parallel/private systems as well as the private University of Science and Technology (henceforth, UST). The research instrument is a service quality questionnaire applied in previous studies and has high reliability (Al-Hidabi and Okasha, 2006 & 2007). It is used to determine the weak and strong aspects in the two universities. The questionnaire is related to nine dimensions of the quality (teaching material, teaching staff members, library, employee personnel, admission & registration, students' activities, the mental image of the university, recruitment and the infrastructure). It is administered to 360 students of Medicine Faculties (310) at SU and UST (50). The study uses descriptive and inferential statistical analyses; it was found that the students of SU and UST obtain different services. The students of both the general and parallel/private systems have the same expectations and opinions regarding the service quality offered to them by US. Results show that the level of service quality does not vary according to type of system within the same university. There is a statistical significance (sig. 001) when the whole categories of thequestionnaire are taken together; that is UST offers better services. Whereas SU students are satisfied with the mental image of the university (53%) and the teaching staff (44%), the UST students are content with the admission and registration (60%) and the library (49%). Yet, students of both universities do not get enough services related to recruitment. Mostly, students perceived service quality offered as low and less than expected.

Finally, in an attempt to raise and improve service quality, various recommendations as well as suggestions for further research were presented.

1. Introduction

This study aims at investigating the Service Quality (henceforth SQ) at the Medicine Faculties of Sana'a University (SU) and the University of Science and Technology (UST). Recently, the Ministry Of Higher Education in Yemen did not allow teaching medicine in private universities except for UST. The implication of this is that there is no sufficient quality in private universities. There is a wide assumption that SU or public universities are doing better in teaching medicine. This study tries to investigate this controversy to find out the type of services that meet the expectations of students in SU and UST. It tackles this from the point of view of quality assurance (henceforth, QA) and total quality management (henceforth, TQM) in higher education.

QA and TQM in higher education have gathered importance and recent publications that deal with these topics from different aspects (Parasuraman et al., 1988; Coulthard, 2004; Wisniewski, 2001; Garvin, 1984; Dawson and Palmer, 1995; Robinson, 1999; Sower, 2006; Al-Hidabi and Okasha, 2007; Al-Mehiawi, 2007). According to Al-Mehiawi (2007: 151), quality is not a new concept but it is as old as human being civilization. Quality was fully integrated into the manufacturing processes, which were passed along from one generation to the next. As civilization evolved, specialization of labor began to develop.

The concept of service quality had begun in the area of marketing services. This led to an increasing competition among the services institutions. Accordingly, the owners of these institutions started studying the customers' expectations compared with their perceptions of actual service delivered so as to obtain the consumers' satisfaction (Lagrosen *et al.*, 2006).

However, in higher education the service quality has not received considerable and sufficient attention and few of them addressed the specific context of higher education (Lagrosen, *et al.*, 2006). In view of the fact that education is not only a service for a customer, but it also involves the teacher doing something to the customer (Watty, 2000). Education aims to change the thinking of a person and create personal development. This transformation involves enhancement, which is value added to the customer by virtue of the process and empowerment, which helps the customers to influence their own transformation.

Accordingly, for the purpose of this study, educational SQ can be viewed as students' perceptions, who are the main stakeholders, of the level of university services offered compared with their expectations and, operationally by calculating their scores in the questionnaire (Al-Hidabi and Okasha, 2007). The focus of the research instrument is students' perceptions of academic and nonacademic services received to assure positive quality service offered by the university.

2. Study Problem and Questions

2.1 Significance of the Study

The significance of this study lies on addressing every important matter, which considers the basis of the university, for the students are the primary consumers of higher education services (Hill, 1995) more than the administration and academic staff. We hope the findings of this study will draw the attention of decision makers to the weaknesses and strengths to improve the services of the

university to meet the labor market. This is in congruence with Anderson (1995) and Pariseau and McDaniel (1997), who mention that students' feedback about educational services can be used in quality improvement programs to improve services and establish positive student perceptions. An important sidelight of the study is to obtain an authentic picture of quality services offered by the various Medicine faculties at SU and UST and the perception and satisfaction of the study subjects.

2.2 Statement of the Problem:

The purpose of this study was to investigate the expectations of students' perceptions of service quality and students' satisfaction, using both descriptive and inferential statistics. Very few studies focus on the SQ at higher education in Yemen. However, this study throws light on the quality of SU and UST services at the Faculties of Medicine.

2.3 Study Questions

This study attempts to answer the following questions:

1. What type of services do the Faculties of Medicine at SU present to students?
2. What type of services do the Faculties of Medicine at UST present to students?
3. What is the difference between the services presented for self-financed students in both universities?
4. What are the weak and strong aspects in the services presented for the students in both universities?

2.4 Limitations

This study is limited to the sample population obtained (during the second term of the academic year 2006- 2007) from the faculties of Medicine at SU and UST. The results cannot be generalized to the other faculties at SU and UST. Another limitation of the study is that it used a tried instrument developed by Al-Hidabi and Okasha (2007) that was meant to predict preliminary results of the Yemeni universities services.

3.1 Background

In recent years, numerous studies in the field of SQ have been carried out. However, relatively few studies have addressed the specific context of higher education, in general, and that of Medicine Faculties, in particular. The purpose of the present study is to investigate the academic and nonacademic SQ at the Medicine Faculties of public university (SU) as well as private university (UST) in the city of Sana'a, Yemen. In addition, the study throws light on weaknesses and strengths to improve the services of the Yemeni Universities to meet the labor market.

SQ at UST is studied before this study by Al-Hidabi and Okasha (2006). This study aimed at predicting the contributing factors of the educational SQ at UST in the context of the globalization concepts. For discovering the contributing factors of measuring the educational services quality in the universities, the researchers prepared a 39-item questionnaire which was distributed to 437 students of the UST

in Sana'a, Republic of Yemen. Through using factor analysis, it was found that six factors were explicable (58.9%).

Al-Hidabi and Okasha (2007) applied the same study on the SQ at US. The instrument was developed to reach 59-items. The study instrument is divided into nine categories: teaching materials, academic staff, library, employees, admission and registration, students' activities, the mental image and reputation of the institution, recruitment and infrastructure. The study investigated: (i) the components of SQ at SU; (ii) the predicting factors of SQ at SU. The sample of the study was 300 students of SU. Through using the factor analysis, it was found that SQ could be explained by nine categories of the study instrument. The results showed that the level of SQ varied according to college, sex and level of study. However, students in general, perceived SQ offered as low and less than expected.

The studies of Al-Hidabi and Okasha (2006; 2007) take SQ at the level of SU and UST for all faculties. However, the present study limits itself to the services of the Medicine Faculties at both universities. This is similar to Holdford and Reinders (2001) who developed and tested a quality measure of pharmaceutical education. A 41-item instrument was created to assess educational SERVQUAL, defined as student perceptions of school service performance: Reliability, Responsiveness, Communication, Credibility, Security, Competence, Access, Academic outcomes. The instrument assessed both perceptions of educational process (functional quality) and outcome (technical quality). Eighty-five fourth-year pharmacology students evaluated four dimensions of educational quality; school learning resources, faculty performance, administration performance, and student perceptions of intellectual progress.

Furthermore, other studies as Holdford and Patkar (2003) dealt with SERVQUAL in Pharmaceutical Education. The objectives of this study were to describe the perceptual dimensions of student assessments of the quality of their education and link those dimensions with student satisfaction with their educational experience. The study used a 37-item educational SERVQUAL instrument and a seven-item satisfaction scale was administered to 372 students in their final year of education in years 1999 to 2002. The result identified 5 dimensions of SERVQUAL labeled resources, interpersonal behavior of faculty, faculty expertise, faculty communication, and administration.

One of the main principles of the quality concept is to focus on the customer, but recently in the management area, the used conception is 'stakeholders'. There are a variety of 'stakeholders' in higher education including students, employers, teaching and non-teaching staff, government and its funding agencies, accreditors, validators, auditors, and assessors (including professional bodies) (Burrows and Harvey, 1992).

Service quality assessment has received considerable attention by scholars and researchers. One of the first efforts in service quality measurement was done by Parasuraman, Zeithaml and Berry, in 1985. They developed 'SERVQUAL', the most famous and widely used instrument to measure service quality. The SERVQUAL instrument is based on ten dimensions of service quality – tangibles, reliability, responsiveness, competency, courtesy, communication, credibility, security, access, and understanding (Parasuraman *et al.*, 1985).

Quality is defined in TQM in terms of whether it meets the needs of the customers (Green, 1994: 13). In addition, Zeithaml (1987) defined service quality as 'the consumers' judgment about an entity's overall excellence or superiority.' Hjorth-Anderson (1984) views quality as a form of attitude, related in part to satisfaction, and resulting from a comparison of expectations with perceptions of performance. Parasuraman *et al.* (1985: 17) devised a gap model of service quality and defined service quality 'as the degree and direction of the discrepancy between consumers' perceptions and expectations'. That is to say, service quality is the difference between consumers' ratings of the perceptions of service quality and their expectations of service quality (Coulthard, 2004).

Despite the popularity of SERVQUAL, it has been extensively criticized on both theoretical as well as operational (i.e., its model of gaps) grounds. In partial response to these criticisms, an alternative instrument has been utilized in service settings. This new instrument, called SERVPERF, retains the original 22 questionnaire items of SERVQUAL but measures only perceptions of performance instead of both performance and expectations. Its proponents argue that SERVPERF is shorter, theoretically superior, and better reflects service quality assessments than SERVQUAL.

From the previous definitions, it is clear that the researchers agree that the service quality is a concept or an attitude. Nevertheless, there is some disagreement as to what constitutes quality and how best it can be achieved (Dawson and Palmer, 1995). This is clear when Robinson (1999) concludes: "It is apparent that there is little consensus of opinion and much disagreement about how to measure service quality."

In addition, Parasuraman *et al.* (1985) see the measurement of service quality via recognizing the gaps, which represent the difference between the perception and expectation. In other words, service quality can be measured, by the use of SERVQUAL instrument, through comparing customer perceptions of the quality of a service experience to customer expectations for that experience. Yet, others and through the field studies, believe that it is better to assess the performance without the expectation (Al-Hidabi and Okasha, 2007: 14).

It seems really difficult to define service quality in the field of higher education, and the quality professionals have assured the necessity of agreement on some terms, like: levels, standards, proficiency, efficiency, which without a doubt they are studying right now (Al-Hidabi and Okasha, 2006). Harvey and Green (1993) in their pioneering paper explored the nature and usage of quality in relation to higher education:

> Quality is a relative concept, that different groups or 'stakeholders' in higher education have different priorities and their focus of attention may be different. For instance, the focus of attention for students and lecturers might be on the process of education while the focus of employers might be on the outputs of higher education. In some views, quality is seen in terms of absolutes. In other views, quality is judged in terms of absolute thresholds that have to be exceeded to obtain a quality rating (for example, the output has to meet a pre-determined

national standard). In other conceptualizations, however, quality is relative to the 'processes' that result in the desired outcomes. in view of that, some conceptualizations of quality are rather more 'absolutist' than others.

Rather than try to define one conception of quality, Harvey and Green (1993) argued that they could be 'grouped into five discrete but interrelated ways of thinking about quality'. Harvey (1995) provides the following brief overview of the five categories:

1. The exceptional view [of quality] sees quality as something special. Traditionally, quality refers to something distinctive and, in educational terms is linked to notions of excellence, of 'high quality' unattainable by most.
2. Quality as perfection sees quality as a consistent or flawless outcome.
3. Quality as fitness for purpose sees quality in terms of fulfilling a customer's requirements, needs or desires. In education, fitness for purpose is usually based on the ability of an institution to fulfill its mission or a programme of study to fulfill its aims.
4. Quality as value for money sees quality in terms of return on investment. If the same outcome can be achieved at a lower cost, or a better outcome can be achieved at the same cost, then the 'customer' has a quality product or service.
5. Quality as transformation is a classic notion of quality that sees it in terms of change from one state to another. In educational terms, transformation refers to the enhancement and empowerment of students or the development of new knowledge.

However, some researchers (Allen 1991, DiDominico and Bonnici 1996, Holdfold and Reinders 2001) have suggested that educators should evaluate student perceptions of educational service quality. Educational service quality is defined as a student's overall evaluation of services received as part of their educational experience (Holdfold and Reinders 2001). It describes a variety of educational activities both inside and outside of the classroom including classroom instruction, faculty member/student interactions, educational facilities, and contacts with administration (Holdfold and Patkar, 2003). Harman and Meek (2000, p: 36) define Quality in the context of higher education as a judgment about the level of goal achievement and the value and worth of that achievement. They add that quality is also a judgment about the degree to which activities or outputs have desirable characteristics, according to some norm or against particular specified criteria or objectives. Service quality differs from satisfaction primarily because it is quality specific, while satisfaction deals with quality and non-quality (e.g., price) evaluations (Holdfold and Patkar, 2003).

The present study is in response to the suggestions of other studies (Al-Hidabi and Okasha, 2006; 2007; Holdford and Reinders, 2001) that further research

is necessary to explore how SQ assessments vary over time and in different situations.

3.2 Sana'a University and the University of Science and Technology

The Faculty of Medicine and Health Sciences (first batch was in 1978-79) branched out of the Faculty of Science. The first Department was Laboratory. It was followed by Medicine in 1982-83 and Nursing in 1989-1990. Then the Faculty of Pharmacy (1988-89) was established and followed by the Faculty of Dentistry (1997-98). They were followed by a center to develop medicine education at the Faculty of Medicine (1992-93). UST was established in 1995. The Medicine Faculties at the UST include Dentistry, Medicine, and Pharmacy.

4. Methodology and Procedure

4.1 Study Methodology:

The study uses descriptive and inferential statistics to analyze the collected data. The instrument is a questionnaire from a study by Al-Hidabi and Okasha (2007) was administered to students of Medicine Faculties at SU and UST. The instrument has been tried, improved and used in two studies by the researchers. It has been recommended by the researchers to be used in different Arab universities. Qian (2006) used the SERVQUAL service quality gap model that was developed by Parasuraman *et al.* (1994) to measure graduate students' perceptions of service quality and satisfaction. Its aim was to collect opinions about the type of services to find out the weak and strong aspects. This instrument tests the quality of the lecturer and the student support systems that are the most influential factors in the provision of quality education (Hill *et al.*,2003). It included 59 items which were used to measure students' expectations of the level of the following nine quality services:

1. Teaching Material (6 items).
2. Teaching Staff Members (11 items).
3. Library (4 items).
4. Employee Personnel (9 items).
5. Admission & Registration (4 items).
6. Students' activities (4 items).
7. Mental Image of the University (6 items).
8. Recruitment (5 items).
9. Infrastructure (10 items).

The SQ instrument was administered to 360 students which represents a 100% response rate. This high response rate was due to the cooperation of academic staff and students who are friendly and easy to approach. The students were instructed to rate the services qualities of their respective colleges without writing their names to maintain free choices with no fear. The majority of service quality researchers have used similar SERVQUAL service quality model that compares differences between consumers' expectations of services and their assessment of the actual performance (Holdford and Reinders, 2001).

4.2 The Population and Study Instrument:

The population of the study is 7385 according to the available statistics of 2005-2006 as shown in the Tables (1 and 2) below. The study selected students (during the 2nd term of the academic year 2006-2007) from various levels at the Medicine Faculties (i.e. Medicine and Health Sciences, Dentistry and Pharmacy) at SU and UST to investigate the service quality from the viewpoints of students. SQ can be evaluated from the point of view of students as in Al-Hidabi and Okasha (2006, 2007) or from the point of view of both students and teachers as in Kitcheon (2004) who used a sample of students and staff of ten randomly selected Thai universities to investigate the importance of service attributes for service providers' and student's evaluation of services.

Table (1) Shows the Number of Students at the Medicine Faculties of SU, according to Faculty: General and Parallel/Private Systems (registered and new students until 2005-2006) and Sex

Faculty	*General*			*Parallel/Private*			*Total*		
	M	F	*Total*	M	F	*Total*	M	F	*Total*
Medicine	1014	776	1790	445	270	715	1459	1046	2505
Pharmacy	320	198	518	201	83	284	521	281	802
Dentistry	100	238	338	172	289	461	272	527	799
Total	1434	1212	2646	818	642	1460	2252	1854	4106

Source: *SU in Figures 1970 to 2006*

Table (2) Shows the Number of Students at the Medicine Faculties of UST

Faculty	Students' Joining Status	Male	Female	Total
Medicine	Accepted in 2004/2005	151	62	213
	Registered (2004/2005)	913	388	1301
	Enrolled in 2004/2005	451	191	642
Dentistry	Accepted in 2004/2005	105	59	164
	Enrolled in 2004/2005	282	226	508
	Technician Dentist	77	77	154
Pharmacy	Accepted in 2004/2005	66	-	66
	Enrolled in 2004/2005	180	-	180
	Technician Pharmacist	51	-	51
Total		2276	1003	3279

Source: *Educational Indicators of the Republic of Yemen* 2004 / 2005

4.3 Sample of the Study:

The sample of study was selected from the students studying at the various levels of Faculties of Medicine, Dentistry and Pharmacy at Sana'a University (SU) and University of Science and Technology (UST). The participants were chosen from the aforementioned two universities so as to get a sample of students from the most famous universities in Yemen: a public university (SU) and a private university (UST). The resolution of the Ministry of Education in Yemen to limit studying medicine to some universities that include SU and UST raises a question about the

services quality presented in those universities. The total number of the sample is (360) students, from SU (310) students (202 General System Students, and 108 Parallel/Private Expense System Students). And the remaining number of (50) students were taken from the various levels of Faculties of Medicine, Dentistry and Pharmacy at UST. The sample is divided and categorized according to Type of System, Faculty, Sex (Table 3).

Table (3) Shows the Sample's Frequency and Percent according to Type of System, Faculty and Sex

General (N=202)					**Parallel/Private** (N=108)					**UST** (N=50)				
Med.	Dent.	Pharma.	M	F	Med.	Dent.	Pharma	M	F	Med.	Dent.	Pharma.	M	F
144	32	26	80	122	71	24	13	41	67	38	10	2	50	-
(71.3)	(15.8)	(12.9)	(39.6)	(60.4)	(65.8)	(22.2)	(12.0)	(38.0)	(62.0)	(76.0)	(20.0)	(4.0)	(100)	

The above table shows the sample is varied from different faculties and sections to avoid bias and get a wide range of opinions about the nature of the quality of services in those medicine faculties. It is noticed in the table that the majority are from the general system at Sana'a University for this is the main system that includes most of the population (i.e. 64%; see Table 1). This is followed by the parallel/private systems. They are seen as one category since they are treated as self-financed students. The services they get are also similar. This category is similar also to the students in UST since they all pay for their education. This sample belongs to different levels (see Table 4 below).

Table (4) Shows the Sample's Frequency and Percent according to Type of System and Level of Study**Level of Study**	***General***		***Parallel/Private***		***UST***	
	N	%	N	%	N	%
One	101	(50.0)	32	(30.0)	11	(22.0)
Two	37	(18.3)	42	(38.9)	18	(36.0)
Three	6	(2.0)	8	(7.0)	5	(10.0)
Four	51	(25.2)	26	(24.1)	3	(6.0)
Five	-	-	-	-	6	(12.0)
Six	3	(1.5)	-	-	5	(10.0)
Seven	-	-	-	-	2	(4.0)
Postgraduate	4	(2.0)	-	-	-	-
Total	202	(100.0)	108	(100.0)	50	(100.0)

Table 4 shows the selected sample represents mainly level one through four. Very few students were selected from level five, six and seven. It was not easy to get enough sample from UST and include females because the administration of the university refused to allow the researchers to meet the students.

5. Data Analysis and Study Results

The following analysis shows the distribution of the sample, means and percentages. ANOVA is used to reflect the difference between the three groups: General and Parallel/Private Systems at SU and students from UST. The focus is on

the self-financed students to compare the services they get and when there is no significance a comparison is made with the General Students and UST. As for the students from SU there is no much difference in their opinions. Most of the time they are similar and there is no significant difference between the opinions of General or Parallel/Private Students.

The informants' responses to the Questionnaire were analyzed, at the beginning, according to their responses to each item of the category. But, this way didn't reveal a clear picture of the students' opinions related to the quality services offered to them by the faculties. With a view to obtaining a clear insight of their opinions about the quality services they get from their faculties, the students' responses to the Questionnaire were analyzed in terms of the nine categories, namely, *teaching material, teaching staff members, library, employee personnel, admission and registration, students' activities, mental image of the university, recruitment and infrastructure*. Table (6) below presents the a comparison of the informants' satisfaction according to means and percents in each of the nine categories.

The Type of Services which the Faculties of Medicine at SU and UST Present to Students

Table (5) Shows the Informants' Mean and Percentage in each of the Questionnaire Categories, according to Type of System

Questionnaire Categories	*General (N=202)*		***US** Faculties* **Parallel/Private** (N=108)		***UST** Faculties (N=50)*	
	Mean	%	Mean	%	Mean	%
1. Teaching Materials	1.8	35	1.9	37	2.2	44
2. Teaching Staff	2.2	43	2.2	44	2.3	46
3. Library	1.9	39	1.9	38	2.5	49
4. Employee Personnel	1.8	37	1.9	37	2.3	47
5.Admission and	2.2	44	2	40	3	60
6. Students' activities	1.8	37	1.8	36	1.9	37
7.The Mental Image of	2.8	55	2.6	53	1.8	36
8. Recruitment	1.4	28	1.3	27	1.7	33
9. Infrastructure	1.8	36	1.9	37	2.3	46

The SU students are satisfied with the services (from the highest to the lowest): the mental image of the university (55%), teaching staff (44%), admission and registration (43%), library (39%), infrastructure (37%), employee personnel (37%), teaching materials (36%), students' activities (35%), and recruitment (28%).

The UST students are satisfied with the services (from the highest to the lowest): admission and registration (60%), library (49%), teaching staff (47%), infrastructure (46%), employee personnel (46%), teaching materials (44%),

students' activities (37%), mental image of the university (36%), and recruitment (33%).

The most significant for SU students are the mental image of the university, teaching staff and the least significant are students' activities, and recruitment. The most significant for UST students are admission and registration and the library and the least significant are the mental image of the university and recruitment. Students of both universities agree that recruitment is not given attention.

5.3 The Differences between the Services Presented for Students in both Universities

Table (6) Shows Frequency, Mean and Statistical Significance of the Opinions of Medicine Students at SU and UST, Regarding Teaching Material

Item	Type of System	N	Mean	Sig.
1. The university provides clear and sufficient information about the different specializations.	General	202	1.96	.049
	UST	50	2.42	
	Parallel/Private	108	2.03	
2. Programs and specializations are varied and meet students needs.	General	202	1.84	.005
	UST	50	2.34	
	Parallel/Private	108	1.85	
3. The university provides training programs for all specializations.	General	202	1.47	.006
	Parallel/Private	108	1.48	
	UST	50	1.94	
4. The content of the materials are modern and up to date.	General	202	1.90	.011
	UST	50	2.38	
	Parallel/Private	108	2.04	
5. The materials are realistic.	General	202	1.99	.000
	UST	50	1.96	
	Parallel/Private	108	2.16	
6. The laboratories are used efficiently in the process of teaching.	General	202	1.48	.000
	Parallel/Private	108	1.60	
	UST	50	2.16	
First: Teaching Material	General	202	1.77	.002
	Parallel/Private	108	1.86	
	UST	50	2.20	

Table (6) shows there is a statistical significance of the opinions of Medicine Students at SU and UST, regarding Teaching Material. The UST students get sufficient information about the university and about the different specializations unlike students at US. UST students are also happy about variability of programs and specializations. The UST students also are happy about the content of the materials that are seen as modern and up to date unlike the students of SU. But SU students are satisfied that the materials are

realistic and related to everyday life. However the laboratories are used efficiently in UST and not efficiently in SU in the process of teaching. On the whole this axis shows UST students get better services than SU students.

The second part of the questionnaire deals with the members of the teaching staff and the way they handle the teaching and learning process. (It includes items from 7-17). The result is not reported in a table for it shows no differences in the performance of the teaching staff in SU and UST. Using ANOVA shows that there is no statistical significance of the opinions regarding appearance of the teachers, justice of teachers, efficiency of the teachers, punctuality of teachers, effective teaching methods and aids, encouragement of students' participation, suitability of information according to the level of students, and office hours. This consensus is because almost the same teachers teach in SU and UST. Thus there is no difference in the way students look at this particular service quality.

Table (7) Shows means and statistical significance of the Opinions of Medicine Students at SU and UST, Regarding the Library

Item	Type of System	N	Mean	Sig.
19. The service of the electronic library and internet is available.	General	202	1.89	.000
	Parallel/Private	108	1.55	
	UST	50	2.60	

The library service quality is an important component of the university services. There is no statistical difference between the SU and UST students with regard to the sufficiency and availability of books, easy access to get the required knowledge in the library (the items that do not show difference were not reported in the Table. The difference is in the availability of the electronic library and internet.

Table (8) Shows means and statistical significance of the opinions of medicine students at SU and UST, regarding employees personnel

Item	Type of System	N	Mean	Sig.
23. The Employees are found in their work offices continuously.	General	202	2.02	.006
	Parallel/Private	108	1.96	
	UST	50	2.50	
25. University employees' appearance is smart.	General	202	2.02	.000
	UST	50	2.74	
	Parallel/Private	108	2.05	
26. The Employees treat students nicely and according to regulation.	General	202	1.90	.000
	Parallel/Private	108	1.81	
	UST	50	2.60	
28. The employees offer their services to students accurately and quickly.	General	202	1.58	.018
	UST	50	1.98	
	Parallel/Private	108	1.68	
29. The employees listen carefully to the views and suggestions of students.	General	202	1.56	.000
	UST	50	2.34	
	Parallel/Private	108	1.65	
30. The employees provide clear and sufficient information about the administrative student procedures for Ss.	General	202	1.53.	.005
	UST	50	2.16	
	Parallel/Private	108	1.66	
Fourth: Employee Personnel	General	202	1.83	.025
	UST	50	2.34	
	Parallel/Private	108	1.87	

There is no difference in the way SU and UST students look at the employees performing their duties with honesty and confidence. Both have no difference in viewing employee personnel solving students' problems. However, UST students get the benefit of having their employees in their offices and they have good looking and treat them nicely, accurately and quickly and according to regulation unlike their counterparts at SU. UST employees provide clear and sufficient information about the administrative student procedures for students and they listen carefully to the views and suggestions of students unlike SU. On the whole, there is a statistical significance about the employee personnel at both universities. According to the survey of opinions UST is doing better in this respect.

Table (9) Shows Frequency, Mean and Statistical Significance of the Opinions of Medicine Students at SU and UST, Regarding Admission & Registration

Item	Type of System	N	Mean	Sig.
31. Procedures of admission and registration are accurate and quick.	General	202	1.79	.000
	Parallel/Private	108	1.78	
	UST	50	2.32	
32. Procedures of financial items are accurate and quick.	General	202	2.00	.000
	Parallel/Private	108	1.71	
	UST	50	4.36	
33. The information about admission and registration procedures is clear and	General	202	2.04	.000
	Parallel/Private	108	1.86	
	UST	50	3.94	
34. The fees are suitable.	General	202	2.40	.000
	UST	50	3.78	
	Parallel/Private	108	2.09	
Fifth: Admission and Registration	General	202	2.21	.000
	Parallel/Private	108	2.01	
	UST	50	3.02	

Table (9) deals with admission and registration. The procedures of admission, registration and financial matters are accurate and quick in the UST. The UST students also get clear and sufficient information about admission and registration procedures. The fees are suitable for the services the UST students get. On the whole, UST students get better services in this axis.

According to Abouchedid and Nasser (2002), the first encounter of students at universities is the administrative office, which leaves a lasting imprint for their entire experience in higher education. With the exponential growth of higher education in the Middle East, private universities face hardened competition in the overall retention of students. Registrar and academic advising offices are vital components to the university as well as the front end to the universities' SQ. This study attempts to measure student attitudes of registration and academic advising across different faculties to assure positive quality service complementing that of the academic. Keeping in mind that many developing universities in the Middle East have not yet utilized automated services to meet student needs, the present study provides recommendations to the development of touch-tone and Web-banner automated registration for a positive assessment of SQ. Abouchedid and Nasser (2002), however, attempted to measure student perception of registration and academic advising across different faculties and other administrative services to assure positive quality service complementing that of the academic. UST, as a private institution, competes highly with one of the leading universities (SU) in Yemen, especially in Admission and Registration services to attract a larger students population.

Table (10) Shows Frequency, Mean and Statistical Significance of the Opinions of Medicine Students at SU and UST, Regarding Students' Activities

Item	Type of System	N	Mean	Sig.
35. The activities meet the interest of the students.	General	202	2.15	.000
	Parallel/Private	108	1.90	
	UST	50	3.78	

Table (10) shows no statistical significance of the opinions of SU and UST students regarding students' extra-curricular activities: importance to students' personalities, availability of good sport, cultural and entertainment activities, and the availability of special places for practicing activities. However, UST students are happy about the type of activities they get, for these activities meet their interest. But, on the whole, there is no statistical significance of the services offered by the SU or UST.

Table (11) Shows Frequency, Mean and Statistical Significance of the Opinions of Medicine Students at SU and UST, Regarding the Mental Image of the University

Item	Type of System	N	Mean	Sig.
39. I am proud of studying in Sana'a University.	General	202	3.00	.002
	UST	50	1.94	
	Parallel/Private	108	2.80	
40. Reputation of the university among community is distinguishable.	General	202	2.91	.015
	Parallel/Private	108	3.01	
	UST	50	2.34	
41. Students feel safe and comfortable at the university.	General	202	2.30	.071
	Parallel/Private	108	2.39	
	UST	50	1.90	
42. People show confidence towards SU.	General	202	2.60	.000
	UST	50	1.64	
	Parallel/Private	108	2.63	
43. I advice students to join SU/ UST	General	202	2.79	.001
	Parallel/Private	108	2.57	
	UST	50	1.62	
44. I have joined SU/ UST as the first choice.	General	202	3.00	.000
	Parallel/Private	108	2.64	
	UST	50	1.48	
Seven: The Mental Image of the University	General	202	2.75	.000
	Parallel/Private	108	2.64	
	UST	50	1.81	

Table (11) shows there is a statistical significance of the opinions of students at SU and UST regarding the mental image of the university. SU students both General and Parallel/Private systems are proud of studying at Sana'a University more than UST students. They feel the reputation of the university among community is distinguishable. The general feeling is that people show confidence towards Sana'a University. SU in spite of the services they get less than UST but they would advise students to join SU. Moreover, they have chosen SU as the first choice unlike UST students. Thus, overall the Mental Image of SU is far better than UST. The reason is due to the long existence and the accumulated experience of SU. Another reason is due to the government which until recently prefers and employs graduates of public universities more than private ones. The learning environment (students feel safe and comfortable at the university) is preferred at SU for the mean is higher (2.39) than (1.90) UST though there is no statistical difference that can be mentioned.

The result of the present study is in line with the findings of Al-Hidabi and Okasha (2007) that the students perceived SQ offered by SU and UST as low and less than expected. Joseph *et al.* (2005) found from the student population used in their study that their sample did not consider their university a "quality" institution and the result pointed towards a lack of perceived quality.

Recruitment (items 45-49) is similar at SU and UST. There is no difference with regard to the role of the university in providing information about the vacant jobs for graduates, in providing mechanism of communication with graduates (Graduate Club), in offering counseling on getting jobs after graduation. Both SU and UST students are getting similar service in terms of getting a job easily or preparing students for work market. But on the whole UST presents better service in this axis.

Table (12) Shows Frequency, Mean and Statistical Significance of the Opinions of Medicine Students at SU and UST, Regarding the Infrastructure

Item	Type of System	N	Mean	Sig.
50. Equipments of laboratories are modern.	General	202	1.46	.000
	Parallel/Private	108	1.63	
	UST	50	2.59	
51. Halls and classroom are comfortable.	General	202	1.61	.006
	UST	50	2.12	
	Parallel/Private	108	1.78	
53. The situation of the university is suitable and safe.	General	202	2.28	.000
	Parallel/Private	108	2.42	
	UST	50	1.42	
55. The service of using computers and internet are provided.	General	202	1.92	.000
	Parallel/Private	108	1.64	
	UST	50	3.14	
58. Banking and Financial services are available.	General	202	1.20	.000
	Parallel/Private	108	1.16	
	UST	50	2.32	

59. Comfortable places and clean bathrooms are available.	General	202	1.31	.000
	Parallel/Private	108	1.35	
	UST	50	2.67	
Nine: The Infrastructure	General	202	1.80	.004
	Parallel/Private	108	1.87	
	UST	50	2.30	

Table (12) shows no statistical significance of the opinions of SU and UST students regarding the infrastructure: clean and nice buildings, availability of restaurants and cafeterias, availability of communication service, availability of travel service. But there is a statistical significance that shows UST students get better services with regard to modern equipments of laboratories, comfortable classroom, availability of computers and internet, availability of banking and financial services, availability of comfortable places and clean bathrooms. SU students feel the situation of their university is suitable and safe.

Table (13) shows Frequency, Mean and Statistical Significance of the Opinions of Medicine Students at SU and UST, Regarding all the categories

	N	Mean	Std. Deviation	Std. Error	Sig.
General	202	1.9617	.52209	.03664	.984
Parallel/Private	108	1.9507	.55546	.05320	
UST	50	2.2668	.42919	.06070	.001
General	202	1.9617	.52209	.03664	
Parallel/Private	108	1.9507	.55546	.05320	.002
UST	50	2.2668	.42919	.06070	

Table (13) shows there is a statistical significance of the Opinions of the Medicine Students at SU and UST, regarding all the categories. UST seems to present better services when compared with the opinions of SU students in both the General and the Parallel/Private systems. It seems also there is no difference in the opinions of General and the Parallel/Private systems. They agree on the type of services they get from SU. However, the results cannot be generalized across a university-wide spectrum.

6. Conclusion

The study investigated the expectations of students' perceptions of service quality and students' satisfaction about SU and UST services at the Faculties of Medicine. It identified the type of services the Faculties of Medicine at SU and UST present to students. It is found there is no difference between the services presented for self-financed students or regular students at SU. It found also that SU students are satisfied with the mental image of the university (55%), teaching staff (44%), admission and registration (43%), library (39%), infrastructure (37%), employee personnel (37%), teaching materials (36%), students' activities (35%), and recruitment (28%). However, the UST students are satisfied with admission and registration (60%), library (49%), teaching staff (47%), infrastructure (46%), employee personnel (46%), teaching materials (44%), students' activities (37%), mental image of the university (36%), and recruitment (33%).

The most significant for SU students are the mental image of the university, teaching staff and the least significant are students' activities, and recruitment. The most significant for UST students are admission and registration, the library, and the least significant are the mental image of the university and recruitment. Students of both universities agree that recruitment is not given attention. However, the results cannot be generalized to the other faculties at SU and UST since the sample (50 students) from US is not as large as in SU. The study ends with a suggestion for the two universities to take the results into account and reviewing the services presented to the students. Meeting students' needs is a recent approach that is internationally recognized to achieve high quality in higher education.

7. Suggestions

This study is limited to students' opinions. Further research is necessary to evaluate the university services from the point of view of teaching staff, administration, or the three of them at the level of different faculties. The present study also suggests further research to explore at the Yemeni and Arab universities. More research can be performed in a longitudinal way: pre-course position, which is centered on service expectations; in-course experience and post-course service value assessment to see the improvement of SQ in the institution. One of the limitations of this study is that it took an instrument from a previous study but it would be much better to have an interview with concerned parties and develop accordingly a SQ instrument.

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نوعية جودة الخدمةِ التعليمية في كليّاتِ الطبّ بجامعةِ صنعاء وجامعة العِلوم والتكنولوجيا: كما يراها الطلبة في الجامعيتين: دراسة تحليلية مقارنة

ملخص

تهدف هذه الدراسة إلى التحقق من نوعيةِ الخدمةِ التعليمية المقدمةَ إلى طلبة كليّاتِ الطبِّ بجامعةِ صنعاء، ذات النظامين العام والموازي/الخاص وكذلك كليات الطب بجامعةِ العِلوْم والتكنولوجيا الخاصة. وقد استخدمت هذه الدراسة استبيان جودة الخدمة التي تم تطبيقها واستخدامها مسبقاً في دراسات سابقة وقد كان له درجتي ثبات ومصداقية عاليين (الحدابي وعكاشة، ٢٠٠٦و٢٠٠٧). وقد تم استخدام هذه الأداة لتحديد السمات القوية والضعيفة في الجامعتين. وقد اشتمل الاستبيان على تسعه أبعاد هي: المادة التعليمية، أعضاء هيئة التدريس، المكتبة، الموظفون، القبول والتسجيل، الأنشطة الطلابية، الصورة الذهنية للجامعة والتوظيف، وطبق هذا المقياس على (٣١٠) طالباً وطالبة من طلبة جامعة صنعاء وجامعة العلوم والتكنولوجيا الخاصة. وقد استخدم منهج التحليلي الإحصائي الوصفي، ووجد بأن الطلبة في كلا الجامعتين يحصلون على خدمات تعليمية مختلفة. حيث وجد أن طلبة النظامين العام والموازي/ الخاص بجامعة صنعاء لهم نفس التوقعات والآراء فيما يتعلق بجودة الخدمات التعليمية المقدمة لهم من قبل الجامعة. أي أن النتائج توضح بأن جامعة صنعاء تقدم نفس الخدمات التعليمية لكلا النظامين العام والموازي/الخاص. ويوجد دلالة إحصائية (0.01.) عندما نأخذ أبعاد الاستبيان بشكل عام، أي أن جامعة العلوم والتكنولوجيا الخاصة تقدم خدمات تعليمية أفضل من جامعة صنعاء. وبينما يوضح طلبة جامعة صنعاء رضاهم عن الصورة الذهنية للجامعة (٥٣٪) ورضاهم عن أعضاء هيئة التدريس (٤٤٪)، طلبة جامعة العلوم والتكنولوجيا عبروا عن رضاهم عن القبول والتسجيل (٦٠٪) والمكتبة (٤٩٪). وبالرغم من ذلك فأن الطلبة في كلا الجامعتين لا يحصلون على خدمة تعليمية كافية فيما يتعلق بخدمة التوظيف بعد التخرج. وبشكل عام فأن الطلبة ينظرون إلى الخدمة التعليمية المقدمة لهم بأنها اقل من المتوقع. أخيراً، كمحاولة لتحسين الخدمة التعليمية، تم تقديم بعض التوصيات والاقتراحات للبحوث المستقبلية.