Customer-Oriented Quality Management System in Cyprus Higher Education

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Abstract

Due to the current market pressures and the cruel competition for both students and resources caused by the rapid expansion of colleges and universities worldwide, higher education institutions (HEIs) are gradually developing and implementing more market-oriented strategies, orientations and policies. Meeting customer demands and expectations as well as maintaining effective relationships with them, is nowadays high in priority as an important determinant of superior overall institutional performance and as a major source of profitability and sustainable competitiveness. The majority of contemporary leading HEIs are increasing the emphasis given on identifying the "characteristics" of a quality university as perceived by their most important internal stakeholders, students. Quality constitutes a key success factor for HEIs, since it strengthens student attraction and retention, enhances both student and alumni satisfaction, improves graduate employability, reinforce institution's brand name, and increases market share and profits.

Historically, quality management in higher education used to be based on external quality approaches, known collectively as External Quality Monitoring (EQM), such as audits, accreditation, assessment and external examination. However, such approaches have been heavily criticized for enabling the control of quality – to some degree- but without contributing crucially to its improvement. As a consequence, there is a growing trend by HEIs to shift the emphasis away from EQM to quality management systems that are internally developed and implemented; HEIs are increasingly engaging in quality management activities underpinned by a more customer-driven philosophy for delivering quality service.

The present empirical study explores student views, perceptions and expectations for a "quality" HEI and identifies student-defined characteristics of quality. It explores eventual differences in the expectations for a "quality" university between students of private and public universities, and indicates the priorities that the university administration should put with respect to quality determinants. A questionnaire survey has been carried out, based on a large sample of both full- and part-time undergraduate students following studies programs at both public and private universities in Cyprus.

The challenging originality of this project lies in the fact that the research conducted has addressed the concept of quality in higher education based on a pragmatic and market-oriented approach, which combines three purposes -defining, assessing and improving quality- into one. This study aspires to contribute to the existing body of knowledge about the definition of quality and quality management in higher education, to provide a conceptual framework of quality determinants based on student requirements and expectations, as well as to identify areas where extra effort for quality improvement should be put.

Descriptive and inferential statistics, namely reliability analysis (Cronbach's Alpha), exploratory factor analysis, independent and paired sample t-test were used for testing the reliability of the collected data and analyzing them with the aim of answering the research questions. Moreover, the Importance-Performance technique was utilized with the aim of identifying and prioritizing areas for quality improvement efforts.

Keywords:
Characteristics of Quality, Higher Education Institutions, Stakeholders, Expectations, Students, Academics, Cyprus

Introduction

In their attempt to cope with intense market pressures, high volatility and stiff competition surrounding contemporary academic environment (Sahney et al., 2004), modern higher education institutions (HEIs) tend to growingly embrace market-oriented strategies and strive to create superior value for their customers (Olaleke Oluseye et al., 2014). To achieve this goal, HEIs put increased emphasis on quality management systems that are internally developed and implemented (Brennan and Shan, 2000). The development of such systems is based on indicating quality characteristics as they are perceived by various organization"s stakeholders (Harvey and Green, 1993; Joseph and Joseph, 1997; Lagrosen et al., 2004; Becket and Brooks, 2008) and utilizing them to evaluate quality and assess stakeholder satisfaction.

The majority of studies exploring the notion of quality in higher education, highlight the need for further research in this area (Lagrosen et al., 2004, Becket and Brooks, 2008). The present research has investiagted the concept of quality in higher education based on a pragmatic and market-oriented approach, which combines three purposes -defining, assessing and improving quality- into one. It aspires to supplement the existing literature and to broaden the awareness of both conceptualisation and operationalization of quality systems in higher education. Moreover, this study was carried out in Cyprus higher education sector where no previous inquiries had been conducted on this subject.

Advancing Stakeholder Quality Assurance in Higher Education

In spite of the notable research work that has been carried out on quality management, there is no unanimous agreement on a single model for quality management in higher education (Becket and Brooks 2006). According to the existing literature, in order for a quality model to be community-wide and generally accepted, it needs to reflect stakeholder views (Birnbaum, 2000; Srikanthan and Dalrymple, 2007; Houston, 2008). Quality in higher education should be defined and assessed by stakeholders (Harvey and Green, 1993; Shanahan and Gerber, 2004), and most attempts to determine quality, are highly related since they adopt a "customer" or "stakeholder approach" (Cheng and Tam, 1997, Cullen et al., 2004).

Moreover, existing literature stresses that quality does not constitute a unitary concept and hence, it needs to be defined with the aid of quality dimensions or criteria, such as support services, university reputation, and programmes of study (Harvey et al., 1992; Harvey and Green, 1993; Green, 1993; Harvey and Knight, 1996; Lagrosen et al., 2004). Green (1993) states that the optimum approach to quality in higher education, consists in defining as clearly as possible the criteria used by each stakeholder to assess quality as well as taking these different views into consideration when evaluating quality. In congruence with this, Harvey and Green (1993) underline that a practical approach to a multifaceted and complicated philosophical issue, such as quality, would be to inquire the criteria that various interest groups use in evaluating quality instead of creating a single definition of quality. Green (1994) is in total agreement with the above-expressed view when he states that due to the difficulties in defining quality in higher education, it is critically important to identify the criteria that each stakeholder applies when evaluating quality and to take these competing views into consideration.

Given that quality is defined by stakeholders, who are then the "stakeholders" of higher education? According to modern quality management principles, there are numerous "customers" or "stakeholders", especially when dealing with service providers such as higher education institutions (Lagrosen et al., 2004). Although many studies use the term "customer", some others prefer the term "stakeholder". However, certain authors, such as Lagrosen et al. (2004), recommend using the term "stakeholder" instead of the term "customer", when discussing quality in higher education with the argument that this term is less controversial. The present study follows this approach.

Srikanthan and Dalrymple (2003) indicate certain stakeholders, such as government, funding bodies, students, academic staff, employers and society at large, for whom the quality of higher education is rather crucial. Cheng and Tam (1997) describe both internal and external stakeholders in the quality management process. Current students and academic staff are considered as internal constituents in the quality management process, whereas employers, government funding and professional bodies, institutional management and prospective

students are external constituents; these stakeholders are likely to create various perceptions of quality as well as disparate perceptions of how quality needs to be assessed (Cheng and Tam, 1997). This inquiry focuses on a principal group of internal stakeholders, current students.

Therefore, the existing literature suggests a "practical approach" to quality: defining a set of criteria that can be regarded as determinants of quality, which are identified by stakeholders and are suitable for measuring quality and satisfaction.

Methodology

The purpose of this study is to identify the determinants of a "quality university", as identified by students, one of the key stakeholders of HEI's, as tools for quality management and student recruitment and retention. The study also aims in identifying any differences in the expectations for a "quality" university between the students of Private and Public universities, as competition among those becomes stronger.

The research questions formulate, reflecting the study's primary purpose and objectives, were the following:

> **RQ 1:** Which are the determinants of a "quality" University as identified by university students and how strong of an "expectation" are those for students
> **RQ 2:** Are there any differences in the expectations for a "quality" university between students of private and public Universities?
> **RQ 3:** What should be the priorities of the university administration with respect to the determinants of its quality for improvement efforts?

The research was undertaken in three stages. The first explored the determinants or characteristics of a "quality" university. Qualitative methods, such as focus groups and interviews, are considered more appropriate for exploration purposes (Gummerson, 1991; Kent, 1999). For that purpose, the views and opinions of students of public and private Universities were collected through a series of focus groups. A total of five student focus groups were carried out at one private and one public university in the period of January 2015. Participants were randomly selected. The Miles and Huberman's (1994) framework for qualitative data analysis was used for analysing data collected so as to identify any developing patterns. The emerging patterns were compared with the literature findings and a survey questionnaire was developed for conducting this study.

The second phase involved the piloting of the questionnaire constructed. A Likert scale is commonly used to measure perceptions, attitudes, values and behaviours (Vogt, 1999). Thus, a five-point Likert rating scale, as used in similar studies (Harvey et al., 2002; Palli and Mamilla, 2012; Spooren et al., 2007) was utilised. Furthermore, the questionnaires were pilot-tested for validity with two experts and for reliability with the utilisation of the test re-test method.

The third phase was the administration of the survey to the students. The target population included all students pursuing an undergraduate or graduate degree in private or public universities in Cyprus. Convenient sampling was used, as it was impossible for the researches to have access to student data of all Universities so as to formulate a stratified random sample data. Moreover, the researchers work for one of the Universities and had no means to administer the questionnaire to a stratified sample.

The researchers, utilizing their personal contacts, contacted as many teaching faculty of all universities as possible, explaining the purpose of the study and asking them for their contribution in administering the questionnaire. The student questionnaires were personally delivered to those faculty members who responded positively, and were administered by them to their students through group-distribution in class.

The collected data were analysed using the SPSS statistical package. Descriptive and inferential statistics, such as reliability analysis (Cronbach's Alpha) and independent sample t-test, were utilised to analyse the collected data, test their reliability and answer the formulated research questions.

Research Findings

Overall, there was a satisfactory response from students of both Private (46%) and Public Universities (54%). The demographic data are presented in Table 1 below.

TABLE 1: Demographic Characteristics

DEMOGRAPHIC VARIABLE	STUDENTS	Frequency	Valid %
Gender	M	140	51.3
	F	133	48.7
	TOTAL	**273**	**100**
Age	17-20	105	38.5
	21-23	106	46.2
	24-26	34	12.5
	27+	8	2.9
	TOTAL	**273**	**100**
Year of Study	1st Yr	102	37.4
	2nd	54	19.8
	3rd	62	22.7
	4th	33	12.1
	Graduate	22	8.1
	TOTAL	**273**	**100**
Nationality (Origin)	Cypriot	191	70
	EU National	55	20.1
	Non-EU National	27	9.9
	TOTAL	**273**	**100**
Enrolment Status	Full Time	231	84.6
	Part Time	42	15.4
	TOTAL	**273**	**100**
Type of University	Private	125	45.8
	Public	148	54.2
	TOTAL	273	**100**

As indicated in Table 1 above, a total of 273 students studying in private and public universities in Cyprus responded to the questionnaire (Valid responses). 51.3% of the respondents are Female and 48.7% Male. All respondents are older than 17 years. Specifically, 38.5% belong to the age group of 17-20, 46.2% put themselves in the age range of 21-23, 12.5% are in the age group of 24-26 and 2.9% belong to the age group of 27+. The majority of respondents (37.4%) are in their 1st year of study, 19.8% in their 2nd year of study, 22.7% in their 3rd, 12.1% in their 4th, and finally 8% of the respondents are graduate students pursuing a Master's degree. In addition, 70% of the sample participating in the study, are Cypriots, 20.1% EU Nationals and 9.9% Non-EU Nationals. Finally, the majority of the students participating in the survey are studying on a Full Time basis (84.6) and only 15.4% on a Part-Time basis. Finally, 45.8% (125) of the respondents attend a private university whereas the remaining 54.2% (148) attend a public one. The above demographic data suggest that the sample is representative of the student population in Cypriot universities. In Cyprus, seven universities (two public and five private) operate offering both undergraduate and postgraduate programs.

In order to answer the Research Questions, students were asked to rate how strongly each statement in the questionnaire (characteristic/determinant of a quality university as identified by students through the first stage of the research methodology) expressed their expectations for a "quality" university (this is referred in this study, and others found in the literature, such as Iacovidou et al., 2009) as 'Expectations/Importance").
Mean values for "Expectations/Importance" were then calculated, since the use of mean values for ranking and other statistical purposes is quite acceptable (Chen *et al*., 2006) and used to address the research questions.

With regards to the first research question, Table 2 below shows what students expect from a "quality" university and how strong each determinant is for them. A significant finding is the high importance given to all determinants. Specifically, for 33 out of the 43 determinants of a "quality" university, students assigned a "very Important" to "Extremely Important" value (mean values of more than 4 out of 5) and for the remaining 10 statements the students assigned mean values ranging from 3.7 to 3.97 out of 5, suggesting that those statements were 'Important" to "Very Important" determinants for a "quality" university.

TABLE 2: Expectations for Quality Rankings

	STATEMENTS	**N**	**Mean Value**	**Standard Deviation**	**Median**
1	Teaching develops a student's knowledge (value –added)	273	4.19	.93438	4
2	Teaching Improves the practical skills and abilities of students	273	4.16	.86795	4
3	Lecturers are friendly and approachable	273	4.08	.93192	4
4	Lecturers encourage students to participate in their class	273	3.87	1.01457	4
5	Lecturers are sympathetic and supportive to the needs of students	273	4.03	1.09079	4
6	Lecturers are punctual and reliable (Keeping time/no class cancellation / following course outline)	273	4.04	.95977	4
7	Lecturers adapt their teaching to the skills and abilities of students	273	3.97	.99783	4
8	Lecturers have good teaching skills and abilities	273	4.14	.99629	4
9	Lecturers produce significant research work (publications in journals/etc.)	273	3.92	.99674	4
10	Lectures keep up-to-date with their subject through industry experience, attending conferences, etc.	273	4.17	.89711	4
11	Studies for a Degree must be completed within a specified time period (i.e. 6 years for a Bachelor's degree)	273	4.06	1.02214	4
12	Lecturers are enthusiastic in their teaching	273	3.98	.98249	4
13	Lecturers make their subject interesting to students	273	3.96	1.07078	4
14	Problems in the teaching of lecturers are identified	273	4.59	.52177	5
15	Corrective action is taken when problems in the teaching of lecturers is identified	273	4.49	.66488	5
16	Academic rules and policies are **communicated** to students/staff/faculty (Attendance/missing exam, cheating, etc.)	273	4.04	1.03162	4
17	Academic rules and policies **are applied** equally to all students (attendance/ missing of an exam, cheating, etc.)	273	4.16	1.03181	5
18	Students know early enough what is expected from them in a course (attendance/weight of exams/projects, etc.)	273	4.26	.96355	5
19	Lecturers inform students what they can expect from their lecturers (student hours, advising, etc.)	273	4.22	.92913	4
20	Examinations and assessment are related to the objectives and learning outcomes of the course	273	4.11	.99904	4
21	Students are assessed equally and fairly by their lecturers	273	4.17	1.32230	4

22	Lecturers provide feedback to student assignments/ projects/ exams within a reasonable time (less than 2 weeks)	273	4.21	1.46843	4
23	The feedback that students receive on their work helps them understand their mistakes and improve their performance	273	4.16	1.01262	4
24	Student cheating/plagiarism is punishable	273	4.13	1.04056	4
25	The Programmes of study must prepare students for employment	273	4.10	1.07362	4
26	The purpose of the Programmes of study must be the development of the students (intellectual abilities, improvement of character)	273	4.00	1.02539	4
27	When Programmes of study are developed the needs of the industry must be taken into consideration	273	4.09	.99393	4
28	Programmes of study must provide students with opportunities for practicum/internships	273	4.06	1.07434	4
29	Programmes of study must be continuously updated	273	3.97	1.06025	4
30	Happenings and events at university premises.	273	3.75	1.20822	4
31	Sport facilities available	273	3.69	1.20789	4
32	University Clubs and Societies	273	3.72	1.12994	4
33	The up to datedness of books, journals, periodicals, and databases in the library	273	4.44	.92579	5
34	Availability and access to **private study areas** at the University	273	4.46	.88235	5
35	Availability and access to study space for **groups at the University.**	273	4.35	.93136	5
36	Access to university computers to students for their use	273	4.42	.84139	5
37	Access to printers located at the university to students for their use	273	4.26	.99818	5
38	Access to the library over the **weekends**	273	4.36	.92858	5
39	Access to university study areas over the **weekend**	273	4.21	1.08989	5
40	Access to university computers/labs and printers to students over the **weekend**	273	4.33	.98142	5
41	Pleasing University buildings and facilities	273	3.98	1.08443	4
42	Inspirational class rooms	273	3.82	1.18440	4
43	Appropriateness of labs	273	4.22	2.68356	4

Scale: *1: Not Important at all; 2: Not Very Important; 3: Important; 4: Very Important, 5: Extremely Important.*

As table 3 below indicates, the top ten (10) determinants for a "quality" university are the following:

TABLE 3: The Ten (10) Most Important Determinants of a "Quality" university

Statement No	Statement	Mean Value	RANK (out of 43)
14	Problems in the teaching of lecturers are identified	4.59	1
15	Corrective action is taken when problems in the teaching of lecturers is identified	4.54	2
34	Availability and access to private study areas at the University	4.46	3
33	The up to datedness of books, journals, periodicals, and databases in the library	4.44	4
36	Access to university computers to students for their use	4.42	5
38	Access to the library over the weekends	4.36	6
35	Availability and access to study space for groups at the University.	4.35	7

40	Access to university computers/labs and printers to students over the weekend	4.33	8
18	Students know early enough what is expected from them in a course (attendance/weight of exams/projects, etc.)	4.26	9
19	Lecturers inform students what they can expect from their lecturers (student hours, advising, etc.)	4.27	10

The above Table indicates what students mainly expect from a "quality" university; their major expectations are related to faculty performance and corrective action by university management, learning support and infrastructure available, such as library materials and access to it even over weekend, private and group study areas and access to them over the weekend, availability of computers/labs/printers and access by students over the weekend as well as prompt and constructive academic information relating to studies, such as information about academic rules and regulations, student advising available, etc. The ten statements listed in the Table above indicate the determinants for which students have strongest expectations and thus, those are items, which are of critical importance for students. The usefulness of these findings to University management is rather high as universities always need to optimise the use of their limited resources. Moreover, it is a useful finding since it provides a tool for differentiation in the highly competitive environment in which universities compete for student retention and recruitment.

Table 4 below indicates the ten (10) determinants of a "quality" university ranked last in importance according to the value assigned to them by students.

TABLE 4: The Ten (10) Least Important Determinants of a "Quality" university.

Statement No	Statement	Mean Value	RANK (out of 43)
31	Sport facilities available	3.69	1 (43)
32	University Clubs and Societies	3.72	2 (42)
30	Happenings and events at university premises.	3.75	3 (41)
42	Inspirational class rooms	3.82	4 (40)
4	Lecturers encourage students to participate in their class	3.87	5 (39)
9	Lecturers produce significant research work (publications in journals/etc.)	3.92	6 (38)
13	Lecturers make their subject interesting to students	3.96	7 (37)
29	Programmes of study must be continuously updated	3.97	8 (36)
7	Lecturers adapt their teaching to the skills and abilities of students	3.97	9 (35)
41	Pleasing University buildings and facilities	3.98	10 (34)

The statements listed in the above Table indicate the determinants for which students have the lowest expectations. This suggests that the above-mentioned quality determinants are issues that students consider "important" for a "quality" university but rank them as the 10 least important determinants. This, again, might be of great usefulness to University management when trying to optimise the use of their limited at most times, resources.

Still, all determinants of a "quality" university identified by students received mean values ranging from 3.69 to 4.54 out of 5, all above the value of "IMPORTANT". The high importance rating of all determinants suggests that students are very demanding and have very high expect**a**tions for a "quality" university. This also suggests that it may be difficult for an institution to meet all expectations of its key stakeholder, especially in case of private universities given the limited resources available. This in turn, may result in dissatisfaction and

perceptions of not such a good "quality" university. Given the competitive nature of Higher Education area, this may be problematic for an institution since limited resources might restrict an organisation's competitiveness.

To address the second Research Question, an Independent Sample T-Test analysis was carried out in order to identify eventual statistically significant differences in the expectations for a "quality" university between the students of private and public universities. The results are presented below in Table 5.

Table 5: Comparison of Private and Public University Student Expectations for Quality

	STATEMENTS	**University**	**N**	**Mean Values**	**Sig p value**	**T-Test Sig. (2-tailed)**
1	Teaching develops a student's knowledge (value –added)	Private Public	273	4.4400 3.9730	.186	**.000**
2	Teaching Improves the practical skills and abilities of students	Private Public	273	4.1520 4.1689	.962	.873
3	Lecturers are friendly and approachable	Private Public	273	4.1760 4.0000	.148	.120
4	Lecturers encourage students to participate in their class	Private Public	273	3.8320 3.8919	.132	.628
5	Lecturers are sympathetic and supportive to the needs of students	Private Public	273	4.0880 3.9932	.601	.476
6	Lecturers are punctual and reliable (Keeping time/no class cancellation / following course outline)	Private Public	273	4.0720 4.0135	.329	.617
7	Lecturers adapt their teaching to the skills and abilities of students	Private Public	273	4.0000 3.9527	.354	.697
8	Lecturers have good teaching skills and abilities	Private Public	273	4.2000 4.0811	.193	.327
9	Lecturers produce significant research work (publications in journals/etc.)	Private Public	273	3.7840 4.0338	.432	**.039**
10	Lectures keep up-to-date with their subject through industry experience, attending conferences, etc.	Private Public	273	4.1920 4.1554	.824	.738
11	Studies for a Degree must be completed within a specified time period (i.e. 6 years for a Bachelor's degree)	Private Public	273	4.1120 4.0068	.391	.398
12	Lecturers are enthusiastic in their teaching	Private Public	273	4.0320 3.8986	.960	.265
13	Lecturers make their subject interesting to students	Private Public	273	4.0400 3.9257	.885	.380
14	Problems in the teaching of lecturers are identified	Private Public	273	4.6160 4.5676	.733	.446
15	Corrective action is taken when problems in the teaching of lecturers is identified	Private Public	273	4.3120 4.6486	.000	**.000**
16	Academic rules and policies are communicated to students /staff/faculty (Attendance/missing exam, cheating, etc.)	Private Public	273	4.0640 4.0270	.967	.769
17	Academic rules and policies **are applied** equally to all students (attendance/ missing of an exam, cheating, etc.)	Private Public	273	4.2000 4.1351	.919	.606
18	Students know early enough what is expected from them in a course (attendance/weight of exams/projects, etc.)	Private Public	273	4.2400 4.2770	.642	.752
19	Lecturers inform students what they can expect from their lecturers (student hours, advising, etc.)	Private Public	273	4.3040 4.1486	.254	.169

20	Examinations and assessment are related to the objectives and learning outcomes of the course	Private Public	273	4.1840 4.0541	.268	.285
21	Students are assessed equally and fairly by their lecturers	Private Public	273	4.1360 4.1892	.211	.741
22	Lecturers provide feedback to student assignments/ projects / exams within a reasonable time (in 2 weeks)	Private Public	273	4.2960 4.1484	.473	.348
23	The feedback that students receive on their work helps them understand their mistakes and improve their performance	Private Public	273	4.1520 4.1689	.570	.891
24	Student cheating/plagiarism is punishable	Private Public	273	4.1760 4.0878	.812	.487
25	The Programmes of study must prepare students for employment	Private Public	273	4.1840 4.0203	.858	.210
26	The purpose of the Programmes of study must be the development of the students (intellectual abilities, improvement of character)	Private Public	273	4.0640 3.9595	.879	.402
27	When Programmes of study are developed the needs of the industry must be taken into consideration	Private Public	273	4.0880 4.0946	.304	.957
28	Programmes of study must provide students with opportunities for practicum/internships	Private Public	273	4.1360 4.0000	.801	.298
29	Programmes of study must be continuously updated	Private Public	273	4.0880 3.8716	.908	.093
30	Happenings and events at university premises.	Private Public	273	3.8400 3.6757	.084	.264
31	Sport facilities available	Private Public	273	3.6640 3.7027	.408	0793
32	University Clubs and Societies	Private Public	273	3.6400 3.7838	.977	.296
33	The up to datedness of books, journals, periodicals, and databases in the library	Private Public	273	4.2480 4.5946	.001	**.002**
34	Availability and access to **private study areas** at the University	Private Public	273	4.3760 4.5270	.161	.159
35	Availability and access to study space for **groups at the University.**	Private Public	273	4.2480 4.3424	.098	.103
36	Access to university computers to students for their use	Private Public	273	4.3520 4.4797	.126	.212
37	Access to printers located at the university to students for their use	Private Public	273	4.1200 4.3851	.299	**.029**
38	Access to the library over the **weekends**	Private Public	273	4.2800 4.4189	.341	.219
39	Access to university study areas over the **weekend**	Private Public	273	4.0800 4.3176	.302	.073
40	Access to university computers/labs and printers to students over the **weekend**	Private Public	273	4.1360 4.4865	.057	**.004**
41	Pleasing University buildings and facilities	Private Public	273	4.1440 3.8378	.098	**.020**
42	Inspirational class rooms	Private Public	273	3.9840 3.6892	.001	**.038**
43	Appropriateness of labs	Private Public	273	4.5840 3.9122	.589	**.039**

Note: A four-point Likert scale was used: Scale: 1: Not important at all; 2: Not Very important; 3: Important; 4: Very Important, 5: extremely important. Independent Sample T-Test p value **sig. <.05 : statistical difference exists** - Equal variances assumed

The above analysis suggests that students of private and public universities share the same expectations for a "quality" university regarding the majority of determinants (34 out of the 43 or (79.1%)). They do, though, have statistically significant differences in their expectations for a "quality" University on nine (9) determinants, as listed below in table 6.

Table 6: Differences in Expectations for a Quality University between students of Private and Public Universities

Statement No	Statement	**University**	Mean Values
1	Teaching develops a student's knowledge (value –added)	Private Public	4.4400 3.9730
9	Lecturers produce significant research work (publications in journals/etc.)	Private Public	3.7840 4.0338
15	Corrective action is taken when problems in the teaching of lecturers is identified	Private Public	4.3120 4.6486
33	The up to datedness of books, journals, periodicals, and databases in the library	Private Public	4.2480 4.5946
37	Access to printers located at the university to students for their use	Private Public	4.1200 4.3851
40	Access to university computers/labs and printers to students over the weekend	Private Public	4.1360 4.4865
41	Pleasing University buildings and facilities	Private Public	4.1440 3.8378
42	Inspirational class rooms	Private Public	3.9840 3.6892
43	Appropriateness of labs	Private Public	4.5840 3.9122

As indicated by the above Table, students of private universities have significantly stronger expectations than the students of public universities for teaching to be a value-adding activity that leads to the development of their knowledge. This could probably be linked with the increased tuition fees that students of private universities are required to pay for their studies. Another area of significant difference in student expectations relates to the research output of lecturers. Specifically, students of public universities have much stronger expectations from their lecturers to produce significant research work and make publications in academic journals. Moreover, students of public universities have significantly stronger expectations for university management to take corrective action when problems in the teaching of lecturers are identified. This difference could be attributed to the fact that faculty of public universities are considered by students as governmental employees who will continue to work in spite of their inadequate performance.

Another significant difference between students of private and public universities, relates to the up-to datedness of the reading and research materials available at the library of a university. Students of public universities have significantly stronger expectations; this means that perhaps public universities have a much stronger research orientation, which in turn becomes an expectation for the students. Another area where a statistically significant difference has been identified, is the availability of printers at the university premises for student use. The expectations of public university students are much higher than those of the private ones,

perhaps because such facilities were absent in their high school/lyceum and this absence created a strong need for it. An additional area where a statistically significant difference occurs concerns student access to university computers/labs and printers over the weekend. Once more, expectations of public university students are higher. This may be due to the fact that students of public universities have a much stronger sense of university culture and life than students of private institutions.

Finally, significant differences have been identified in student expectations concerning pleasing university buildings and facilities, inspirational class rooms and appropriateness of. For all three above statements, expectations of private universities' students are higher; this may be attributed to the fact that these students pay high tuition fees for their studies and thus, have much stronger expectations for buildings, facilities and infrastructure.

Prioritisation of quality efforts

Given the findings of the independent sample T-Test above and the emerging differences in the expectations for a "quality" university between private and public universities, different priorities can be set by the management of the two groups of institutions, as explained below.

Private universities should focus their efforts on developing student knowledge through high-level teaching, providing students with aesthetically pleasing buildings and enough facilities, inspirational classrooms and appropriate labs. On the other hand, public universities can increase their demand and popularity by employing academic staff that produces significant research work, taking corrective action in case problems in teaching emerge, equipping the library with up-to-date books, journals, periodicals and databases as well as offering students access to printers and university computers/labs even over the weekend.

The above findings are quite significant for Universities' Higher Management as it provides them with information which can be used for addressing matters which can lead to improvements in quality, as perceived by students, and in turn in improving student satisfaction, student retention and even student recruitment.

Reflection and Conclusions

A "quality" university was defined by students, who are one of the key stakeholders of Higher Education Institutions, by reference to specific quality characteristics, which were identified by them. These characteristics indicate what students expect from a 'quality' university and thus, it is valuable information for university managers. Students of both private and public universities assigned high importance to all quality determinants investigated, expressing thus high student expectations from a "quality" university. The importance rankings of those characteristics were not affected by demographic variables.

Quality characteristics identified and ranked, may be used by university Higher Management as guidelines for resource allocation, as well as for the development of policies and practices that will lead to quality improvements. Universities need to address the importance assigned to the student-defined determinants of a "quality" university and attempt to manage them. The reason for this is that firstly, a university cannot achieve excellence in all dimensions, due to limited resources and secondly, unrealistic expectations will always result in dissatisfaction and perceptions of low quality. This denotes that there is a need for universities to manage student expectations, make effective prioritisation decisions and focus on quality determinants regarded by students as critical.

Furthermore, the quality characteristics identified and their importance, are in accordance with the findings of other similar studies found in the literature (Clemes et al., 2001; Lagrossen et al., 2004; Douglas et al., 2006). For example, a study conducted by Joseph and Joseph (1997), identified issues such as programmes and courses of study and physical facilities as significant quality criteria. Similarly, a study carried out by Clemes et al. (2001), highlights campus facilities and issues related to teaching and learning process as the most important

quality criteria. More recently, a study by Lagrossen et al. (2004) acknowledged matters such as campus facilities, teaching practices, computer and library facilities and programmes of study as the most important determinants of quality. Finally, a study by Douglas et al. (2006) identified teaching and learning, teaching and learning support facilities and services as the most important characteristics of quality. The findings of this study are thus in line with the findings of the literature on quality in higher education and are therefore supported and validated by studies such as the above-mentioned ones. This suggests that despite the unique environment of the highly regulated private higher education sector in Cyprus, the views, opinions and expectations of Cypriot students of either public or private universities with respect to a 'quality' university are similar to those of international students.

Previous studies (Douglas et al., 2006, Petruzzellis et al., 2006) suggest that further research is required on the subject of quality in higher education. The contribution of this study is that the findings provide additional support to other similar studies. Firstly, the study attempts to overcome some of the limitations of previous studies, such as restriction of the survey to students enrolled in one School only, or even to first year students. Secondly, the results have revealed that Cypriot students behave in a very similar way to their counterparts in other countries and this might be of significant interest to higher education institutions in other countries, especially private ones. Thirdly, the present study indicates the main decision making areas on which a HEI should focus in order to improve service quality.

The main limitation of this research is that the sample size could have been bigger to increase the study's reliability.

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