

# MARKETING HIGHER EDUCATION: STUDENTS' SERVICE EXPECTATIONS

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## RESUMEN

El entorno cada vez más competitivo de los días de hoy, ha provocado una creciente y dramática competición entre Universidades, con vista a reclutar y mantener alumnos, llevando a la necesidad de la oferta de un servicio de enseñanza de gran calidad. Los investigadores que analizan la calidad del servicio de enseñanza y la satisfacción de los alumnos, miden esta calidad por la diferencia entre las expectativas del consumidor (alumnos) con la percepción del servicio recibido.

Este estudio ha sido realizado para obtener datos para analizar las expectativas de los alumnos al entrar en la Universidad, bien como las fuentes de información que tuvieran influencia en las expectativas. Entonces estas expectativas son comparadas con las percepciones del servicio recibido por los estudiantes al final del primero año de estudios. Esta análisis ha permitido encontrar una discrepancia entre el servicio percibido y el servicio esperado en todas las variables utilizadas.

Una análisis factorial ha revelado que las expectativas del servicio son construidas en torno a las dimensiones de la aprendizaje y la futura carrera, la reputación de la Universidad y con los recursos humanos no directamente relacionados con la enseñanza.

**PALABRAS CLAVE:** Expectativas del servicio, calidad del servicio, marketing de Universidades

## ABSTRACT

Facing a growing competitive environment, higher education institutions have increased dramatically the competition for recruiting and retaining students providing a high quality service as a solution to compete. Frequently, researchers who have studied the service quality and client satisfaction have measured it by comparing consumers' expectations with their perception of the provided service.

This study was undertaken to provide data for analysing students' expectations when they enter University, as well as to know which influences origin those expectations at the beginning of undergraduate studies. Then these expectations were compared with student's service perceptions after one year of study. An analysis between expected service and service received is made and the results shown that the gap between those, is great in aspects mainly directly related to educational service.

A factorial analysis shows that service expectations are mainly formed around the dimensions related to aspects of learning and career, reputation of the University and how the support services are delivered by staff.

**KEY WORDS:** Service expectations, service quality, higher education, marketing

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## 1. INTRODUCTION

The higher education sector underwent major changes over the last years, namely a decrease of budgets (Santos, 1995), a decrease in applicant students (DGES, 2001) and the growing number of institutions in the sector (Santos, 1995). Facing these changes, higher education institutions are presently confronted with a more competitive and challenging framework, which requires an effective answer in order to attract and keep students.

To know students' expectations, could be one of the ways that higher education Institutions have, to face this highly competitive new environment. If those Institutions have a correct knowing about the characteristics and thinking of their target-market, or in other way, have an exactly idea about service expectations, it is possible to develop better strategies to satisfy and retain students.

The retention of students is part of the product in the 4P's of marketing and links into both institutional image and student satisfaction. Keeping enrolled students is just as important as attracting and enrolling them, as Kotler and Fox (1995) noted. They indicated that students are not a constantly captive audience since each student renews his or her enrolment decision every year. The busy or dissatisfied student may cut back on the number of courses or drop completely.

To Henning-Thurau, Langer and Hansen (2001), higher education institutions could benefit very much, if they make an establishment of long-term relationship with his students. For those researchers, a long term relationship with students could develop a competitive advantage to the institution, mainly across a positive word of mouth to the actual, future and potential students, well as a continuing and collaborative relation with the institution after the finish of the graduate studies, contributing especially for the placement in the labour market.

On the contrary students dissatisfaction, could have bad consequences, both for the University and for the students, namely the, school failure (Wiese, 1994; Walther, 2000), the drop out and transference (Chadwick and Ward, 1987; Dolinsky, 1994; Wiese, 1994; Thomas, Adans and Birchenough, 1996; Astin, 2001) and a negative word of mouth, with loss for future applications (Chadwick and Ward, 1987; Dolinsky, 1994; Ugolini, 1999; Walther, 2000).

## 2. THE ROLE OF EXPECTATIONS

Expectations have been used in both, studies about service quality and studies about client satisfaction. The same has been happen in higher education or in services similar to higher education. Eskildsen et al (1999) suggest that expectations influence satisfaction. However, expectations are also studied in service quality, this last being related with satisfaction.

Thinking about that the expectations can influence directly or indirectly, student's satisfaction, thus becoming so important its study. However, its definition isn't unique. Many researchers have defined expectations differently. Miller (1977), for instance, proposed four types of expectations that can be used by consumers: ideal, expected, minimum tolerable and deserved. He referred to ideal expectations as what the consumer wishes the performance of the product or service to be; expected expectations as what the consumer thinks that he or she will get; minimum tolerable expectations as what the consumer feels that the performance of the product or service must be; and deserved expectations as what the consumer feels that the performance of the product or service should be.

According to Ngobo (1997), perceived quality of a service is analysed trough the use of normative expectations, this is, by comparing what the client receive with what the client thinks that he should receive, whereas satisfaction is analysed by comparing what the client receive with what the client anticipate, this is, what the client think that he will receive. Thus either in service quality studies, either in satisfaction studies, expectations have a fundamental role, because they serve as a comparison standard in face of what is received.

In addition, it is also extremely important to analyse the origin of those expectations. However, according to Zeithaml *et al* (1993), the antecedents of expectations are a seldom-explored area. Among the few studies on this subject, stand out those of Cadotte *et al* (1987) who implied that experience was the source of

expectation, and Oliver's (1980) who suggested as antecedents of expectations, the product itself, the consumers' context and his or her characteristics. In turn, Zeithaml *et al* (1993) proposed four likely antecedents (explicit promises about the service, implicit promises about the service, word-of-mouth and previous experience), the importance of which depends on the used pattern of expectations.

Therefore, this study is aimed at two main goals: (1) to know the expectations of University students, as well as the sources they originated from, in the beginning of their higher education studies; (2) to monitor the evolution of opinion throughout a year of permanence at the University, trying to understand which aspects cause discrepancies in relation to initial expectations. Knowing these discrepancies it might imply alterations in order to improve the projected image or the reality behind that image. The new reality retained by prospective students might be more favourable if the experience lived at the University by the students is closer to the transmitted image, which may allow a greater connection to the University and the permanence of students.

### **3. RESEARCH METHODOLOGY**

Since this study is based in primary data, directly obtained from the students who enter University for the first time, and because this is a longitudinal research, the data collection was divided into two phases. The first phase coincided with the date of the first enrolment at the University (2001). The second phase took place in the moment that students renewed his enrolment (2002).

Based on the evidence obtained in bibliography and because it was necessary to obtain directly from the students their opinion on expectations about the University and the sources they originated from, a questionnaire was developed addressing the issues deemed relevant for this study. The survey was constructed around four categories of variables: 1) generic information (six items); 2) the influences for choosing the University (7 items graded on a scale from 1 – less important – to 7 – very important); 3) the institutional environment (9 items graded on a scale from 1 – less important – to 7 – very important) 4) the University (20 items graduated on a scale from 1 – less important - to 7 – very important).

The first survey was endorsed when the new students made their first inscription at the University and was conducted by a graduate student. Respondents were instructed to return the anonymous questionnaire to a box placed in the University registry where they make their official inscription. The number of questionnaires returned was in number of 955 that represents the total population of first year students.

The second phase of data collection occurred when students renewed his enrolment in the second year of their respective courses (2002/2003). A new survey was conducted contained the same groups of questions of the first survey, and a new group of open questions were included, where students could reflect in a free way his opinion about positive and negative aspects of the University.

The population of students in the second year had changed in number, because some of them doesn't approve and stay in the first year, others had gone to other institution and other had abandoned the course. So, in the second year the number of questionnaires returned was 664.

Each questionnaire was reviewed, coded and prepared for computer analysis. Data from the survey were analysed using SPSS 10.0 software. The data of the first and the second year survey were analysed through a descriptive analysis. After the descriptive analysis, making a comparison between the value of the mean of each variable, used in the survey for the two years, it was possible to identify the differences between the service expectations, when the students arrived at the University, and the perceived service after one-year of permanence in the University.

In order to identify the main dimensions that form student expectations, the data of the first year was submitted to a factorial analysis, through the method of main components to extract the factors.

### **4. RESULTS AND DISCUSSION**

In order to understand better the issue of service quality in higher education, this study analysed student's expectations about the educational service when they enter University and the students perceived service after one year of permanence in the University.

The survey conducted in the first year (2001/2002) result in a total of 955 useable questionnaires. The salient socio-demographic data included the following: over 88% were between the ages of 17 and 20 years old; 54% were male and 56% were female; 68% come from other regions of Portugal; more than 50% had choose the University in first option.

The survey conducted in the second year (2002/2003) result in a total of 664 useable questionnaires. The salient socio-demographic data included the following: over 74% were between the age of 18-20 years old; 42% were male and 58% were female.

#### 4.1. INSTITUTIONAL ENVIRONMENT

As we can see in Table1, there are a number of areas in which the University of Beira Interior students' actual experience differs from their incoming expectations in relation to the institutional environment. By the analysis of the results, we can see that only one variable related to the institutional environment: "the existence of cultural activities", have a negative difference. While all of the others variables exceed students' expectations.

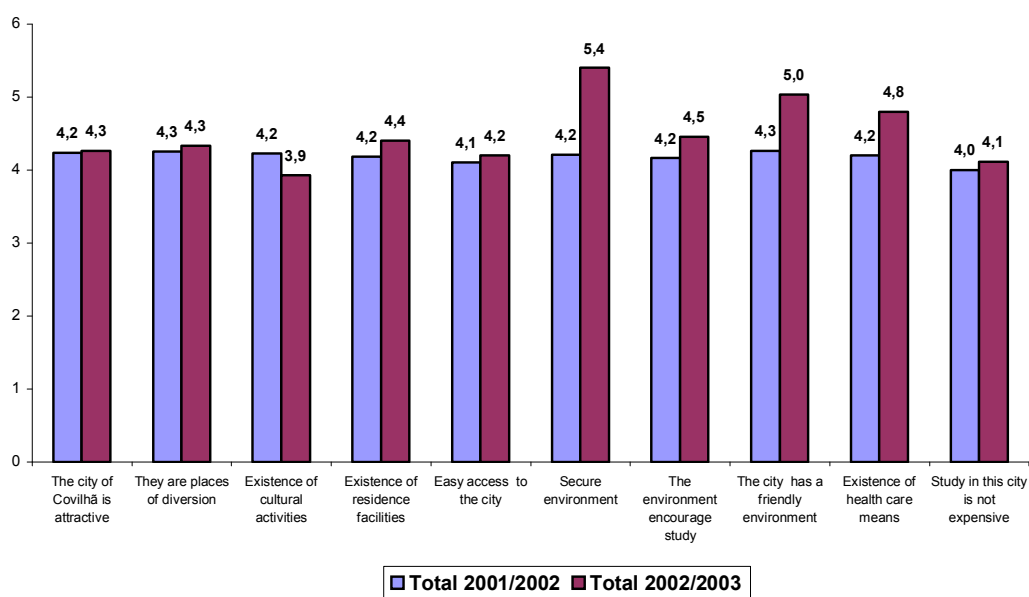
These results appear to be very surprising, because the city of Covilhã is very peripheral in Portugal, factor usually considered negative in students' attraction and retention.

**Table 1 – Institutional Environment – Expected versus Perceived**

Variables	Mean (2001/2002) (A)	Mean (2002/2003) (B)	Difference (B - A)
1. The city of Covilhã is attractive	4,24	4,26	+ 0,02
2. They are places of diversion	4,25	4,33	+ 0,08
3. Existence of cultural activities	4,22	3,93	- 0,29
4. Existence of accommodation facilities	4,19	4,40	+ 0,21
5. Easy access to the city	4,11	4,20	+ 0,09
6. Safety environment	4,21	5,40	+ 0,19
7. The environment encourage study	4,16	4,45	+ 0,29
8. The city has a friendly environment	4,26	5,04	+ 0,78
9. Existence of health care means	4,20	4,80	+ 0,60
10. To Study in this city is not expensive	4,00	4,11	+ 0,11
<b>Total of Answers</b>	<b>955</b>	<b>644</b>	

These results can be graphically observed in Figure 1.

**Figura 1 – Institutional environment – Expected versus Perceived**



## 4.2. THE UNIVERSITY EXPECTED AND PERCEIVED SERVICE

In table 2, are reflected, in a global way, the mean ratings for variables related with the instruction and noninstructional service provided by the University. Regarding bibliography, we assume that the results for the first incoming in the University (2001) are the expected service, and the results for the second year (2002) are the perceived service.

Based in table 2, it is possible to say that students felt that University of Beira Interior fails to meet their expectations in all aspects being studied. The negative differences are bigger in variables related with the instruction (relationship with teachers) and in variables related with future placement in market labour.

This is in agreement with what is suggested by Shank, Walker and Hayes (1995), that students form expectations, mainly about faculty knowledge, not only, in scientific terms, but also, faculty knowledge about job opportunities and extra curricular activities, as well as about the relationships with faculty and about physical facilities.

However, Eskildesen et al (1999) have stated that when students have high expectations about the education they will receive, expectations will produce a negative effect on student satisfaction. This is in agreement with the gaps found.

**Table 2 – The University – Expected versus Perceived**

Variables	Mean (2001/2002) (A)	Mean (2002/2003) (B)	Difference (B - A)
- Physical facilities are modern	5,19	4,87	-0,32
- Physical facilities are accessible	5,08	4,22	-0,86
- University reputation is good	5,10	4,69	-0,41
- Courses content is up-to-date	5,28	4,66	-0,62
- Graduate students receive several job proposals	5,01	3,86	<b>-1,15</b>
- University help graduate students to find first job	5,09	4,01	<b>-1,08</b>
- Students have extracurricular activities	4,91	4,70	-0,21
- High academic excellence emphasis	4,87	4,63	-0,24
- Teachers have good scientific capacities	5,01	4,64	-0,37
- Teachers are known for their researches/publications	4,77	4,13	-0,64
- Teachers give classes with clearness and precision	5,09	4,02	<b>-1,07</b>
- Good relationships between teachers and students	4,93	3,98	-0,95
- Teachers help students to solve their problems	5,04	4,21	-0,83
- Students have easy access to teachers	4,87	4,13	-0,74
- Library resources are adequate	5,09	4,88	-0,21
- Library has fast and actualised ways of search	5,11	4,92	-0,19
- Computer facilities are accessible	5,20	4,89	-0,31
- Staff personal are helpful	4,88	4,73	-0,15
- Staff personal know very well the rules and norms	4,91	4,53	-0,38
- Staff personal are kind	4,95	4,70	-0,25
<b>Total of Answers</b>	<b>955</b>	<b>664</b>	

Considering that could exist differences among students of different scientific areas, we have done the analysis dividing the students for their areas. Table 3 reflects the results divided by the different scientific areas. Table 4 present the differences between the perceived services and the expected services for students in different scientific areas. Looking at the results, it is possible to say that exists different ratings among students. Exact, Engineering, Social and Economics, Humanities and Arts students, present the main negative differences in areas related with the educational service. The better results occur in areas related directly with the support services such as: Library, physical facilities, computer facilities and staff personal.

Medicine students, present the best results with positive differences in fifteen variables. This appear to be a surprise, because the course is new in the University (two years) and the University hasn't yet graduate students in this area. But one thing different in this course is the method of teaching and the classes. The instruction is based in student's self learning. Each class is divided in groups of 15 students with the support of a tutor. The faculty of health sciences make available a computer for each student, with links to Internet and Intranet for self-learning. Also the student evaluation is done every two weeks. This new method could be the reason for the positive results in the perceived service.

**Table 3 – The University – Expected versus Perceived (by Scientific Areas)**

Variables	Exact Sciences		Engineering Sciences		Social and Economic Sciences		Humanities and Arts		Medicine	
	Mean (2001/2002) (A)	Mean (2002/2003) (B)	Mean (2001/2002) (A)	Mean (2001/2002) (A)	Mean (2001/2002) (A)	Mean (2002/2003) (B)	Mean (2001/2002) (A)	Mean (2002/2003) (B)	Mean (2001/2002) (A)	Mean (2002/2003) (B)
- Physical facilities are modern	5,11	4,69	5,27	5,01	5,01	4,83	5,39	4,70	5,25	5,71
- Physical facilities are accessible	5,00	4,45	5,06	5,03	5,03	3,67	5,21	4,11	5,09	5,11
- University reputation is good	5,02	4,52	4,99	5,06	5,06	4,73	5,36	4,85	5,11	4,53
- Courses content is up-to-date	5,09	4,48	5,23	5,23	5,23	4,74	5,52	4,33	5,45	6,00
- Graduate students receive several job proposals	4,96	3,64	5,15	4,88	4,88	3,87	4,99	3,54	5,17	4,44
- University help graduate students to find first job	4,84	4,01	5,19	5,08	5,08	3,94	5,11	3,77	5,26	4,30
- Students have extracurricular activities	4,73	4,56	4,89	5,10	5,10	4,73	4,86	4,73	4,78	4,84
- High academic excellence emphasis	4,72	4,72	4,85	4,88	4,88	4,66	4,99	4,67	4,93	4,93
- Teachers have good scientific capacities	4,99	4,41	4,97	4,92	4,92	4,75	5,09	4,65	5,39	5,40
- Teachers are known for their researches/publications	4,62	3,84	4,79	4,77	4,77	4,18	4,80	4,19	4,98	4,64
- Teachers give classes with clearness and precision	4,97	3,58	5,00	5,09	5,09	4,26	5,21	3,97	5,33	4,80
- Good relationships between teachers and students	4,84	3,16	4,86	4,97	4,97	4,32	4,99	3,80	5,07	5,73
- Teachers help students to solve their problems	4,99	3,62	5,00	4,98	4,98	4,44	5,14	4,13	5,28	5,42
- Students have easy access to teachers	4,63	3,44	4,87	4,87	4,87	4,46	5,03	4,08	4,94	5,33
- Library resources are adequate	4,95	4,97	5,00	5,05	5,05	4,72	5,31	4,66	5,24	5,60
- Library has fast and actualised ways of search	4,94	5,03	5,03	5,13	5,13	4,83	5,25	4,62	5,33	5,58
- Computer facilities are accessible	5,16	5,08	5,19	5,07	5,07	4,58	5,32	4,71	5,50	5,76
- Staff personal are helpful	4,85	4,61	4,87	4,85	4,85	4,79	4,87	4,65	5,19	5,42
- Staff personal know very well the rules and norms	4,94	4,39	4,91	4,92	4,92	4,63	4,83	4,43	5,06	5,18
- Staff personal are kind	4,99	4,65	4,85	4,94	4,94	4,77	5,00	4,75	5,19	5,30
<b>Total of Answers</b>	<b>142</b>	<b>88</b>	<b>256</b>	<b>282</b>	<b>282</b>	<b>208</b>	<b>209</b>	<b>124</b>	<b>61</b>	<b>45</b>

**Table 4 - The University – Expected versus Perceived (Difference by Scientific Areas)**

Variables	Exact Sciences	Engineering Sciences	Social and Economic Sciences	Humanities and Arts	Medicine
	Difference (B - A)	Difference (B - A)	Difference (B - A)	Difference (B - A)	Difference (B - A)
- Physical facilities are modern	-0,43	-0,38	-0,18	-0,68	0,46
- Physical facilities are accessible	-0,55	-0,49	<b>-1,36</b>	<b>-1,10</b>	0,02
- University reputation is good	-0,50	-0,31	-0,33	-0,51	<b>-0,58</b>
- Courses content is up-to-date	-0,61	-0,67	-0,49	<b>-1,19</b>	0,55
- Graduate students receive several job proposals	<b>-1,32</b>	<b>-1,14</b>	<b>-1,02</b>	<b>-1,45</b>	<b>-0,73</b>
- University help graduate students to find first job	-0,83	<b>-1,02</b>	<b>-1,14</b>	<b>-1,34</b>	<b>-0,96</b>
- Students have extracurricular activities	-0,17	-0,21	-0,37	-0,13	0,06
- High academic excellence emphasis	0,00	-0,37	-0,22	-0,33	0,01
- Teachers have good scientific capacities	-0,59	-0,54	-0,17	-0,43	0,01
- Teachers are known for their researches/publications	-0,78	-0,72	-0,60	-0,60	<b>-0,34</b>
- Teachers give classes with clearness and precision	<b>-1,39</b>	<b>-1,20</b>	-0,83	<b>-1,23</b>	<b>-0,53</b>
- Good relationships between teachers and students	<b>-1,67</b>	<b>-1,19</b>	-0,65	<b>-1,19</b>	0,66
- Teachers help students to solve their problems	<b>-1,38</b>	-0,99	-0,54	<b>-1,02</b>	0,14
- Students have easy access to teachers	<b>-1,19</b>	<b>-1,02</b>	-0,41	-0,95	0,39
- Library resources are adequate	0,01	-0,04	-0,33	-0,65	0,36
- Library has fast and actualised ways of search	0,09	-0,04	-0,30	-0,63	0,24
- Computer facilities are accessible	-0,08	-0,15	-0,49	-0,61	0,26
- Staff personal are helpful	-0,23	-0,27	-0,06	-0,22	0,24
- Staff personal know very well the rules and norms	-0,55	-0,51	-0,29	-0,40	0,12
- Staff personal are kind	-0,35	-0,38	-0,17	-0,25	0,11

### 4.3. INFORMATION SOURCES

In order to deepen the study of high education student's expectations about the University, we intended to identify the information sources that potential students had accessed to choose the University and to build their service expectations.

As we can see in Table 5, students had attributed more importance to personal sources (Friends/family, actual students of the University and teachers of undergraduate level) and less importance to the commercial sources (Publicity/promotion/ leaflets/exhibitions).

These results are in agreement with what was found by Bakewel and Gibson-Sweet (1997) and Alves (1998), who stated that personal sources were used by potential students.

**Table 5 – Sources Used to Form Expectations**

Sources of Information	Mean	Standard Deviation
- Friends/Family	4,51	1,96
- Actual students of University	3,86	2,09
- Teachers of undergraduate level	3,74	1,92
- Publicity/Promotion	3,69	1,81
- Governmental office	3,60	2,07
- Graduate students of University	2,96	1,93
- Exhibitions	3,29	1,75

As a consequence of these findings, we conclude that University actual students can be a major vehicle for transmitting University image, so it is very much important to satisfy them through the delivering of a high quality service. In addition, the parents and relatives of may be a source of influence for the prospective students. So it is essential that the universities convey to former an image of quality in terms of teaching and preparation of their students for the future.

#### **4.4. THE MAIN DIMENSIONS OF STUDENTS EXPECTATIONS**

In order to understand better, what aspects of the educational service provided by the University, have a significant contribute in expectations formation, the data of the first survey was submitted to a factorial analysis. The factorial analysis allows a reducing of the number of variables into common factors, corresponding to the main dimensions of students' expectations.

The results of the factorial analysis after a varimax rotation have grouped the variables into three factors. The eigenvalue of each factor is more than one, and in overall they explain 66,2% of the total variance, which is considered satisfactory in studies related to social sciences (Hair et al 1996).

The indicators of validity are a KMO of 95%, indicating that the results of the analysis may be considered very good (Malhotra, 1993) and a Bartlett's test of sphericity significant to a level of significance of 0.000, showing that there is a high level of correlation between variables, which makes it adequate to apply the factorial analysis (Hair et al, 1998). The obtained results are present in the table 6.

Chronbach's Alpha coefficient was calculated in order to measure the reliability of the sets of variables. Given that the factors show an alpha of 95%, 85% and 95%, respectively, the internal coherence levels are considered satisfactory (Hair et al, 1998).

Regarding the composition of each factor it is possible to say that:

- The variables that are correlated with factor 1 are those related with the teachers and their methods of giving classes; with the future jobs; with the facilities of the library and computers. We call this factor as – learning and career;
- The variables that are correlated with factor 2 are those that represented reputation of the University; the localisation; the buildings and additional activities. We call this factor as overall reputation and facilities;
- The variables that are correlated with factor 3 are those that reflects: the way how the support services are delivered to the students. We call this factor as availability and sympathy of the staff.

So considering variables that appear correlated which of the factors it is possible to state that the higher education students expectations are grouped into three dimensions: Learning and career, overall reputation of the University and the available and sympathy of the staff.

**Table 6 – Composition of Each of the Factors Obtained by Factorial Analysis**

<b>Variables</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Graduate students receive several job proposals	0.61		
University help graduate students to find first job	0.65		
High academic excellence emphasis	0.60		
Teachers have good scientific capacities	0.74		
Teachers are known for their researches/publications	0.63		
Teachers give classes with clearness and precision	0.78		
Good relationship between teachers and students	0.79		
Teachers help students to solve their problems	0.79		
Students have easy access to teachers	0.70		
Library resources are adequate	0.70		
Library has fast and actualised ways of search	0.70		
Computer facilities are accessible	0.69		
Physical facilities are modern		0.78	
Physical facilities are accessible		0.81	
University reputation is good		0.75	
Courses content is up-to-date		0.66	
Students have extracurricular activities		0.41	
Staff personal are helpful			0.83
Staff personal know very well the rules and norms			0.78
Staff personal are kind			0.78
% of explained Variance	53.1	7.2	5.9

## 5. Conclusions

The competition for recruiting and retaining students in Portugal has increased dramatically in last few years. Contrary to other countries very little published research is available on the topic in Portugal. Nevertheless there is overwhelming evidence that consequences of unhappy students who drop out, multiplied by repeated instances, will most certainly affect the image of the University and in consequence the students services expectations.

Having this in mind, this research intends to know in which aspects the educational services provided by the University correspond or not to students' expectations. So a longitudinal study was developed involving students in the first incoming at the University (expected service), and the some group of students after one year of permanence at the University (perceived service).

The results had shown that exist a gap between the perceived and expected service. The gap related with institutional environment is surprisingly very positive. On the contrary, the gap related with the educational services is in general negative. However when the analysis was made considering the different scientific areas, we find that in the Health Faculty the gap is positive in almost the variables studied. We think that this result is due, mainly, to the adoption of a new educational method centered in student' self-learning and a different teaching method.

Also the research allowed knowing that the main information sources used by students, to form their expectations, are based in personal sources as friend/family, current students of the University and teachers of undergraduate schools. The commercial sources have less influence.

The results of a factorial analysis have shown that the services expectations are formed around three main dimensions:

- Dimension related to learning and career
- Dimension related with overall reputation and facilities of the University
- Dimension related with the availability and sympathy of the staff

## BIBLIOGRAPHY

Alves, H. (1998) – O Marketing das Instituições de Ensino Superior: o Caso da Universidade da Beira Interior, Dissertação de Mestrado apresentada na Universidade da Beira Interior, Covilhã.

Astin, A. (2001) – What matters in college? Four critical years revisited, Jossey-Bass, San Francisco.

Backwell, C.; Gibson-Sweet, M. (1997) – “Marketing in a turbulent environment: are the new universities in danger of being “stuck in the middle”?”, Proceedings of the MEG 31st Annual Conference: Marketing Without Borders.

Cadotte, E.; Woodruff, R.; Jenkins, R. (1987) – “Expectations and norms in models of consumer satisfaction”, Journal of Marketing Research, (August), Vol.24, pp.305-14.

Chadwick, K.; Ward, J. (1987) – “Determinants of consumer satisfaction with education: implications for college and university administrators”, College and University, 62 (Spring), pp. 236-246.

DGES (2001) – Dados da Direcção Geral do Ensino Superior, Ministério da Educação.

Dolisky, A. (1994) – “A consumer complaint framework with resulting strategies: an application to higher education”, Journal of Services Marketing, Vol. 8, Nº 3, pp. 27-39.

Eskildsen, J.; Martensen, A.; Gronholdt, L.; Kristensen, K. (1999) – “Benchmarking student satisfaction in higher education based on the ECSI methodology”, Proceedings of the TQM for higher education institutions conference: Higher Education Institutions and the Issue of Total Quality, Verona, (30-31 August), pp. 385-402.

Hair, J.; Anderson, R.; Tatham, R.; Black, W. (1998) – Multivariate data analysis, (5th ed.), Prentice-Hall, New Jersey.

Henning-Thurau, T.; Langer, M.; Hansen, U. (2001) – “Modeling and managing student loyalty: an approach based on the concept of relationship quality”, Journal of Service Research, Vol. 3, Nº 4, pp. 331-344.

Kotler, P.; Fox, K. (1995) – Strategic Marketing for Educational Institutions, (2nd ed.), New Jersey, Prentice Hall.

Malhotra, N. (1993) – Marketing research: an applied orientation, Prentice-Hall International, Inc., Englewood Cliffs.

Miller, J. (1977) – “Studying satisfaction, modifying models and eliciting expectations, posing problems, and making meaningful measurements” in Conceptualization and measurement of consumer satisfaction and dissatisfaction, Keith Hunt, ed., Cambridge, Ma: Marketing Science Institute, (May), pp. 72-91.

Ngobo, P. (1997) – “Qualité perçue et satisfaction des consommateurs: un état des recherches”, Revue Française du Marketing, Nº 163, pp. 67-79.

Oliver, R. (1980) – “A cognitive model of the antecedents and consequences of satisfaction decisions”, Journal of Marketing Research, (November), Vol. 17, pp.460-469.

Patterson, P. (2000) – “A contingency approach to modelling satisfaction with management consulting services”, Journal of Service Research, (November), Vol.3, Nº 2, pp.138-153.

Santos, S. (1995) – “Tendências do ensino universitário em Portugal”, Seminário Internacional Os Estudos Superiores em Macau, (January), Macau.

Shank, M.; Walker, M.; Hayes, T. (1995) – “Understanding professional service expectations: do we know what our students expect in a quality education?”, Journal of Professional Services Marketing, Vol. 13 (1), pp. 71-89.

Thomas, M.; Adams, S.; Birchenough, A. (1996) – “Student withdrawal from higher education”, *Educational Management and Administration*, Vol.24, N° 2, pp.207-221.

Ugolini, M. (1999) – “University dropout: a problem and an opportunity”, *Proceedings of the TQM for higher education institutions conference: Higher Education Institutions and the Issue of Total Quality*, Verona, (30-31 August), pp417-436.

Walther, E. (2000) – *The relationships between student satisfaction and student retention in higher education*, Dissertation submitted to the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Wiese, M. (1994) – “College choice cognitive dissonance: managing student/ institution fit”, *Journal of Marketing for Higher Education*, Vol.5, N° 1, pp.35-47.

Zeithaml, V.; Berry, L.; Parasuraman, A. (1993) – “The nature and determinants of customer expectations of service”, *Journal of the Academy of Marketing Science*, Vol. 21, N° 1, pp. 1-12.