

## Chapter 2

# Heterogeneity Analysis in the University Context: A Proposal Based on Service Quality Perceptions

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### EXECUTIVE SUMMARY

*The transformations being experienced by Spanish universities faced with the challenge of adapting to a changing environment and increasingly discerning and segmented demand highlights the importance of knowing the needs and wishes of students as main customers. The present study attempts an in-depth examination of the viability of student perceptions of service quality as a segmentation criterion. We go deeply into the dimensionality of university service quality and we analyze how such dimensions can be used to segment effectively the collective of students' degrees using latent methodology. The results based on information gathered from 287 questionnaires permit analysis of existing heterogeneity and a set of recommendations to be made for strategic management in the area of university services.*

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## **ORGANIZATIONAL BACKGROUND**

### **Spanish University**

Global social, economic and technological change since the late 20th Century such as globalisation of the economy, social and business fabric trends towards increased competition and the search for organisational excellence (Cheng, 2000), are affecting education and more specifically, university education. The internationalisation of university education and the growth in educational supply in recent years are some of the limitations encountered by institutions as they attempt to maintain their market share in the face of competition. Spanish universities are also facing the same challenges and have undergone substantial change recently since the construction of the European Higher Education Area which was promoted with the Bologna Declaration signed on 19 June 1999 by 29 European Ministers with competences in Higher Education. The Bologna process aims to increase compatibility and comparability of Higher Education systems while respecting their diversity and its introduction is planned for 2010. Current changes are mainly based on the following pillars: the elimination of obstacles to the movement of students, university teachers and administrative staff, recognition of higher education qualifications, the start up of a system of qualifications organised in three cycles, and European cooperation.

According to the Spanish Ministry of Science and Innovation, there are 77 universities in Spain - 47 of them are state universities, 23 are private universities, 5 are distance learning universities and 2 are specialized colleges. Out of the 23 private universities, 74% of them were created in the last fifteen years. Over a million and half students enrolled in universities in the academic year 2008-09 (1,500,069 students in first and second cycles: 89.2% enrolled in state universities and 10.8% in private universities).

In Spain there are 32.81 university students per 1,000 inhabitants. This ranking is higher than that in Germany (23.75), France (26.01) or UK (28.55). Despite these data, investment from GDP of the Spanish State in higher education was 0.9% in 2006, lower than the EU average (1.30%), Sweden (1.9%), and Norway (2.3). Spain also devotes only 0.08% to scholarships and grants to university students, while the OECD average is 0.25.

According to the Spanish Secretariat of State for Universities, the most significant weaknesses of Spanish universities system are lack of identity, academic failure, low academic standards, poor job placement, inadequate mobility, and above all, the resistance to change for adapting to the European Higher Education Area. These weaknesses would mean a less competitive and lower quality university education levels. Thus, the necessary investment in higher education and its efficient management are the keys for the success of Spanish universities integration into the European Credit Transfer System (ECTS) Programme.

The basic elements of quality in university education can be grouped into human factors (attitudes, teaching design, operation and competence of faculty), technical factors (infrastructure and equipment), and management factors (teaching programmes, organizing teaching quality assessment, information transparency and participation of everybody involved). Traditionally, the indicators used to measure quality in universities have been internal ratios to assess the demand-oriented students, human resources, physical resources, curriculum and academic achievements. However, with the growth of new information technologies and communication and the development of Educational Psychology, there is a need to better organize the higher education system that would include the specificities of each institution, faculty and students from a more qualitative perspective.

In view of all this, Spanish universities are increasingly aware of the need to maintain and/or improve the quality of their services. However, the most recent literature on service quality in

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