Modeling Perceived Quality of Graduate Students in Higher Education. Possibilities and Advantages of a New Viewpoint: The Graduates.

Keywords:

Abstract:

This paper aims at the design and validation of a model of perceived quality and satisfaction of Higher Education (HE) graduate students, who are in a better position to give rise to more complete evaluations of the efficiency of the university because they can convey their experience both as students and as professionals. By exploring several discussion groups and their evaluation by experts, we arrived at the theoretical formulation of a measurement scale, containing 118 items grouped into 18 dimensions. Further, a preliminary field survey was carried out applying a lengthy questionnaire to a sample of graduate students. We did analyze the results by means of the exploratory factor analysis technique in order to get the empirical formulation of the scale, that eventually consisted of 25 items, grouped into 7 dimensions. This shorter scale was then applied to a probabilistic sample, so that we could arrive at a refined formulation of the scale.

Introduction: The satisfaction of the graduate student

The European Higher Education Area (EHEA), begun with the Declaration of Bologna by the end of the past century, and its precedents the Magna Charta Universitatum (Bologna 1988) as wellas the Sorbonne Joint Declaration, is waking a growing interest in the managerial perspective of higher education. The exchange of students and teachers, the people´s free movement across the European space and the globalization of the economy bring about the posibility of social attraction of a university center, and of projecting a positive image over that institution, which underlines the strategic relevancy for the management of that institution. The traditional measurements of the educational and research activitivities, such as the renowned rankings and accreditation processes (Carmen-Esparrell and Lopez 2009) prove to be insufficient to manage the social attraction of the institution. Concepts such as perceived quality and satisfaction of the students have emerged as useful key elements to explain the rise of favourable attitudes towards the University (Arambewela y Hall 2008; Helm 2007; Nesset y Helgesen 2009; Ciftcioglu 2011; Mustafa et al. 2012).

This presentation shows how we did develop a scale of quality and satisfaction of the graduate student, following the confirmation/disconfirmation of expectations model (Anderson 1973; Parasuraman et al. 1988) and the literature on satisfaction (Tsé y Wilton 1988; Fornell et al. 1996; Oliver 1997; Johnson et al. 2001). These models have been sucessfully applied to HE students (Vidaver-Cohen 2007; Helhesen y Nesset 2007; Arambewela y Hall 2008; Brown y Mazzarol 2008; Nesset y Helhesen 2009; Mustafa et al. 2012). However, the studies of

satisfaction of the graduate students are rather scanty around the world (Arambewela and Hall 2008) and we think that it is a question of a strategic group because it represents the most important prescriptor of the university activity. These people have a full experience of the functioning of the university and at the same time they are professionally integrated, thus being able to carry out a functional evaluation of the university. By the same token, they are in an ideal position to recommend or not their universities to the company, the family or friends.

Aims of the research project

The research project that supports this presentation attemps to develop and apply a scale of perceived quality and satisfaction with university services, from the standpoint of the HE students, two years after they have finished their graduate studies. The fieldwork was completed between January and June 2012. The strategy of research consisted of the following steps: (a) scientific review of the literature; (b) two discussion groups with graduate students, (c) evaluation of the scientific materials by experts, (d) preliminary survey (pilot study) with 250 cases in order to reduce the lengthy initial questionnaire, (e) application of the final survey instrument to a representative independent sample of 750 cases, to be able to validate the scale, and (f) refining and validating the final scale and testing the measurement model (convergence and discrimination) as well as the checking of its dimensional structure and nomologic validity.

**Theoretical constructs of satisfaction**

There are two basic theoretical constructs of the quality and satisfaction model, namely perceived quality and global satisfaction (Churchill and Surprenant 1982; Tsé and Wilton 1988; Bagozzi 1992; Oliver 1997; Fornell 1996; Johnson et al. 2001; Helhesen and Nesset 2007; Arambewela and Hall 2008; Brown and Mazzarol 2008; Nesset and Helhesen 2009; Mutafa et al. 2012; Carreras and González 2012). The measurement of the perceived quality is based on the models of "passive expectancies" (Oliver 1997) and the "expectancy-value model" (Ajzen y Fishbein 1980). We rely on the Hierarchical Multidimensional Scale (Dabholkar et al. 1996; Brady and Cronin 2001; Carreras-Romero and González-Rodríguez 2012). These expectancies are the direct antecessors of satisfaction (Churchill and Surprenant 1982; Tsé and Wilton 1988; Fornell et al. 1996). We have added to the classical university quality facets others such as facilities and equipment, teaching and research quality, and the assessment of the achieved professional abilities at the university (Helhesen and Nesset 2007; Brown and Mazzarol 2008; Nesset and Helhesen 2009; Mustafa et al. 2012).

Regarding to the satisfaction construct, researchers tend to distinguish between satisfaction with the encounter and generalized satisfaction with the university (Bitner y Hubbert 1994). We have chosen the global satisfaction with the university because it has shown a higher predictive power on loyalty (Fornell et al. 1996; Oliver 1997; Johnson et al. 2001; Lam et al. 2004; Cater and Zakbar 2008). We have picked up three items of satisfaction as global asessment of the university experience (Brown y Mazzarol 2009).

The proposed model

To build and test the model we have used SEM (Structural Equation Modeling) (Bollen 1989; Kline 1999) to (a) test the measurement model and its convergent validity and discrimination between the items associated to their dimensions (Baggozi and Yi, 1988; Anderson Gerbing 1988, Fornell y Larker 1981; Anderson Gerbing 1988); (b) test the dimensional structure of university perceived quality (as a second order factor) (Kline 1999); and (c) validate the full structural model by means of fit indexes (Hu Bentler 1999) and searching for the signification of the coefficients by means of nesting analysis.

Initial statement of the model:
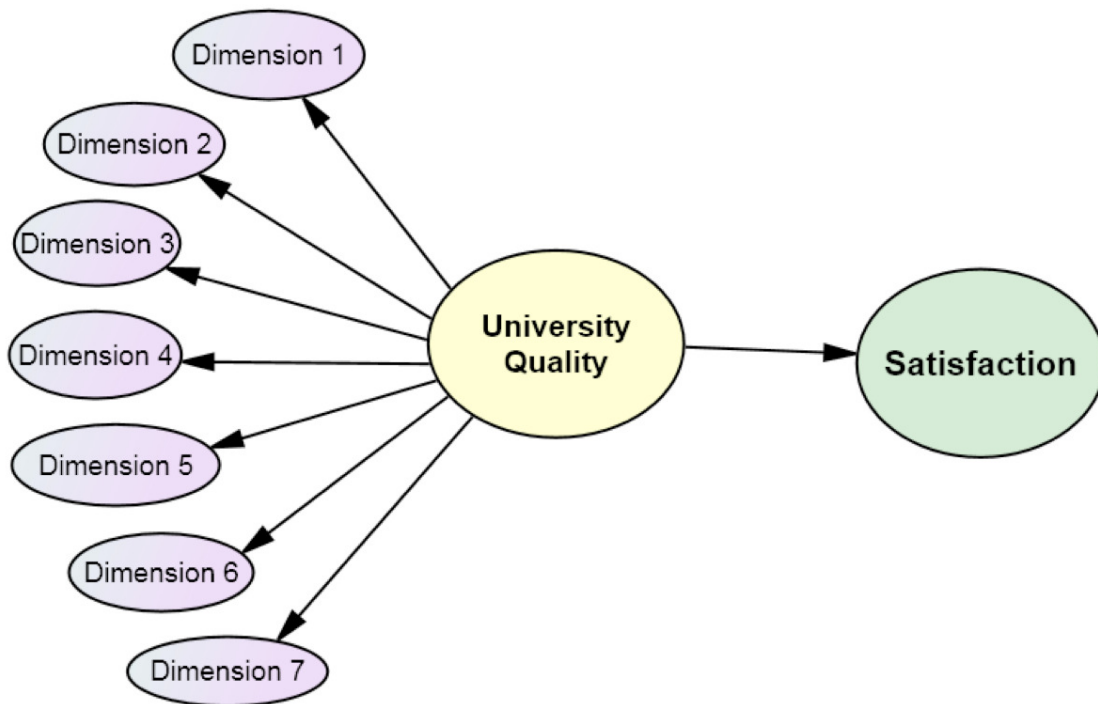
Main hypotheses

H1: Dimensions of university quality are separated entities in the collective mind of the graduate students (they show discriminant and convergent validity).
H2: The quality dimensions are positively correlated with satisfaction.
H3: There is a general, global idea of university quality and their components can be explained by a latent variable of higher order.
H4: The global perceived quality is the direct antecedent of satisfaction (R^2 significant and high).

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