Analysis of the Value Creation in Higher Institutions: A Relational Perspective

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Abstract. Despite the growing interest in value creation, a review of the relevant educational literature reveals that there is no generally accepted and empirically confirmed relational model of the student value creation process. This paper contributes in this way, analyzing several antecedents and consequences in the value creation process between graduates and their universities. We therefore study the effects of the quality of the student-professor interaction, trust, and university image on student perceived value. Moreover, we analyze the impact of perceived value on student satisfaction and loyalty. An empirical study was carried out in order to test the proposed theoretical model. The findings provide relevant academic and managerial implications for strategic decision-making at universities.

Keywords: perceived value; quality of the student-professor interaction; trust; image; satisfaction; loyalty; higher education.

JEL Code: M14.
REL Code: 4C.
1. Introduction

In a world where knowledge has become a key resource, governments have realised the importance of developing the intellectual capital of their citizens. In this context, the topic of value creation has become of great importance in the policies and practices of a lot of institutions in recent years (Sakthivel, Raju, 2006). Approaching higher education institutions as service providers to the very complex net of social agents to whom they must offer effective solutions and added value, determines the base for the application of the Relationship Marketing Theory. The concept of relationship marketing is at “the forefront of marketing practice and academic research” (Berry, 1995, p. 23, Verhoef, 2003). This is especially true in the field of services marketing (Henning-Thurau et al., 2001). Higher education institutions can be considered service organizations (Cave et al., 1997). However, a relational approach has only recently been applied to the specific field of services marketing (Helgesen, Nesset, 2007, Henning-Thurau et al., 2001).

Relationship marketing literature relates to variables such as trust, value, communication or loyalty (Bryce, 2007, Gwinner et al., 1998, Morgan, Hunt, 1994, Parvatiyar, Sheth, 1994, Webster, 1994). These variables are necessary to develop and maintain long-term relationships with stakeholders. However, as Fournier (1998) point out, such relationships are likely to remain elusive for most marketers without a more precise understanding of when and why consumers respond favourably.

This paper applies the precepts of the relationship marketing in an analysis of management education as a service encounter between the professor and the students. Moreover, this study wants to extend previous efforts in the analysis of value creation in education by examining this construct under a relational perspective, delving into its relationship with variables such as quality of the interaction, trust, image, satisfaction and loyalty. It attempts to contribute to the growing research on customer-company (specifically graduate-university) relationships (Bergami, Bagozzi, 2000, Bhattacharya, Sen, 2003) by analyzing the value creation process (Baker et al., 2003). Following Sakthivel and Raju (2006), for education to become excellent, perceived value should have the greatest impact on students’ knowledge and personal development. But the growing body of knowledge of value is fragmented. Different points of view are advocated with no widely accepted way of pulling views together, especially in its relationship with other variables. There are only a few studies on value creation in the educational context (e.g. Baker et al., 2002,
Sakthivel, Raju, 2006, Unni, 2005). We suggest that this relational perspective provides a fresh and innovative view about how a higher education institution can improve its performance creating and adding value for an important stakeholder group: the students.

2. Conceptual framework and hypotheses

The examination of perceived value determination and value delivery has recently become a focal point in the marketing literature (Lee, Overby, 2004). Perceived value has gained considerable research interest as a stable construct to predict buying behaviour (Chen, Dubinsky, 2003, Pura, 2005). However, despite this growing interest in value creation, a review of the relevant educational literature reveals that there is a lack of analysis about this construct and, in particular, about its relationships with other variables. The value concept is multi-faceted and complicated by numerous interpretations, biases, and emphases (Hu et al., 2009, Huber et al., 2001). Zeithaml (1988) defined value as the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given. Regarding Sakthivel and Raju (2006, p. 557) in engineering education, perceived value is not merely transmission of technical knowledge or the degree that the student is pursuing, but something more: a value for the money that he or she has paid; he or she wants to hone leadership, communication, and interpersonal skills to acquire knowledge of the latest trends in technology, to have exposure to industrial climate, and to face challenges in life.

In order to delve into the value creation process in the educational context, we propose an integrative model of student perceived value that considers several antecedents and consequences of this construct (Figure 1). This integrative approach takes into account relationship marketing theory to include various aspects of educational research, thereby accounting for the special characteristics of educational institutions and their relationships with students as customers.
2.1. Quality of the student-professor interaction in the service encounter

A service encounter has been defined as the dynamic interaction between a service operation and its customers (Surpremant, Solomon, 1987). The importance of understanding the customer-contact employee service encounter has been discussed in marketing literature (Gil et al., 2008, Wong, 2004) though less frequently in the education context (Chung, McLaren, 2000, Venkatesh, Meamber, 2006). The service encounter between student and professor is analyzed like a specific and particular type of service, where an extended encounters and provision of extras and special attentions can be a significant factor in explaining service satisfaction and also positive feelings (Price et al., 1995).

Accordingly Chung and McLaren (2000, p. 485), “teaching is a service encounter”, where reforms to the education process require that the student be treated as the consumer of a service (Krehbiel et al., 1997). In this way, it is important that the professor recognize the student as an active participant in the service encounter (Chung, McLaren, 2000). Accepting that there is an important impact of service encounter on perceived value (Keng et al., 2007), and considering the lack of study of this relationship in an educational context, we hypothesize:

**H1:** The quality of the student-professor interaction has a positive and significant influence on student perceived value.
2.2. Trust

Trust has traditionally been considered as a key variable for long-lasting relationships. Moorman et al. (1992, p. 315) define this concept as “a willingness to rely on an exchange partner in whom one has confidence”. In the educational context, and following the definition by Morgan and Hunt (1994), the students’ trust in an educational institution can be understood as their confidence in its integrity and reliability, and it is based on the personal experiences of students with faculty members (Henning-Thurau et al., 2001).

Service literature shows evidence of the relationship between trust and perceived value (Lentz et al., 2004, Nijssen et al., 2003, Sirdeshmukh et al., 2002). Sirdeshmukh et al. (2002) affirm that trust creates value because it provides relational benefits derived from the interaction between the firm and the consumer, and it reduces uncertainty in consumers (Morgan, Hunt, 1994), but no studies exist where this relationship has been tested in the educational context. In this sense, we propose the following:

H2: The students’ trust on the educational institution has a positive and significant influence on student perceived value.

2.3. University image

Kotler and Fox (1995) define image as the sum of beliefs, ideas, and impressions that a person has of an object. Corporate image is described as the overall impression made on the minds of the public about a firm (Barich, Kotler, 1991, Nguyen, LeBlanc, 2001). A Higher Education Institution (HEI) image is not absolute, but relative to the images conveyed by other HEIs. HEIs must understand the image that they portray, and make sure that the image is both an accurate and favorable reflection of the institution (Beerli et al., 2002). The various publics of universities draw conclusions about an institution’s overall image from impressions they have about the strengths and weaknesses of the institution’s offerings. These images are formed from word of mouth, past experience and marketing activities of the institution. This study will only consider the graduate’s perception.

From the perspective of marketing, the impact of corporate image on consumer behaviour is well recognized in spite of the lack of empirical evidence. The relationship between corporate image and perceived value has not been the object of much attention in the educational literature. However, in other fields, corporate image has been studied as an antecedent or as a mediator
of constructs regarding the evaluations of organizations, products or services—perceived quality, perceived value, loyalty—individually or together with satisfaction (Beerli et al., 2002, Nguyen, LeBlanc, 2001, Pina et al., 2006). In particular, the image-value relationship has been validated in the service literature (Barich, Kotler, 1991, Nguyen, LeBlanc, 2001). In accordance with the arguments above, we hypothesize:

**H3:** The university image by students has a positive and significant influence on student perceived value.

### 2.4. Student satisfaction and loyalty

The importance of measuring the satisfaction variable stems from its relationship to customer loyalty (Galloway, 1998). In current competitive environments, repeated purchases by customers are necessary in order to guarantee the survival of the organisations, which means customer retention. This situation affects most sectors, and higher education is certainly not beyond being (Helgesen, Nesset, 2007).

Customer satisfaction has been widely debated in the literature, but there is no consensus about the definition of the concept of satisfaction with the service, specially in higher education (Hartman, Schmidt, 1995). An adaptation of the definition of student satisfaction is the one proposed by Elliot and Healy (2001), who indicate that it is a short-term attitude that results from the evaluation of their experience with the education service received.

The connection between perceived value and customer satisfaction has been debated. Apparently, there is a growing recognition that satisfaction is positively influenced by perceived value (Chen, Dubinsky, 2003, Sakthivel, Raju, 2006, Yang, Peterson, 2004). However, some researchers propose an opposite relationship (Bolton, Drew, 1991, Petrick et al., 2001). Based on the above discussions, the following hypothesis is proposed:

**H4:** The student perceived value has a positive and significant influence on student satisfaction.

Regarding loyalty, this can be defined as the consumer’s relationship over time toward one specific object (a vendor, brand, service supplier) (Söderlund, 2006). Student loyalty has become essential for the survival of higher education institutions (Helgesen, Nesset, 2007). Maintaining long lasting relationships with students creates a competitive advantage for universities (Henning-Thurau et al., 2001). Given their current situation, the falling number of incoming
students, the increasing number of those that leave their studies, and the requirements of the Bologna Declaration (1999), among others, justify the importance of analyzing loyalty in this context (Helgesen, Nesset, 2007). In this study, the term „student loyalty” refers to the loyalty of a student after his or her time at the university.

In the value literature, empirical findings have denoted the indirect influence of perceived value on loyalty through the consumer satisfaction (Yang, Peterson, 2004), though some authors do not validate this relationship (Andreassen, Lindestad, 1998). Further, some studies show the direct effect of perceived value on loyalty (Cronin et al., 2000, Sirdeshmukh et al., 2002, Yang, Peterson, 2004), but others do not validate this relationship (Varki, Colgate, 2001, Wang et al., 2004).

In the services context in general, satisfaction and loyalty are closely related, and satisfaction is an antecedent variable of loyalty (Dick, Basu, 1994). Similarly, in the higher education sector, the concepts of loyalty and satisfaction are also closely related to each other, whereby the same causal relationship between them can become established (Helgesen, Nesset, 2007, Söderlund, 2006). A student who is therefore satisfied with the service received may develop various attitudes and behaviours that are indicative of loyalty, among which is positive interpersonal communication with other potential customers about the university (Guolla, 1999), and/or students may show the intention to return to participate in other courses offered by the same university (Patterson et al., 1997).

Consequently, the following hypotheses are set forth:

\[ H5: \text{There is a positive and significant relationship between student perceived value and loyalty.} \]

\[ H6: \text{There is a positive and significant relationship between student satisfaction and loyalty.} \]

3. Research method and results

A field study was conducted in two Spanish universities, collecting the data from a random sample of 1000 graduates. This exploratory analysis was developed in order to test the validity of the measurement scales and the relationships hypothesized. The scale of the quality of the student-professor interaction was adapted from Peiró et al. (2005). Trust to the institution was measured adapting the one proposed by Morgan and Hunt (1994), and image was measured through the scale of Nguyen and LeBlanc (2001). For the
measurement of perceived value we adapted the scale of Dodds et al. (1991), and for satisfaction the one used by Fornell (1992). Finally, loyalty was measured through the intention to return to the university and through the positive interpersonal communication that students may provide, adapting the scales of Martensen et al. (1999) and Henning-Thurau et al. (2001). For all constructs, a 11-item Likert-type scale (completely disagree to completely agree) was employed.

We used structural equation modelling with LISREL 8.80 to assess the measurement properties of the scales and test the hypothesized relationships. Reliability was calculated with Cronbach’s Alpha (higher than .9 for all measures), Bagozzi and Yi’s (1988) composite reliability index (all values were higher than .8), and Fornell and Larcker’s (1981) average variance extracted index (higher than .7 for all the measures). The overall fit indices provide support for the fit of the proposed conceptual model ($\chi^2$ (194)=1321.46; p=.00; GFI=.89; CFI=.98; RMSEA=.07; NNFI=.98; IFI=.98). All items loaded on their hypothesized factors, and the estimates were positive and significant. The results demonstrated the convergent and discriminant validity of the scales.

Results of the structural equation model ($\chi^2$ (161)=1102.39; p=.00; GFI=.90; CFI=.98; RMSEA=.07; NNFI=.98; IFI=.98) lend support for all the hypotheses. Quality of the student-professor interaction has a significant influence on perceived value (.49, p<.01) and also trust and image influence value (.56, p<.01; .59, p<.01). Moreover, the results suggest that perceived value is an antecedent of consumer satisfaction (.47, p<.01) and loyalty (.14, p<.01), and that satisfaction also mediates the impact of perceived value on loyalty. The results of an appropriate structural equation model confirm the importance of the relationship among all these variables in the educational context.

4. Conclusions and implications

This work attempts to provide a better understanding of the management of the student-university relationship, delving into the value creation process through the identification of possible antecedents and consequences of students’ perceived value. Results confirm previous findings in this field and others beyond the educational context, showing that perceptions of value in the educational service encounter are influenced by the quality of the student-professor interaction, the student trust, and the university image. Findings also reveal that perceived value contributes to students’ satisfaction and loyalty. Therefore, the proposed model and associated measurement instruments can
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reliably and consistently be applied for higher educational institutions, providing useful information for strategic decisions of universities.

These results have significant academic and managerial implications for universities and non-profit organizations. Thus, quality of the student-university interaction, university image and students’ trust are three of the key factors in creating satisfied and loyal students, through a value creation process. The findings show that creating and maintaining the link or closeness between student and university constitutes an attractive relationship for users with a great potential for generating behavioural and affective positive responses to the organization. Improving interaction between students and professors could be useful to generate user identification with the organization, perceived value and loyalty. These conclusions should encourage universities to dedicate effort and invest resources to reinforce the link with one of its main stakeholders: students, and thus, succeed in obtaining a higher identification with the educational institution and in their retention.

In light of the results, it would be interesting to replicate and extend this study to other contexts, including other related variables such as commitment or student-university identification. Moreover, further research would be necessary to consider the multidimensional nature of perceived value in the educational context, following the suggestions of Sakthivel and Raju (2006).

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