



CENTRUM Católica's Working Paper Series

No. 2015-09-0015 / September 2015

A Model for Assessing the Quality of Marketing- Management Education

Jaime Rivera-Camino and Víctor Alarcón

**CENTRUM Católica Graduate Business School
Pontificia Universidad Católica del Perú**

Working papers are in draft form. This working paper is distributed for purposes of comment and discussion only. It may not be reproduced without permission of the author(s).

A Model for Assessing the Quality of Marketing-Management Education

Jaime Rivera-Camino
CENTRUM Católica Graduate Business School
Pontificia Universidad Católica del Perú, Lima, Peru

Víctor Alarcón¹
CENTRUM Católica Graduate Business School
Pontificia Universidad Católica del Perú, Lima, Peru

¹ Corresponding Author: valarcon@pucp.edu.pe

A Model for Assessing the Quality of Marketing-Management Education

Abstract

Purpose: This study proposes and tests a model of educational quality in marketing management incorporating resource-capability variables linked to learning outcomes for students and the competitive positioning of universities.

Methodology/approach: Drawing on resource-dependence theory, the study develops a comprehensive model for measuring educational quality. The hypothesised relationships in the model are tested with a sample of Spanish university teachers using a two-stage least squares regression analysis, while controlling for the possible effect of the public/private nature of the university.

Findings: The results validate the model and show that educational capabilities are reliable variables for predicting the educational quality of marketing-management programs at Spanish universities.

Research limitations/implications: As with all educational research, certain problems are acknowledged with respect to the data and the theoretical constructs that are utilised in the study. Future studies could replicate this study using more direct objective measures of the theoretical constructs and extend the study to other countries with different educational contexts.

Originality/value: This is one of the few studies to apply resource-dependence theory to an analysis of the variables associated with the quality of marketing-management education. In doing so, the study presents original multi-item scales to improve the measurement of model constructs.

Practical implications: The results provide guidance to university marketing teachers in designing high-quality marketing-management educational programs and in developing self-diagnostic tools that determine a university's likelihood of competitive success.

Keywords: marketing management education; educational quality; educational resources and capabilities

Paper type: Research paper

1. Introduction

As education has increasingly become a competitive factor in the knowledge-based economy, quality in higher education has emerged as an important international issue (Altbach, et al., 2009; Pavel, 2012). The European Commission has stated that European universities must achieve and maintain educational excellence if Europe is to achieve its aim of becoming the most competitive knowledge-based economy in the world (European Union, 2013; Pawlowski, 2004).

Given that marketing managers are frequently involved in decisions that have significant effects on corporate and national economies, education in marketing management is important in promoting national competitiveness (Pride and Ferrell, 2000; Sinkovics and Schlegelmilch, 2000). It has been contended that traditional marketing strategies do not work in the current turbulent business environment (Courtney et al., 1997; Fortier et al., 1998) and that the gap between academia and practice is widening (Tapp, 2004). Despite these concerns, the literature suggests that there is a bias in marketing education towards the achievement of academic status through the writing and publishing of papers (Baumgartner and Pieters, 2003; Cabell, 1997-98), rather than towards an improvement in marketing education *per se* (Straughan and Albers-Miller, 2000). Although some studies have addressed issues in marketing education—such as innovative teaching (Albers-Miller et al., 2001), marketing curricula (Athaide, 2005), and course structure for learning key marketing concepts (Eriksson et al., 2004)—it would seem that insufficient attention is being paid to the quality of contemporary teaching in marketing management.

The principal reason for the failure to assess the quality of education in marketing management needed seem to be that different conceptions of higher education lead to different conceptions of educational quality (Barnett, 1992), this makes it impossible to arrive at one set of standards for institutional assessment that would be applicable to all countries (UNESCO, 1998). Another possible reason for failure in this field is that few teachers actually participate in what

might be called the ‘education quality agenda’; making it difficult to know what teachers regard as ‘quality’ in higher education (Watty, 2003), also most of the information about management education is generated in the United States, which is of varying relevance to other countries (Imbs, 1995). Finally, given that the expectations of the public change continuously, previously satisfactory approaches to business education rapidly become outdated (Lengnick-Hall and Sanders, 1997). There is a need to examine the assumptions on which current practices of business education are founded, especially in countries that are seeking to compete on a global scale (Rowley et al., 1998).

The present study proposes an exploratory model of educational quality with a view to identifying and testing the variables that determine the learning outcomes of marketing students and the competitive positioning of universities. This study utilises a sample of Spanish universities with an appropriate context because European Commission experts agree that Spain needs to develop intellectual infrastructures associated with marketing skills if the country is to advance an economic model based on high added value (Vanguardia Digital, 2006). The first national survey of the public image of the Spanish university system revealed that few respondents believed that their training prepared them sufficiently for the labour market (El Mundo Digital, 2006); indeed, this situation prompted the European Commission to declare that Spanish universities produce too many candidates for unemployment (El Mundo Digital, 2007).

In the next section, the paper presents the theoretical framework of the study and extant models of quality of education. Subsequent, is the proposed model for assessing quality in marketing-management education, a description of the research design and the main features of the methodology of the empirical study used to test the proposed model, an in-depth analysis of the results, and finally a discussion of the managerial implications and future lines of research.

2. Theoretical framework

Despite the abundant literature on educational quality assurance in various countries, there is no consensus on several issues including (i) definition of educational quality; (ii) appropriate assessment indicators; and (iii) suitability of the models that have been proposed (Srikanthan and Dalrymple, 2003; Woodhouse, 1996).

There is considerable disagreement with regard to the *definition* of educational quality which is testimony to the complexity and multifaceted nature of the concept (UNICEF, 2000; UNESCO, 2002). The notion of ‘quality’ in education is not only multidimensional, but also often subjective (PHARE, 1998), because it depends on the specific goals of the local educational context in which it is being assessed (Adams, 1993). According to Fife and Janosik (1999), defining educational quality is an almost impossible task.

The choice of *assessment indicators* is similarly problematic (Campbell and Rozsnyai, 2002). According to Ramina (2003), educational quality should be assessed by a set of appropriate indicators and a monitoring system, but this has not because educational quality is influenced by factors, many of which are non-measurable. There is therefore widespread disagreement on the selection of objective indicators, especially with regard to attempts to quantify concepts such as teaching, learning, and research (Kaiser and Yonezawa, 2003). These difficulties are exacerbated when attempts are made to make international comparisons because the collection of objective data can be hampered by legislative differences with regard to confidentiality and data protection. Kaiser and Yonezawa (2003) have advocated the use of plain descriptive information as an alternative to objective data.

For assessing educational quality, many suggestions have been made. The ‘Harvard model’, in which the quality of an educational institution is measured against that of the most prestigious institution, suffers from the conceptual weakness of assuming that all customers want the same

thing (Fife and Janosik, 1999). Other models have drawn on the philosophy of total quality management (TQM), but these approaches have been criticised because such models tend to focus on the exercise of control (Salter and Tapper, 2000). Thus, the adoption of TQM in academia (in general) is rather limited since those higher education institutions that have adopted TQM have used diverse perspectives on their approach (Ali and Kumar Shastri, 2010).

Other models have been based on pedagogical, cultural, social, and economic perspectives. None of these models has achieved widespread acceptance, and the only consensus that appears to have emerged is that the measurement of quality in education will remain an elusive concept (Matsuura, 2003).

3. Conceptual model and research hypotheses

3.1 Paradigm underlying the proposed model

In an attempt to overcome the perceived inadequacies of the models noted above, the paradigm of ‘input–process–outcome’ was selected as the basis for this study’s proposed model for assessing the quality of marketing-management education. This paradigm was chosen because it conceives of quality education as an ongoing process that transforms the participants (Harvey and Green, 1993).

The paradigm of ‘input–process–outcome’ assumes that quality education is determined by: the human and material resources that are invested in education; and the kinds of processes that take place in educational organisations and classrooms. The model thus proposes that educational quality can be measured by assessing efficiency in the use of resources (Welsh and Metcalf, 2003), and examining educational outcomes (Pascarella, 2001). The model assumes that high-quality education institutions empower their students with the specific skills, knowledge, and attitudes that they require to live and work in a knowledge society (Campbell and Rozsnyai, 2002; EFQM, 1995). This

notion of educational quality is appropriate when ‘learner profiles’ are subject to significant changes (Harvey and Knight, 1996).

The proposed model assimilates elements of resource-dependence theory (Amit and Schoemaker, 1993). This theory seeks to explain why certain organisations in a particular sector attain a competitive advantage, whereas others in the same sector do not (Nelson, 1991). The present study contends that resource-dependence theory can also be utilised to explain university competitiveness—which, is essentially based on the effective management of educational resources and capabilities (Scott, 2003). According to the literature (Lado and Wilson, 1994; Tumer and Crawford, 1994), such capabilities can be classified into four categories: (i) organisational capabilities, (ii) input-based capabilities, (iii) managerial capabilities, and (iv) technical organisational capabilities. This classification is utilised in the present study to describe the hypothesised relationships among the variables of the proposed model for assessing quality in marketing-management education.

3.2 Variables and hypothesised relationships

3.2.1 Organisational capabilities (based on outputs)

The *organisational capabilities* of the institution represent the dependent variables of the proposed model. These are the tangible and intangible outputs that provide added value for clients (Lado and Wilson, 1994) and/or enhance corporate reputation and image (Verdin and Williamson, 1994). In the context of marketing education, the organisational capabilities of interest are the *learning outcomes* of marketing-management education (LOMME) and the *competitive outcomes* of marketing-management education (COMME).

Lengnick-Hall and Sanders (1997) defined excellence in management education as the achievement of increased knowledge and skills, the application of new knowledge and skills, and the positive response of students. Although these general criteria are relevant and useful in

evaluating an institution, they should be augmented by consideration of how well an institution responds to criticism of its output. For example, teaching in the field of marketing management has been criticised for failing to meet the demands of new business environments, for failing to focus on real job markets, and for failing to develop links with the business community (Rowley and Rowley, 2000). In addition, it has also been claimed that contemporary business education does not develop interpersonal skills and teamwork (Lerner, 1995) and that it has failed to address issues such as social responsibility and the need for leadership training (UNESCO, 1998). Canzer (1997) emphasised the acquisition of subject knowledge and theoretical concepts, together with the ability to apply this knowledge to real marketing situations. McMullen (1998) suggested that graduates must be able to handle problem-solving, communicate effectively, and exercise managerial judgment. Walker et al. (1998) favoured the ability to integrate and use marketing knowledge in a creative and synergistic manner. Adrian and Palmer, 1999; Floyd and Gordon, 1998 recommended skills have included leadership, people management, power distribution, team-building and interpersonal skills to promote effective interaction with subordinates, peers, and superiors, and linkages to business practice (Stern and Tseng, 2002).

The proposed model evaluates the first dependent variable, learning outcomes of marketing-management education (LOMME), in terms of applicability to the needs of companies, contribution to solving national problems, and the students' ability to solve real problems, work in teams, develop innovative solutions, and demonstrate leadership.

The second dependent variable is *competitive outcomes* of marketing-management education. Universities depend on their reputation and image to ensure funding for educational programs and research initiatives (Martínez, 2005). As a consequence, the pursuit of prestige is typical of academic institutions worldwide (Brewer et al., 2002). According to Holdsworth and Nind (2005), universities compete in the 'marketplace of public opinion' on the basis of their prestige or reputation. League tables and rankings thus assume great importance as indicators of a university's

market position in the educational system and the likelihood that it will acquire the resources it needs (Lombardi et al., 2001). Prestige has been described as a form of ‘brand-name recognition’, which is derived from historical visibility; as such, prestige actually precedes market share (Bok, 2003). Prestige effectively differentiates an institution from its competitors in ways that stakeholders find meaningful. The proposed model evaluates the second dependent variable COMME, on the basis of a university’s prestige or reputation as perceived by students, donors, market competitors, and employees.

3.2.2 Input-based capabilities

The first of the independent variables in the model is associated with the input-based capabilities of the institution (availability of the various *resources*: financial, physical, human, and technological) that enable any organisation to create and deliver products and services valued by customers (Grant, 1991; Amit and Schoemaker, 1993).

Several studies have confirmed that resource availability enhances learning achievement at all levels of education (Carron and Cháu, 1996; Glewwe and Jacoby, 1994). Many universities have recognised that a well-resourced system of incentives attracts and retains the best professors (Henry et al., 1997). These institutions understand that they also require physical resources to meet the challenges of providing education within a changing business environment (Rowley et al., 1998). Institutions from other regions (including Central America, South America, and Europe) have also recognised that a link exists between a university’s level of competitiveness and the procurement of financial resources (EUA, 2003).

The following hypotheses are proposed:

- *Hypothesis H1*: A higher level of resource availability is associated with: (a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.

3.2.3 Managerial capabilities

The next group of independent variables in the model are associated with *managerial capabilities*: the manager's ability to: develop a beneficial relationship between an organisation and its environment (Lado and Wilson, 1994), design the organisation and coordinate its various functions (Boyatzis, 1999), and provide direction and control in implementing organisational systems to realise organisational objectives (Tumer and Crawford, 1994). In the context of the present study, managerial capabilities are evaluated in terms of: *management style*; *teaching methods*; and *evaluation of faculty performance*.

Management style: Pascarella and Terenzini (1991) contended that the organisational environment of an academic department could be more important for student learning than the subject matter itself. 'Participatory' management style promotes the fulfilment of a university's social responsibilities (Neave, 1998; UNESCO, 1998) and provides a climate for optimal adjustment to changing societal conditions (Dill, 2003). This management style is also said to provide an atmosphere in which teachers can focus on instruction and student achievement (Wyman, 2001) and thus foster 'learning departments' (Walvoord et al., 2000). In this regard, quality assurance is increasingly based on the autonomous participation of all organisational members in the pursuit of quality, rather than on explicit external quality control (Frackmann, 2000; Leithwood et al., 1998).

The following Hypotheses are proposed with regard to the relationship between management style and competitive outcomes:

- *Hypothesis H2.1*: A higher level of participatory management style is associated with: a higher level of learning outcomes; and a higher level of competitive outcomes.
- *Hypothesis H2.2*: A higher level of non-participatory management style is associated with: (a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.

For *teaching methods*, we assess if academic staff are adequately conveying the knowledge that they wish to impart (Frost and Fukami, 1997). Several studies support that teaching methods

should aim to develop critical thinking as a problem-solving tool (Bok, 1986; Dubois, 1995). Current teaching method posits the lecturer as the authority from whom all knowledge emanates (Rowley and Rowley, 2000), with the students posited as passive recipients of information (Lengnick-Hall, 1996; Schneider and Bowen, 1995), encouraging an algorithmic reading of reality (Bergadaà, 1990) and the development of resources that are not actually used in business practice (Cova et al., 1994).

It has been contended that marketing-management education requires non-structured teaching methods that involve students as active participants in the learning process instead (Alavi et al., 1995; Leidner and Jarvenpaá, 1995) and co-producers of their training (Lengnick-Hall and Sanders, 1997) and this is consistent with contemporary developments in organisational management, which encourage teamwork and good interpersonal skills (Baldwin et al., 1997). UNESCO (1998) has stated that higher education must implement pedagogical methods based on participatory knowledge if graduates are to learn how to be innovative and creative in their future work.

On the basis of the above discussion, the following alternative hypotheses are proposed:

- *Hypothesis 3.1:* A higher level of non-structured teaching methods is associated with:
(a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.
- *Hypothesis 3.2:* A higher level of structured teaching methods is associated with: (a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.

Evaluation of faculty performance can be done by: government-imposed and/or external stakeholders' criteria. The first refers to assessment of faculty performance on the basis of government-mandated criteria (such as seniority and 'civil service' procedures). The second refers to assessment of faculty performance by student surveys, academic and scientific publishing, consultancies, and so on.

Cave et al. (1997) have suggested that academic quality is equivalent to the quality of teaching at a university. The reaction of students to a course is a way of determining how well a teaching system is working—because education is a service in which the participation of the customer (student) influences both the service process (learning) and the results of that service process (Lengnick-Hall and Sanders, 1997). In addition, because academic quality is also associated with sharing information on best practices (Zhou, 2000), faculty performance can also be assessed on the basis of the number of textbooks and educational materials that are published and the number of consulting contracts that are secured for the university. The publication of research papers in scholarly journals and conferences represents an additional criterion of faculty performance; such publications not only complement effective teaching but also represent the accepted *sine qua non* of academic excellence (Braimoh, 2002).

The following alternative hypotheses are proposed with regard to the relationship between the evaluation of faculty performance and the learning outcomes and competitive outcomes:

- *Hypothesis H4.1:* A higher level of government-imposed criteria in the evaluation of faculty performance is associated with: (a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.
- *Hypothesis H4.2:* A higher level of external stakeholder criteria in the evaluation of faculty performance is associated with: (a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.

3.2.4 Technical organisational capabilities

Technical organisational capabilities are essentially the talents and skills that enable inputs to be turned into outputs (Lado et al., 1992; Green, 1999). They represent sources of competitive advantage because they are often difficult to copy and remain embedded in the tacit routines and practices of the organisation (Kogut and Zander 1996).

These capabilities are assessed in terms of the variable of *teacher qualification*. Educational research has established that, in all forms of education, positive relationships exist between years of teaching experience and student outcomes (Greenwald et al., 1996) and between teachers' academic qualifications and learning outcomes (Strauss and Vogt, 2001). These relationships have been confirmed at the level of higher education, where quality has been positively associated with the level of education and qualifications of faculty members (Glewwe and Jacoby, 1994; Ramina, 2003; Pawlowski, 2004). There is a relationship between the level of international experience of teachers and the quality of education (Ramina, 2003; Heyl et al., 2003).

The following hypothesis is proposed between variables, teacher qualification, learning outcomes, and competitive outcomes:

- *Hypothesis H5*: A higher level of teacher qualification is associated with: (a) a higher level of learning outcomes; and (b) a higher level of competitive outcomes.

3.2.5 Control variable

Because the private or public nature of an educational institution might affect the perception and use of variables associated with educational quality, the proposed model includes a dichotomous control variable that indicates the nature of the university ('0' = private; '1' = 'public').

The literature offers conflicting points of view on whether the quality of education is affected by the private or public nature of an institution. Private institutions tend to have a reputation for relaxed academic standards, and prospective employers can be sceptical about the quality of the education received by the graduates of such institutions (Bernasconi, 2003). Others have contended that private institutions are more efficient and flexible than public institutions, and that they provide the type and quality of education that students (and their parents) demand (Lockheed and Jiménez, 1994).

In Spain, private universities tend to be younger and to have a larger academic staff, more library resources, and better facilities. They are usually smaller, more specialised, and offer fewer degree programs. In contrast, public universities in Spain are typically crowded and have fewer staff; however, they offer more degrees, and their academic level is reported to be higher (E-campus 2006).

The control variable in the proposed model was included to account for these differences and their potential impact on the variables associated with education quality.

4. Methodology

4.1 Sample and data collection

To apply and test the proposed model for assessing the quality of marketing-management education, an empirical study was conducted among academic staff who conducts courses in marketing management in Spanish universities. For this purpose, a self-completed questionnaire was developed and distributed to a cross-section of potential respondents. Because there is no comprehensive directory of all university teachers of marketing courses in Spain, a list was created by consulting individual university websites and listings of persons who attend marketing conventions. The final list of potential respondents consisted of individuals who: (i) were designated as teachers of marketing management courses at their universities; and (ii) could be contacted by e-mail or postal mail.

The questionnaire was sent to the entire target population. The returned questionnaires were divided into quartiles according to the date on which they were received (with the first quartile containing the earliest returns and the fourth quartile containing the latest returns). Those in the first and fourth quartiles were compared by *t*-tests, which indicated that there were no significant statistical differences on average scores for most measures.

The final sample included 124 teachers in public institutions (70.45% of the sample) and 52 instructors in private institutions (29.55% of the sample). There were 136 male respondents (77.27%) and 40 female respondents (22.73%). The overall response rate from the complete list of potential respondents was 14 % (with data from five respondents being discarded as a result of missing and invalid data).

Teachers were adopted as a key informant, since they possess special qualifications such as particular status, specialized knowledge and accessibility to the researcher (Phillips and Bagozzi 1986). This methodology is a frequently adopted approach in spite of their inconveniences, since the use of multiple informants has the selection problem and the perceptual agreement problem (Kumar et al., 1993).

4.2 Measures

4.2.1 Resources for teaching

The variable of ‘resources for teaching’ was evaluated in terms of eight items: (i) government funding for higher education; (ii) support for faculty salaries; (iii) support for administrative salaries; (iv) student library resources; (v) faculty library resources; (vi) technical resources; (vii) political support; and (viii) private funding for higher education.

The responses were recorded on a scale from 1 to 5 (1 = ‘none’; 5 = ‘extensive’). Cronbach’s alpha for this variable was 0.8214, which indicates an acceptable degree of reliability for this scale. Factorial analysis grouped all items onto one factor (eigenvalue = 2.93474).

4.2.2 Management style

The variable of ‘management style’ was assessed by four items derived from Cameron and Quinn (1999). The responses were recorded on a scale from 1 to 5 (1 = ‘strongly disagree’; 5 = ‘strongly agree’).

The chi square for this variable was 17.0226 ($p < 0.0007$) and Kendall's W measure was 0.263. These results indicate a low (although significant) level of agreement among the respondents' ratings.

The variable of 'management style' was recoded as two subsidiary variables: (i) 'non-participatory management style' (characterised by rules and procedures, and by distinguished staff members exercising the most influence); and (ii) 'participatory management style' (characterised by a collegiate and egalitarian management style, regardless of rank).

4.2.3 Teaching methods

The variable of 'teaching methods' was assessed by seven items derived from Roach et al. (1993) and Clow and Wachter (1996). The responses were recorded on a scale from 1 to 5 (1 = 'none'; 5 = 'extensive').

The chi square for this variable was 345.0293 ($p < 0.0000$) and Kendall's W measure was 0.3993. These results indicate a low (although significant) level of agreement among the respondents' ratings.

The variable of 'teaching methods' was recoded as two subsidiary variables: (i) 'structured teaching methods' (characterised by class lectures; structured presentations; conferences); and (ii) 'non-structured teaching methods' (characterised by case studies, role playing, business games, and internships).

4.2.4 Evaluation of faculty performance

The variable of 'evaluation of faculty performance' was assessed by six items derived from Braun et al. (1999) and Burton (1983). The responses were recorded on a scale from 1 to 5 (1 = 'none'; 5 = 'extensive').

The chi square for this variable was 70.8143 ($p < 0.0000$) and Kendall's W measure was 0.3628. These results indicate low (although significant) level of agreement among respondents' ratings.

The variable of 'evaluation of faculty performance' was recoded as two subsidiary variables: 'government-imposed criteria' (characterised by assessment of faculty performance on the basis of seniority and 'civil service' criteria); and (ii) 'external stakeholder criteria' (student surveys, academic and scientific publishing, consultancies, and so on).

4.2.5 Teacher qualification

The variable of 'teacher qualification' was assessed by three items: (i) 'teacher's experience' (ii) 'academic level'; and (iii) 'international experience'. Responses with regard to 'teaching experience' were recorded on a scale from 1 to 3 (1 = 1–4 years; 2 = 5–10 years; and 3 = more than 10 years). Responses with regard to 'academic level' were based on the respondent's highest degree: (1 = bachelor's degree; 2 = master's degree; and 3 = doctorate). To assess 'international experience, respondents were asked to indicate whether they received training outside their home country (1 = 'none or some courses'; 2 = bachelor's degree or master's degree; 3 = 'doctorate').

The chi square for this variable was 73.2947, and Kendall's W measure was 0.3290 ($p < 0.0000$). These results indicate that there was significant agreement among the respondents' ratings. Factorial analysis grouped all items onto one factor (eigenvalue= 1.77515).

4.2.6 Learning outcomes

The dependent variable of 'learning outcomes of marketing management education' (LOMME) was evaluated by six items. Respondents were asked whether the educational outcomes of their course: (i) are adapted to business needs; (ii) are instrumental in solving the country's needs; (iii) develop students' problem-solving skills; (iv) develop student teamwork; (v) develop

innovative solutions; and (vi) provide students with leadership skills. The responses were recorded on a scale from 1 to 5 (1 = ‘strongly disagree’; 5 = ‘strongly agree’).

Cronbach’s alpha for this variable was 0.8584, which indicates a high degree of reliability of this scale. Factorial analysis grouped all items onto one factor (eigenvalue= 3.55246).

4.2.7 Competitive outcomes

The second dependent variable, ‘competitive outcomes of marketing management education’ (COMME), was evaluated by four items: (i) reputation and positioning with regard to students; (ii) reputation and positioning with regard to donors; (iii) reputation and positioning with regard to market competitors; and (iv) reputation and positioning with regard to employees. The responses were recorded on a scale from 1 to 5 (1 = ‘poor positioning’; 5 = ‘good positioning’).

Cronbach’s alpha for this variable was 0.8098, which indicates a high degree of reliability of this scale. Factorial analysis grouped all items onto one factor (eigenvalue= 2.58161).

5. Results

5.1 Descriptive statistics

Descriptive statistics, including means and standard deviations, of the variables are reported in Table 1.

Insert Table 1 about here

5.2 Data analysis

Three procedures were used in data analysis: (i) correlation matrix; (ii) multivariate analysis of variance (MANOVA); and (iii) a two-stage, least-squares regression analysis. MANOVA was

chosen (rather than structural equation modelling) because it is a suitable technique for testing theory at the early stages of development, when research questions are more concerned with the existence of relationship than with their strength (Pedhauzer and Schmelkin, 1991). If the results are significant, it is appropriate to conduct individual multiple regression analyses for each dependent variable (which was done in this study).

The results of the correlation matrices between the independent variables and the dependent variables are shown in Table 2 (learning outcomes) and Table 3 (competitive outcomes). These findings suggested partial acceptance of the hypotheses.

Insert Table 2 about here

Insert Table 3 about here

A MANOVA test was used to assess the overall effects of the independent variables on the dependent variables (learning outcomes and competitive outcomes). The multivariate F value was significant (Wilks' lambda: 0.28; $p=0.000$), which showed that the dependent variables were related to variations in the independent variables.

5.3 Testing of hypotheses

The third data-analysis procedure used a two-stage least-squares regression analysis (with an SPSS statistical package) to assess the effect of each of the model variables on the two dependent variables (LOMME and COMME).

5.3.1 Hypothesised relationships with learning outcomes

Table 4 shows the results of the regression analysis with LOMME as the dependent variable. The results indicate that some of the hypothesised relationships of the model were statistically significant (at $p < 0.01$). The independent variables explained about 33% of the variation in the learning outcomes of marketing management education (LOMME).

Insert Table 4 about here

Table 4 also shows the results of testing Hypothesis 1(a), which had proposed that a higher level of resource availability is associated with a higher level of learning outcomes. The positive relationship between resources and learning outcomes was confirmed when the control variable ('type of university') was included (model 2). This shows that the hypothesised relationship is conditioned by the type of institution (public or private).

The results also confirm the positive relationship between a participatory management style and the level of LOMME, as proposed by Hypothesis H2.1(a). (In contrast, the exploratory results shown in Table 3 suggest that a non-participatory management style did not have a positive relationship with the learning outcomes of an educational institution.) When the control variable ('type of university') was added (model 2), the positive relationship was enhanced, which suggests that the influence of management style on learning outcomes is affected by the different work environments of public and private universities. These results might be due to the fact that private universities often have more freedom in decision-making than do public universities, where the work environment is more likely to be conditioned by bureaucratic rules and controls.

Hypothesis 3 proposed that teaching methods influenced LOMME. The results in Table 3 confirm Hypothesis H3.1(a), which had proposed that non-structured teaching methods improve educational outcomes. Although this was a strong and significant relationship, it was also sensitive to differences in the methods used in public and private universities.

Hypothesis 4 proposed that methods used in evaluating faculty performance were related to LOMME. Table 4 shows that the use of external stakeholder criteria (student surveys, academic and scientific publishing, consultancies) in evaluating faculty had a positive relationship with learning outcomes, as proposed by Hypothesis H4.2(a). However, the influence of these criteria on learning outcomes was appreciable only when the control variable ('type of university') was incorporated (model 2). The explanation for this finding could be that private institutions are more likely to base their evaluation on external (or market) criteria, whereas public universities are more likely to use government-imposed evaluation criteria (seniority and civil service criteria)

Hypothesis H5(a), which had proposed a positive relationship between teacher qualification and the learning outcomes, was partially confirmed. This relationship was previously shown to exist in Spain in a qualitative exploratory study by Cambra and Cambra (2003); however, the relationship in the present study was weaker—because the control variable ('type of university') was included in this study. It would thus seem that the positive relationship is conditioned by the fact that Spanish universities differ in terms of faculty-accreditation criteria. In Spain, only public universities control teaching accreditation; however, there have recently been demands for similar regulation in the private sector.

In summary, the results show that higher levels of educational capabilities (input-based, managerial, organisational, and technical organisational) have a positive relationship with learning outcomes in marketing-management education in Spanish universities.

5.3.2 Hypothesised relationships with competitive outcomes

Table 5 shows the results of the regression analysis with COMME as the dependent variable. The results show that several of the hypothesised relationships in the model were statistically significant (at $p < 0.01$). The independent variables explained approximately 42% of the variation in the COMME.

Insert Table 5 about here

Hypothesis 1(b), which had proposed that a positive relationship exists between availability of resources and the level of COMME, was confirmed. The relationship was enhanced with the inclusion of the control variable ('type of university') (model 2).

The findings also confirm Hypothesis H2.1(b), which had proposed that a positive relationship exists between a participatory management style and competitive outcomes. The results also support Hypothesis H3.1(b), which had proposed a positive relationship between non-structured teaching methods and COMME; this relationship was also enhanced when the control variable ('type of university') was included (model 2).

The results also show that the use of external stakeholder criteria in evaluating faculty performance (student surveys, academic and scientific publishing criteria, consultancies) had a positive relationship with COMME, as proposed by Hypothesis H4.2(b); indeed, the use of external stakeholder criteria in the evaluation of faculty performance was the most influential independent variable with regard to COMME.

Hypothesis H5(b), which had proposed a positive relationship between teacher qualification and COMME, was not confirmed. The initial weak relationship (model 1) was eliminated when the control variable ('type of university') was included.

In summary, the results provide general support for the proposed model, thus substantiating the contention that the suggested variables are reliable in predicting the levels of educational quality (as measured by LOMME and COMME) in marketing-management programs at Spanish universities.

6. Conclusions

The purpose of this study was to propose and test a model of variables for assessing the quality of marketing-management education, which was defined in terms of learning outcomes of students and the competitive positioning of the university. The study also examined how the influence of the proposed variables is moderated by the inclusion of a control variable.

The results of the study contribute to the literature on marketing education by demonstrating the roles played by a variety of capabilities in enabling an educational program to be successful. The study suggests that the implementation of an educational strategy is likely to be most successful when these various teacher and organisational variables are addressed simultaneously.

The findings have several implications for policy-makers, especially those responsible for developing policy for Spanish and European education. First, it shows that the respondents believed that several of the capabilities were at moderate or low levels at their universities. This finding is in accordance with a study by the Organization for Economic Cooperation and Development (OECD), which showed that 75% of state universities had a lack of investment and outdated funding models (El Mundo, 2004). Secondly, structured teaching methods were found to be common in Spanish universities and participatory management styles were found to be relatively uncommon in Spanish university marketing departments. These findings are significant for policy-makers because it has been claimed that these factors can impede the development of good universities in Spain (Pérez-Díaz, 2006).

The results, in accordance with studies that have emphasised the importance of managerial capabilities in business success have implications for marketing for managers (Maijor and Van Wittleoostuijn, 1996; Ramaswamy et al., 1994). They are affected by the quality of education because the skilled personnel that they require will be available only if the quality of educational programs is consistently high. Therefore they should seek to share their business experience with universities and marketing academics.

Teacher and organisational variables can serve as valuable diagnostic tools in determining the potential success of educational programs. The future success of universities might well depend on their ability to identify and act upon critical success factors better than their competitors. Some programs and universities would benefit enormously by creating global reputations, whereas others will be less fortunate and under significant financial pressure (Ashridge and Judge, 2005).

The study provides guidance for firms that develop training policies for their marketing directors. The results help to identify which teaching methods are most effective for internal personnel training, as well as indicating the potential skills to be expected of a graduate of a particular university. The learning outcomes included in the study can also assist in setting career-development objectives and the best methods to attain them and also provide parameters that managers can use for self-evaluation or employee evaluation.

Finally, the study has identified potential problem areas in Spanish marketing-management education that require corrective measures to meet the challenges of globalisation. In particular, the study found that bureaucratic systems prevail in Spanish universities. This is significant because these systems can hamper attempts to inculcate modern marketing skills. Given that universities form tomorrow's leaders in public affairs and national research (Brunner, 1996), the results of this study suggest that Spanish students might not be provided with the social capital that is the basis for the management of government affairs and democratic politic systems (Harrison and Huntington, 2000).

The major limitations of this study are common to all research in education. Data were imperfect and the structures of the educational variables utilised in the study might well be incomplete (Todd and Wolpin, 2003). Also, the study was limited by the individual and organisational cross-level relationships in the model, as well as the auto-selection bias inherent in the sample. Despite these limitations, the sampling procedure and reliability tests conducted on the variables have ameliorated these difficulties to some extent. Future studies could seek to replicate this study using more direct objective measures of the theoretical constructs. In addition, future studies might examine the proposed model in other countries where the educational context is different. Finally, future studies could consider different levels of marketing education (master's degree and doctorates) and a wider range of educational variables.

References

- ABC. (2006), "Los rectores deben saber que la otra cara de la autonomía es la de rendir cuentas", *Diario ABC*, Sociedad, Available at: <http://www.abc.es/Hemeroteca/dia-17-06-2006/Sociedad/>
- Adams, D. (1993), *Defining educational quality*, Improving Educational Quality, Project Publication #1: Biennial Report. Arlington, VA: Institute for International Research.
- Adrian, C., and Palmer, G. (1999), "Toward a model for understanding and improving educational quality in the Principles of Marketing course", *Journal of Marketing Education*, Vol. 21, pp. 25-33.
- Aguilar, M. (2001), *Transición democrática y reforma universitaria en la España de los ochentas*, RISEU, Red de investigadores sobre la educación superior. Septiembre 2001- Universidad de Costa Rica
- Alavi, M., Wheeler, B., and Valacich, J. (1995), "Using IT to reengineer business education: An exploratory investigation of collaborative telelearning", *MIS Quarterly*, Vol. 19, pp. 293-312.
- Alavi, M., Yoo, Y., and Vogel, D. (1997), "Using information technology to add value to management education", *Academy of Management Journal*, Vol. 40 No. 6, pp. 1310-1333.
- Altbach, Ph., Reisberg, L., and Rumbley, L. (2009). "Trends in Global Higher Education: Tracking an Academic Revolution", UNESCO, Available at: <http://www.uis.unesco.org/Library/Documents/trends-global-higher-education-2009-world-conference-en.pdf>.
- Albers-Miller, N., Straughan, R., and Prenshaw, P. (2001), "Exploring Innovative Teaching among Marketing Educators: Perceptions of Innovative Activities and Existing Reward and Support Programs", *Journal of Marketing Education*, Vol. 23 No. 3, pp. 249-259.
- Ali, M., and Kumar Shastri, R. (2010), "Implementation of Total Quality Management in Higher Education", *Asian Journal of Business Management*, Vol. 2 No. 1, pp.9-16
- Amit, R., and Schoemaker, P. (1993), "Strategic assets and organizational rent", *Strategic Management Journal*, Vol. 14 No. 1, pp. 33-46.
- Armstrong, S., and Overton, T. (1977), "Estimating non response bias in mail surveys. *Journal of Marketing Research*, Vol. 14, pp. 396-402.
- Ashridge, K., and Judge, P. (2005), *Preface*, GMAC. Bologna Project Task Force. Report, , Available at:<http://www.gmac.com/gmac/VirtualLibrary/Tools/BolognaReportVol1.htm>.
- Athaide, G. (2005), "Design and Implementation of an Interdisciplinary Marketing Management Course on Technology and Innovation Management", *Journal of Marketing Education*, Vol. 27 No. 3, pp. 239-249.
- Baldwin, T., Bedell, M., and Johnson, J. (1997), "The Social fabric of a team-based M. B. A. Program: Network effects on student satisfaction and performance", *Academy of Management Journal*, Vol. 40 No.6, pp. 1369-1397.
- Barnett, R. (1992), *Improving Higher Education. Total Quality Care*, SRHE/Open University, Buckingham.
- Baumgartner, H., and Pieters, R. (2003), "The structural influence of marketing journals: A citation analysis of the discipline and its sub areas over time", *Journal of Marketing*, Vol. 67, pp. 123-139.
- Benoliel, S., O'Gara, C., and Miske, S. (1999), *Promoting primary education for girls in Pakistan*, USAID's Development Experience Clearinghouse, Arlington, Virginia.
- Bergadaà, M. (1990), *Gestion et pédagogie*, McGraw Hill.
- Bernasconi, A. (2003), "Private Higher Education with an Academic Focus: Chile's New Exceptionalism", *International Higher Education*, No. 32, pp. 18-19.
- Berry, L. (1993), "Our roles as educators: present and future", *Journal of Marketing Education*, Vol. 15, pp. 3-8.
- Bok, D. (1986), *Higher learning*, Harvard University Press, Cambridge, M.A.
- Bok, D. (2003), *Universities in the Marketplace: The Commercialization of Higher Education*, Princeton University Press.
- Boyatzis, R. (1999), "Building on Competence: The Effective Use of Managerial Talent", in Salaman, G. (Ed.), *Human Resource Strategies*. London, Sage Pub., pp. 260-272.
- Braimoh, D. (2002), "Assuring quality in higher education through research and publishing", *World Conference of the International Consortium for Educational Development in Higher Education*, 6/07/2002.
- Braun, D., and Merrien, F.X. (1999), *Towards a New Model of Governance for Universities? A Comparative View*, Jessica Kingsley, London.

- Brewer, D., Gates, S., and Goldman, C. (2002), *In Pursuit of Prestige: Strategy and Competition in U.S. Higher Education*, Transaction, New Brunswick, N.J.
- Brunner, J. (1996), "Higher education in Latin America: the present and the challenges", *Symposium on 'the future of universities'*, 43rd session of the Council of the United Nations University, December, Santiago, Chile.
- Burton, C. (1983), *The Higher Education System. Academic Organization in Cross-National Perspective*, University of California Press, Berkeley.
- Cabell, D. (1997-98), *Cabell's Directory of Publishing Opportunities in Management and Marketing*, Cabell Publishing Co., Beaumont, TX.
- Cambra, J., and Cambra, J. (2003), "Aspectos determinantes de la calidad de un centro educativo como herramienta de gestión y diferenciación"; *II Jornadas Internacionales de Marketing Público y no Lucrativo*, Zaragoza, Spain.
- Cameron, K., and Quinn, R. (1999), *Diagnosing and Changing Organisational Culture: Based on the Competing Values Framework*, Reading, Addison-Wesley, MA.
- Campbell, C., and Rozsnyai, C. (2002), "Quality Assurance and the Development of Course Programmes", *UNESCO*, ISBN 92-9069-171-3.
- Canzer, B. (1997), "Marketing education on the internet: A world wide web based introductory marketing course design for the Virtual-U Project in distance education at Simon Fraser University", *Journal of Marketing Education*, Vol. 23 No. 1, pp. 56-65.
- Carron, C., and Châu, T. (1996), "The quality of primary schools in different development contexts", *United Nations Educational*, Paris.
- Cavallé, C. (1999), "Nuevos retos en la formación de directivos", *ACADEMIA. Revista Latinoamericana de Administración*, Vol. 23, pp. 105-112.
- Cavallé, C. (2005), *Prefación*, GMAC. Bologna Project Task Force. Report, Vol. 1, Available at: <http://www.gmac.com/gmac/VirtualLibrary/Tools/BolognaReportVol1.htm>.
- Cave, M., Hanney, S., Henkel, M., and Kogan M., (1997), *The use of performance indicators in higher education: The challenge of the quality movement*, Jessica Kingsley, 3rd Ed., London.
- Clow, K., and Wachter, M. (1996), "Teaching Methodologies Used in Basic Marketing: An Empirical Investigation," *Journal of Marketing Education*, Vol. 17, pp. 48-59.
- Courtney, H., Kirkland, J., and Viguerie, P. (1997), "Strategy under uncertainty", *Harvard Business Review*, Vol. 75 No. 6, pp. 66-79.
- Cova, B., Kassis, J., and Lanoux, V. (1994), "Entre pédagogie nouvelle et pédagogie sérieuse -Les 20 ans d'expérience européenne de l'EAP", *Gérer et comprendre*, Juin, pp. 29-42.
- Dill, D. (2003), "Allowing the Market to Rule: The Case of the United States", *Higher Education Quarterly*, Vol. 57 No. 2, pp. 136-157.
- Dubois, P. (1995), "Propos sur les sciences de gestion en général et sur leur enseignement en particulier, in *Mélanges en l'honneur d'André*, Editions Economica, Paris, pp. 121-133.
- E-campus. (2006), "Variables de calidad actuales", *Portal de Gaceta Universitaria*, 28/07/2006 - http://www.tugueb.com/e_campus/2002/06/reportaje/ranking/6.html.
- El Mundo, (2004), "Universidades Públicas", *50 carreras, Curso 2004/05*, <http://aula.elmundo.es/aula/especiales/2004/50carreras/concertados.html>.
- El Mundo. (2006), "El Ranking de las Privadas, Donde estudiar las mas demandadas 50 carreras", *El Mundo.es*, Available at: <http://aula.elmundo.es/aula/especiales/2006/50carreras/privadas.html>.
- El Mundo Digital. (2006), "Europa debería invertir el doble en Universidad para acercarse a EE.UU". *El Mundo Digital*, Available at: <http://www.madrimasd.org/informacionIDI/noticias/noticia.asp?id=26167>.
- El Mundo Digital. (2007), "Bruselas exige modernizar las universidades", *El Mundo Digital*, Available at: <http://www.elmundo.es/suplementos/campus/2007/481/1174431609.html.h>.
- Eriksson, L., and Hauer, A. (2004), "Mind Map Marketing: A Creative Approach in Developing Marketing Skills", *Journal of Marketing Education*, Vol. 26 No. 2, pp. 174-187.
- EUA. (2003), "Response to the communication from the Commission: The Role of the Universities in the Europe of Knowledge", *European University Association*, Available at: http://www.eua.be/eua/jsp/en/upload/Role_Univ_EUA_Response.1065180266813.pdf.
- European Foundation for Quality Management- EFQM (1995), *Self-Assessment. Guidelines for Public Sector*, Education, EFQM, Bruselas.

- European Union (2013), "Report to the European Commission on Improving the quality of teaching and learning in Europe's higher education institutions", *European Union*, Available at: http://ec.europa.eu/education/library/reports/modernisation_en.pdf.
- Fife, J., and Janosik, S. (1999), "Defining and Ensuring Quality in Virginia Higher Education, *Virginia Issues and Answers: A Public Policy Forum*, Summer.
- Floyd, C., and Gordon, M. (1998), "What skills are most important? A comparison of employer, student, and staff perceptions", *Journal of Marketing Education*, Vol. 20, pp. 103-109.
- Fortier, J., Albrecht, B., Grady, S., Burbach, M., and Westrich, A. (1998), "Wisconsin's Model Academic Standards for Marketing Education", *Wisconsin Department of Public Instruction*, Bulletin No. 9005, ISBN 1-57337-069-X.
- Frackmann, E. (2000), "Management and Institutional Autonomy, The Higher Education Management Challenge", *Hochschul-Informationen-System GmbH*, Hannover, Germany.
- Frost, P., and Fukami, C. (1997), "Teaching effectiveness in the organizational sciences: recognizing and enhancing the scholarship of the teaching", *Academy of Management Journal*, Vol. 40 No. 6, pp. 1271-1281.
- Glewwe, P., and Jacoby, H. (1994), "Student Achievement and Schooling Choice in Low-Income Countries: Evidence from Ghana", *Journal of Human Resources*, Vol.29 No. 3, pp. 843-864.
- Grant, R. (1991), "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation", *California Management Review*, Spring, pp. 114-135.
- Green, P. (1999), *Building Robust Competencies*, Jossey-Bass, San Francisco.
- Greenwald, R., Hedges, L., and Laine, R. (1996), "The effect of school resources on student achievement", *Review of Educational Research*, Vol. 66 No. 3, pp. 361-396.
- Hanushek, E., Kain, J., and Rivkin, S. (1999), "Do higher salaries buy better teachers?", *National Bureau of Economic Research*, Working Paper No. 7082, Cambridge.
- Harrison, L., and Huntington, S. (Eds.), (2000), *Culture matters: How values shape human progress*, Basic Books, New York.
- Harvey, L., and Green D. (1993), "Defining Quality", *Assessment and Evaluation in Higher Education*, Vol. 18 No. 1, pp. 9-34.
- Harvey, L., and Knight, P. (1996), *Transforming Higher Education*, SHRE/Open University Press, Buckingham.
- Henry, S., Kadane, J., Kaufer, J., Laughlin, P., Lindberg, M., Powers, A., and Smith, B. (1997), "Preliminary Report of the Task Force on Staff at Carnegie Mellon", Available at: <http://www.cmu.edu/splan/CurrentPlan/StfMar397.html>.
- Heyl, J., and McCarthy, J. (2003), "International Education and Teacher Preparation in the U.S.", *Presentation at the national conference Global Challenges and U.S. Higher Education: National Needs and Policy Implications*, Duke University, January 24.
- Holdsworth, D., and Nind, D. (2005), "Choice Modelling New Zealand High School Seniors' Preferences for University Education", *Journal of Marketing for Higher Education*, Vol.15 No.2, pp. 81-104.
- Hunt, L., Eagle, L., and Kitchen, P. (2004), "Balancing Marketing Education and Information Technology: Matching Needs or Needing a Better Match?", *Journal of Marketing Education*, Vol. 26 No. 1, pp. 75-88.
- Imbs, P. (1995), "Les modes managériales mises en échec?", *Gestion 2000*, N° 3, pp. 89-104.
- Jones, S. (2003), "Measuring the Quality of Higher Education: linking teaching quality measures at the delivery level to administrative measures at the university level", *Quality in Higher Education*, Vol. 9 N°. 3, pp. 223-229.
- Kaiser, F., and Yonezawa, A. (2003), "System-Level and Strategic Indicators for Monitoring Higher Education in the Twenty-First Century", *Studies on Higher Education*, UNESCO.
- Kennedy, D. (1998), *Academy duty*, Harvard University Press, Cambridge MA.
- Klein, K., Dansereau, F., and Hall, R. (1994), "Levels issues in theory development, data collection, and analysis", *Academy of Management Review*, Vol. 19, pp. 195-229.
- Kogut, B., and Zander, U. (1996), "What firms do? Coordination, identity, and learning", *Organization Science*, Vol. 7 No. 5, pp. 502-518.
- Kumar, N., Stern, L., and Anderson, J. (1993), "Conducting Interorganizational Research Using Key Informants", *The Academy of Management Journal*, Vol. 36 No. 6, pp. 1633-1651.
- Lado, A., Boyd, N., and Wright, P. (1992), "A Competency Based Model of Sustainable Competitive

- Advantage: Toward a Conceptual Integration”, *Journal of Management*, Vol. 18 No. 1, pp. 77-91.
- Lado, A., and Wilson, M. (1994), “Human Resource Systems and Sustained Competitive Advantage: A Competency Based Perspective”, *Academy of Management Review*, Vol. 119 N° 4, pp. 699-727.
- Leidner, D., and Jarvenpaá, S. (1995), “The use of information technology to enhance management school education: A theoretical view”, *MIS Quarterly*, Vol. 19, pp. 265-291.
- Leithwood, K., and Menzies, T. (1998), “A Review of Research Concerning the Implementation of Site-based Management”, *School Effectiveness and School Improvement*, Vol. 9, pp. 233-285.
- Lengnick-Hall, C. (1996), “Customer contributions to quality: A different view of the customer-oriented firm”, *Academy of Management Review*, Vol. 21, pp.791-824.
- Lengnick-Hall, C., and Sanders M. (1997), “Designing effective learning systems for management education: Student roles, requisite variety, and practicing what we teach”, *Academy of Management Journal*, Vol. 40 No. 6, pp.1334-1368.
- Lerner, L. (1995), “Making student groups work”, *Journal of Management Education*, Vol. 19, pp. 123-125.
- Lockheed, M., and Jiménez, E. (1994), “Public and Private Secondary Schools in Developing Countries: What are the differences and why do they persist?”, *The World Bank. Education and Social Policy Department, ESP Discussion Paper Series*, No. 33.
- Lombardi, J., Craig, D., Capaldi, E., Gater, D., Mendonça, S. (2001), *Quality Engines: The Competitive Context for Research, The Top American Research Universities*, The Center, , Gainesville, University of Florida.
- Maijoor, S., and Van Witteloostuijn, A. (1996), “An Empirical Test of the Resource-based Theory: Strategic Regulation in the Dutch Audit Industry”, *Strategic Management Journal*, Vol. 17, pp.549-569.
- Marks, H., and Louis, K. (1999), “Teacher Empowerment and the Capacity for Organizational Learning”, *Educational Administration Quarterly*, Vol. 35 No. 5, pp.707-750.
- Martínez, A. (2005), “Los retos de la Universidad del siglo XXI”, *Expansion*, 05/12, pp. 27.
- Matsuura, K. (2003), *Round Table of Ministers of Education on Quality Education for All*, Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO)-DG/2003/134.
- McMullen, C. (1998), “Promoting generic skills in marketing education”, *Paper presented at the ANZMZC Conference*, University of Otago, Dunedin.
- Morse, J., and Santiago, G. (2000), “Accreditation and faculty: working together”, *Academe*, Vol. 86 No.1, pp.30-34.
- Motala, S. (2000), “Education transformation and quality: The South African experience”, *Paper presented at the Annual Meeting of the Comparative and International Education Society*, San Antonio, Texas, March.
- Neave, G. (1998), “The Evaluative State Reconsidered”, *European Journal of Education*, Vol. 33 N°3, pp.265-284.
- Nelson, R. (1991), “Why Do Firms Differ and How Does it Matter?”, *Strategic Management Journal*, Vol. 12, pp.61-74.
- Palomba, M., and Banta, T. (1999), *Assessment essentials: Planning, implementing and improving assessment in higher education*, Jossey-Bass, San Francisco.
- Pascarella, E., and Terenzini, P. (1991), *How College Affects Students: Findings and Insights from Twenty Years of Research*, Jossey-Bass, San Francisco.
- Pascarella, E. (2001), “Identifying Excellence in Undergraduate Education: Are We Even Close?”, *Change*, Vol. 33 N° 3, pp.19-23.
- Pavel, A. (2012). “The Importance of Quality in Higher Education in an Increasingly Knowledge-Driven Society”, *International Journal of Academic Research in Accounting, Finance and Management*, Vol. 2 No. 1, pp. 120-127.
- Pawlowski, K. (2004), “Rediscovering higher education in Europe”, *Studies on Higher Education*, UNESCO-CEPES Publications, ISBN 92-9069-180-X.
- Pedhauzer, E., and Schmelkin, L. (1991), *Measurement, Design and Analysis*, Lawrence Erlbaum Associates, Hillsdale, NJ.
- Pérez-Díaz, V. (2006), “Dos claves de la discusión sobre la mejora de la universidad: el marco institucional y la cultura”, *Análisis madri+d*, 06/07/2006.

- Perry, C., and Ball, I. (1996), "The role of an industry placement in developing the competent professional". *ATEA Conference*, Australian Teacher Education Association Inc.
- PHARE. (1998), *Quality Assurance in Higher Education: Final Report and Project Recommendations*, Multicountry Handbook, EU-Phare project.
- Phillips, L.W., and Bagozzi, R.P. (1986), "On Measuring Organizational Properties of Distributional Channels: Methodology Issues in the Use of Key Informants", *Research in Marketing*, Vol. 8, pp 313-369.
- Pride, W., and Ferrell, O. (2000), *Marketing: Concepts and Strategies*, Houghton Mifflin, Boston.
- Ramaswamy, K., Thomas, A., and Litschert, R. (1994), "Organizational Performance in a Regulated Environment: The Role of Strategic Orientation", *Strategic Management Journal*, Vol. 15 No. 1, pp. 63-74.
- Ramina, B. (2003), *Impacts to and measurement of higher education quality*, HERN, Report prepared within EU 5th Framework program project "Higher Education Reform Network".
- Roach, S., Johnston M., and Hair, J. (1993) "An Exploratory Examination of teaching Styles Currently Employed in Marketing Education: Developing a Typology and Its Implications for Marketing Students", *Journal of Marketing Education*, Vol. 15, pp. 32-38.
- Rousseau, D. (1985), "Issues of Level in Organizational Research: Multi-level and Cross-level Perspectives", *Research in Organizational Behavior*, Vol. 7, pp.1-37.
- Rowley, D., Lujan, H., and Dolence, M. (1998), *Strategic choices for the academy: How demand for lifelong learning will re-create higher education*, Jossey-Bass, San Francisco.
- Rowley, D., and Rowley, B. (2000), "Information age challenges to management education and administration in the new millennium", *International Journal of Management*, Vol. 17 No. 1, pp. 45-52.
- Salter, B., and Tapper, T. (2000), "The politics of governance in higher education: the case of quality assurance", *Political Studies*, Vol. 48, pp. 66-87.
- Sanders, W., and Rivers, J. (1996), *Cumulative and residual effects of teachers on future student academic achievement*, University of Tennessee Value-Added Research and Assessment Center, Research Progress Report, Knoxville:
- Schneider, B., and Bowen, D. (1995), *Winning the service game*, Harvard Business School Press.
- Scott, G. (2003), *Effective Change Management in Higher Education*, EDUCAUSE Review, Vol. 38 No. 6, pp. 64-80.
- Sinkovics, R., and Schlegelmilch, B. (2000), "Marketing academics in Austria, Germany and Switzerland: Humboldt's ideals give way to performance pressure", *Journal of Marketing Management*, Vol. 16, pp.745-759.
- Srikanthan, G., and Dalrymple, J. (2003), "Developing alternative perspectives for quality in higher education", *Journal of Educational Management*, Vol. 17 No. 3, pp.126-136.
- Stern, B., and Tseng, L. (2002), "Do academics and practitioners agree on what and how to teach the undergraduate marketing research course?", *Journal of Marketing Education*, Vol. 24, pp.225-232.
- Straughan, R., and Albers-Miller, N. (2000), "Marketing education research: Credit for the advancement of our own profession?", *Journal of Marketing Management*, Vol. 16 No. 7, pp.793-813.
- Strauss, R., and Vogt, W. (2001), "It's what you know, not how you learned to teach it: Evidence from a study of the effects of knowledge and pedagogy on student achievement", *Paper presented at the annual meeting of American Educational Finance Association*, March, Cincinnati.
- Tapp, A. (2004), The changing face of marketing academia: What can we learn from commercial market research and practitioners?, *European Journal of Marketing*, Vol. 38, Issue: 5/6, Page: 492 - 499
- Todd, P., and Wolpin, K. (2003), "On the Specification and Estimation of the Production Function for Cognitive Achievement", *Economic Journal*, Vol. 113 No. 485, pp.3-33.
- Tumer, D., and Crawford, M. (1994), "Managing Current and Future Competitive Performance: The Role of Competences", in Hamel, G., and Heene, A. (Eds.), *Competence Based Competition*, New York-Wiley and Sons, U.K. pp. 241-264.
- Ulrich, D., and Wiersema, M. (1989), "Gaining Strategic and Organizational Capability in a Turbulent Business Environment", *The Academy of Management Executive*, Vol. 3 No. 2. pp. 115-122.
- UNESCO. (1998), *Higher Education in the Twenty-first Century Vision and Action*, World Conference on Higher Education, ED-98/CONF.202/REF.7-October-Paris.
- UNESCO. (2002), *Redefining quality education, Chapter Two, Second International Forum on Quality*

- Improvement in Education: Policy, Research and Innovative Practices in Improving Quality of Education*, UNESCO, Beijing, China, 12-15 June 2001, Final Report.
- UNICEF. (2000), *Defining Quality in Education*, UNICEF Programme Division, Education, Document No. UNICEF/PD/ED/00/02.
- Van Damme, D. (2002), "Quality assurance in an International Environment", *paper CHEA International Seminar III*, 24/01, Available at: <http://www.utwente.nl/cheps/documenten/Susudamme.pdf>.
- Vanguardia Digital. (2006), "Universidad y futuro", *La Vanguardia Digital*, Available at: <http://selene.uab.es/ce-documentacio-europea/CDE%20Informacions/Annexes%200602/0602061.htm>.
- Verdin, P., and Williamson, P. (1994), "Core Competences, Competitive Advantage and Market Analysis: Forging the Links", in Hamel, G., and Heene, A. (Eds.), *Competence Based Competition*, New York-Wiley and Sons, U.K., pp.77-110.
- Walker, R., Hanson, D., Nelson, L., and Fisher, C. (1998), "A case for more integrative multi-disciplinary marketing education", *European Journal of Marketing*, Vol. 32 No. 10, pp.803-812.
- Walvoord, B., Carey, A., Smith, H., Soled, S., Way, Ph., and Zorn, D. (2000), *Academic Departments: How They Work, How They Change*, ERIC Clearinghouse on Higher Education, Washington DC - ED446725. George Washington Univ. Washington DC.
- Watty, K. (2003), "When will Academics Learn about Quality?", *Quality in Higher Education*, Vol. 9 No. 3, pp. 213-221.
- Welsh, J., and Metcalf, J. (2003), "Faculty and Administrative Support for Institutional Effectiveness Activities: A bridge across the chasm?", *The Journal of Higher Education*, Vol. 74 No. 4, pp.445-468.
- Wolff, L., and de Moura Castro, C. (2001), "Public or private education for Latin America: that is the (false) question", *Inter-American Development Bank, Sustainable Development Department Technical Papers Series*, No. EDU-119.
- Woodhouse, D. (1996), "Quality Assurance: international trends, preoccupations and features", *Assessment and Evaluation in Higher Education*, Vol. 21 No. 4, pp. 347-356.
- Wright, L., Bitner, M., and Zeithaml, V. (1994), "Paradigm shifts in business education: using active learning to deliver services marketing content", *Journal of Marketing Education*, Vol. 16, pp.5-19.
- Wyman, W. (2001), "The Progress of Education Reform: Teaching Quality", *Education Commission of the States*, Vol. 2 No. 4, February-March, Document No. 2399.
- Zhou, N. (2000), *Promoting Quality Education in the New Century: New Contexts, Visions, Approaches and UNESCO Strategies*, UNESCO, Second International Forum on Quality Improvement in Education.

Table 1:

Descriptive measures of variables

	Mean	Std Dev
Resources for teaching	2.09	.68
Teacher qualification	1.98	.87
Non participatory style	3.09	.69
Participatory style	2.72	1.10
Structured teaching methods	4.02	.67
Non structured methods	2.19	.72
Government criteria	3.36	.75
External criteria	2.78	.89
Learning Outcomes	3.30	.88
Competitive outcomes	3.29	.79
n=176		

Table 2: Correlation matrix of learning outcomes and model variables

Hypotheses	Learning outcomes						Average
	Adapted business needs	Solving country's needs	Problem-solving skills	Team-work	Innovative solutions	Leadership skills	
H1:Resources	0.2266 *	0.2170 *	0.2918 ***	0.2124 *	0.2610 *	0.1151	0.2132 *
H2.1:Participatory management style	0.3290 ***	0.2474 *	0.2120 ***	0.3473 ***	0.2673 ***	0.2734 ***	0.3501 ***
H2.2:Non-participatory management style	0.0915	0.0730	0.0156	0.0697	0.0382	0.1070	0.0216
H3.1:Structured teaching methods	0.2499 *	0.0266	0.0577	0.0745	0.0581	0.0962	0.0577
H3.2:Non-structured teaching methods	0.1639 *	0.2457 ***	0.2330 *	0.3367 ***	0.3859 ***	0.4710 ***	0.3684 ***
H4.1:Government-imposed criteria for faculty assessment	0.2352 *	0.1826 *	0.4163 ***	0.0000	0.0967	0.2568 *	0.2962 *
H4.2:External stakeholders' criteria for faculty assessment	0.2976 ***	0.1729 *	0.3415 ***	0.3115 ***	0.3589 ***	0.2576 *	0.3722 ***
H5:Teacher qualification	0.2546 *	0.1555	0.2250 *	0.2487 *	0.2489 *	0.2460 ***	0.2884 *

n = 176

*p < 0.05; **p < 0.01; ***p < 0.000

Table 3: Correlation matrix of competitive outcomes and model variables

Hypotheses	Competitive outcomes				Average
	Students	Donors, market	Competitors	Employees	
H1:Resources	0.2026*	0.1424	0.1805*	0.2391**	0.2509*
H2.1: Participatory management style	0.1901*	0.1109	0.0619	0.3786**	0.2939**
H2.2:Non-participatory management style	0.0096	0.0251	0.0538	0.3769**	0.2656*
H3.1: Structured teaching methods	0.0795	0.0971	0.1543*	0.1556 *	0.1365
H3.2: Non-structured teaching methods	0.1725*	0.0647	0.0490	0.1596*	0.1431*
H4.1:Government-imposed criteria for faculty evaluation	0.0930	0.2241**	0.2396**	0.1538*	0.1611*
H4.2:External stakeholder's criteria for faculty evaluation	0.2867**	0.2699**	0.1202	0.1906*	0.2860**
H5:Teacher qualification	0.2324**	0.1748*	0.2153**	0.0682	0.1521*

n=176

*p <0.05; **p < 0.01; ***p < 0.000

Table 4: Two-stage least-squares regression analysis with LOMME as dependent variable

Variables	Model 1	Model 2
H1(a) Resource availability	1.452+	2.519*
H2.1(a) Participatory management style	2.771*	3.370**
H3.1(a) Non-structured teaching methods	3.210**	3.746**
H4.2(a) External stakeholder criteria for faculty evaluation	1.893+	2.764**
H5(a) Teacher qualification	2.915*	1.336 +
Summary statistics		
Multiple R	0.55470	0.59774
R ²	0.30769	0.35729
Adjusted R ²	0.27781	0.32693
ΔR ²		0.04912
F statistic	10.29636	11.76676
p	0.0000	0.0000
n=176	+p <0.10;*p <0.05; **p < 0.01; ***p < 0.000	

Table 5: Two-stage least-squares regression analysis with COMME as dependent variable

Variables	Model 1	Model 2
H1(b) Resource availability	2.016*	2.820 **
H2.1(b) Participatory management style	3.604 **	3.712 **
H3.1(b) Non-structured teaching methods	2.333 *	2.507 **
H4.1(b) Government-imposed criteria for faculty evaluation	2.398 *	2.116 *
H4.2(b) External stakeholders' criteria for faculty evaluation	2.180 *	3.944 **
H5(b) Teacher qualification	1.380 +	
Summary statistics		
Multiple R	0.5827	0.66827
R ²	0.3959	0.44659
Adjusted R ²	0.3659	0.4196
ΔR ²		0.0537
F statistic	12.64452	16.54306
p	0.0000	0.0000
n=176	+p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.000	