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## **PERSPECTIVES ON MEASURING THE QUALITY OF HIGHER EDUCATION SERVICES**

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### **Abstract**

Rapid diversification of services and intensifying competition have led to increased interest of companies for the relationship with costumers and for customers' expectations. Similarly, in the context of the profound competition on the educational services market, higher education institutions seek to gain competitive advantage, which is why it is very important for them to understand the expectations of their clients and hence to satisfy them. For the strategic management of higher education institutions, the quality of educational services viewed from the students' perspective becomes an element of primary interest, even more important than the quality judged from a legislative perspective. That is why, the management of higher education institutions needs additional tools to measure the quality more than the legislative ones, about which can only say that they just ensure the premises of quality, the student being, ultimately, the only one that validates the quality of the educational services. The main purpose of this paper is to analyze the literature on the higher education services quality assessment in order to identify a number of relevant factors for the Romanian higher education consumer and, moreover, for the consumer of higher education services in the field of economic sciences.

**Keywords:** higher education management, service quality, universities' market.

**JEL Classification:** I210.

### **1. INTRODUCTION**

University education is a highly sought-after and appreciated “good” in the current socio-economic context. As a result, there are many who are looking to buy such services, but at the same time there are many institutions that want to provide educational services. Moreover, relevant studies (such as *Global Higher Education Market 2016 - 2020*) predict a market growth trend due to ” the continuous advancements and rapid integration of new technologies, increased participation

from developing nations and the advent of new higher education institutes". So, it is a monopolistic, dynamic and growing market characterized by intense competition. For this reason, higher education institutions develop an organizational behavior similar to that of market-oriented companies, focusing on clients and being very attentive to their expectations. Thus, the issue of quality gains special importance for the university management.

Given the particularity of the educational services, the theory and practice in the field of service quality cannot be translated, simply in the field of the higher education services. As a consequence, it is important for the educational services market to build its own theoretical foundation in terms of quality management. Obviously, this is not an easy step, because it is difficult to capture all the fundamental elements that ensure the quality of education, as a service, and then, in the field, those elements common to all segments of the market. Similarly with the theory regarding service quality it is expected that the subject of quality in higher education to be a controversial one. The present paper, starting from the service quality theories, opens a field of discussion on quality in university education, especially on the requirements to be met by a viable model for measuring quality in this field.

## **2. SERVICES QUALITY IN THE LITERATURE**

The literature abounds in the ways in which the quality of services can be approached and determined, as unlike goods, services are abstract in nature, and cannot be associated with objective indicators such as weight, dimensions, durability, aesthetics etc. Many researchers have tried to develop reliable models to determine services quality.

A well-known and commonly used model in assessing the quality of services is SERVQUAL (derived from the work of many researchers such as: Gronroos 1982; Lehtinen and Lehtinen 1982; Parasuraman, Zeithaml and Berry 1985), of which main characteristics are:

- Service quality is defined as discrepancy between consumers' perceptions of services offered by a firm and their expectations regarding these services – quality is high when performance exceeds expectations and quality is low when performance is under expectations. This characteristic of the model draws attention to the subjectivity in appreciating the quality of services, in opposition to the objectivity of the quality of goods. This characteristic of the services' quality also determines another characteristic of it, respectively the relativism
- Quality is determined through five dimensions: tangibles, reliability, responsiveness, assurance, empathy;
- It is measurable with 22 items representing the five dimensions;

- The 22 items are measurable through seven-point scale ranging from "Strongly Agree" (7) to "Strongly Disagree" (1);
- The model was developed based on the analysis of how consumers of five categories of services perceive the quality: appliance repair and maintenance, retail banking, long-distance telephone, securities brokerage, credit cards;
- As a consequence of the way the model was validated, it is appreciated that it can be used to assess quality across wide variety of services' firms. That is why the model was used by organizations providing various services: retailing, restaurants, banking, telecommunication industry, airline catering, local government, hotels, hospitals, and education.

Starting with SERVQUAL, Mittal and Lasaar (2009) developed the SERVQUAL-P model, where the five dimensions are reduced to four. Thus, the dimensions *Assurance* and *Empathy* were removed from the original model being introduced *Personalization* dimension (which refers to the interaction of the service employees and the customers).

Also a discrepancy model is Evaluated Performance (Teas, 1993). The difference to SERVQUAL is that it measures the gap between the consumers' expectations regarding quality and an ideal level of the dimensions that define the quality of service.

Another model used to measure the quality of the services, developed as a response of the limitations of SERVQUAL, is SERVPERF (elaborate by Cronin & Taylor in 1992). The model measures the quality of services based simply on customer's perceptions. The attributes used in quality assessment are the same as in the case of SERVQUAL.

Lehtinen & Lehtinen (1991) have developed a three-dimensional quality measurement model based on three basic sources considered to be quality generators: physical environment, interactive quality, corporate quality.

Rust and Oliver (1994) also proposed a model based on three dimensions: service product, service delivery, service environment. Philip and Hazlett (1997) developed the P-C-P model based on three types of attributes of the services: pivotal, core and peripheral.

Saravanan & Rao, (2007) identified six factors that influence customer perception of service quality and, implicitly, satisfaction and loyalty in relation with the service provider. These factors are: human aspects of service delivery; core service; social responsibility; systematization of service delivery; tangibles of service; service marketing.

The model of Dabholkar, Shepherd and Thorpe, (2000) is based on the idea that consumers appreciate different attributes of services, and then form an overall perception of service quality, a perception that is not a straightforward sum of the

components. The attributes that contribute to the consumers' perception of the quality of service are: reliability, personal attention, comfort, features.

As can be seen from the short overview of service quality measurement models, there are different views on how it can be evaluated. Each of the models has appreciations and criticisms, both of a conceptual nature and of a methodological nature, so could not be established an unique model for all types of services and not even for each category of service. The highlighted limits of the models presented are related to: limitation of the model to the current or past customers; the number and the nature of the dimensions through which the quality of the services is assessed are not relevant to all types of service; is not realistic to suppose that customers assess the service quality based on the gap between expectations and perceptions; some of the models are not sufficiently tested in terms of validity and reliability etc.

In view of the above, it is obvious that for each type of service it is necessary to develop its own set of models and methods to measure the quality, taking into account the specifics of the field. Regarding the quality of higher education services, the analysis can go further aiming to elaborate models that capture specifics of a demographic nature and also specificities related to the characteristics of the field of study.

### **3. HIGHER EDUCATION SERVICES QUALITY IN THE LITERATURE**

The authors of the present paper consider that the development of a specific theory to assess the quality of the higher education services is necessary due to the role of the education in the contemporary society. The starting point for substantiating a coherent model is to understand the difficulties faced by various authors in trying to develop a model of quality measuring in higher education.

One aspect on which there is consensus in the literature is that any model for determining the quality of services starts from the identification of the customer. Although higher education services have many key categories of stakeholders, starting with the mid-70, the student was recognized as the main category in relation to which higher education institutions need to assess their quality. Many authors consider the student as the primary consumer of educational services, and Duckworth (1994) synthesized as follows: "it's time for educational institutions to face two facts: they are in a competitive battle for students, and students are customers".

In terms of quality measurement, literature highlights the fact that SERVQUAL has proved its applicability in various fields, including education. In fact, the disconfirmation paradigm (useful for understanding the relationship

between a consumer's expectations and actual perceptions) has been used extensively to determine satisfaction (Beaumont, 2012).

Thus, De Oliveira and Ferreira (2009) used SERVQUAL to determine the difference between the perceptions and expectations of Brazilian students and also tried to adapt this model to the local specificity. Tan and Kek (2004) applied a model of quality measurement of higher education services based on SERVQUAL, in the engineering faculties of two universities in Singapore. They concluded that when the model is applied to higher education, it must be adapted taking into account cultural factors. Zafiroopoulos and Vrana (2008) applied SERVQUAL to students in Greece and also to the staff highlighting significant differences between the perceptions of the two categories of study participants. The model was also applied to the university education in Serbia by Dado et.al (2011).

Donlangic and Fazlic (2015) used a tool based on SERVQUAL for measuring quality in higher education in an economics faculty in Bosnia and Herzegovina. Apart from the conclusions regarding the quality of services for the given context, the study highlighted a number of conclusions that can be taken into consideration for the development of a model applicable in Romanian universities, namely: a 5 point Likert scale is more suitable for higher education services than the original 7 point scale; due to the characteristics of each faculty, the model cannot be generalized at the university level and, moreover, it cannot be generalized at the whole sector level; the retroactive inquiry of students expectations may affect the quality of the results - that is why the authors recommend that the assessment of expectations to be made at the time of enrollment; the year of study may affect the quality of the results - therefore, it is recommended that during a generation of students, perceptions and expectations (or rather student recollections of initial expectations) to be measured periodically in order to determine whether the length of time spent in the university influences the outcome.

A specific model for measurement of service quality in higher education is HEdPERF, (Abdullah, 2006), an adaptation of the SERVPERF model - a perception-only approach. The model includes 41 items that form five dimensions of quality: academic aspects, non-academic aspects, reputation, access, program issues. Applying this tool to diverse demographic contexts and educational systems leads to significantly different results.

Vrana et al. (2015), using the HEdPERF model, conducted a comprehensive study on the quality of educational services at the Technological Education Institute of Central Macedonia. Among the findings of this study can be listed: the age of faculty influences significantly the "program issues" dimension but not on the other dimensions; teachers' seniority does not cause variations in student responses; class level determines statistically significant differences in all dimensions.

Beaumont (2012) in a study on the quality of the educational services applied to the students of the University of Manchester highlights the following important issues: Before launching the study, the researchers must identify the relative importance that students attribute to the various characteristics to be surveyed being essential to choose those features that are truly relevant to the subjects of the study; the quality measurement systems used by universities must be able to track students' perceptions of different characteristics as they change over time.

Cerri (2012) used a modified SERVQUAL scale (which retained the five original dimensions) in order to measure the quality of the educational services provided by five public universities in Albania. Following the study, the author concludes that the five dimensions of the model are significant drivers of quality in higher education.

Legčević (2010) applied SERVPERF and HEdPERF scales in determining the quality of the services provided by a university in Croatia. The results of the study allowed to conclude: "the better grades the students get, the better is their estimate of the quality of higher education, better than those with lower grades". He also highlighted the difference in quality assessment according to the student's year of study.

Kontic (2014) used SERVPERF scale for measuring service quality in higher education in Serbia. The results highlighted the fact that students' perception of service quality is influenced by seniority and gender.

#### **4. DIRECTIONS FOR MEASURING THE QUALITY OF THE EDUCATIONAL SERVICES IN THE ROMANIAN UNIVERSITIES**

The study of the literature allows forming a relevant picture of the controversies and difficulties with which researchers concerned to identify and use relevant models to measure the quality of services provided by educational institutions are facing. Moreover, this analysis is relevant to the university management in Romania as a result of the fact that no such quality assessment studies have been conducted so far by Romanian universities. In view of carrying out such a study, the important elements that the authors extracted from the study of the literature are as follows:

- The primary customer of the higher education services is the student, therefore a valid and reliable model of measuring the quality of higher education services from the learner perspective must be developed before developing and applying models for measuring the quality of educational services from the perspective of other stakeholders. However, the theoretical contributions in the field should not disregard the fact that this industry has many categories of consumers.

- The most frequently used models for quality measurement in higher education are: SERVQUAL, SERVPERF and HEDPERF.

The main limitations of the SERVQUAL model are related to the fact that it measures quality based on the discrepancy between current perceptions and student expectations as they were when enrolled in college. The students' memory of expectations affects the veracity of the result, because with the passage of time, the initial expectations cannot be recalled exactly. Moreover, many authors and studies highlight that people do not evaluate quality as a discrepancy between expectations and reality. There are also characteristics of the university activity in connection with which the future student cannot formulate realistic expectations at the enrollment. But if the management of the higher education institution want to apply SERVQUAL model, it is recommended that students expectations to be recorded at the enrollment in order to have a realistic view on this component of the model. Perceptions will be recorded later, over the years of study and compared to expectations.

The other two models, SERVPERF and HEDPERF, are based only on the perceptions measurement.

The authors' opinion is that the use of a model based solely on perceptions of quality in the Romanian universities is advisable. In this respect, we highlight the fact that HEDPERF scale has demonstrated its reliability and validity in the context of higher education services.

- Studies demonstrate that the cultural, demographic and also educational systems' specifics influence the veracity of the results. It is therefore advisable that, regardless of the questionnaire applied, it should be modified against the original form in order to fit the context. It is worth noting that the models of measuring the quality of the services consist of certain dimensions that define the quality and these dimensions are operationalized by items and questionnaires, but, keeping the same dimensions (or about the same dimensions), questionnaires and items need to be contextualized. In developing the dimensions of the questionnaire, the researchers should concentrate on the dimensions perceived to be important in the specific context.

Various methods can be used to adapt the model to the context which it applies: a prior pilot test and using of descriptive statistic to analyze the data; factor analysis; analysis of reability; interviewing experts

- Within the questionnaire, the importance that respondents give to the various dimensions of the model must be checked. Depending on the nature of the study program, on the type of university, on the consumer segment, a core set of characteristics must be determined according with the relative importance that different consumers attribute to the multiple characteristics that define the quality of the educational

services. To rank each characteristic and to identify how students place, according with importance, service quality characteristics it can be used: Importance-Performance Analysis (IPA); stepwise regression; Structural Equation Modeling (SEM)

- The year of study, seniority and gender influences the perceptions regarding the quality of the services, but also the importance that the students attribute to the different quality characteristics. For example, some studies show that students in the first years of studies express higher estimates of the education quality. As a consequence the sample must be proportional stratified.
- Even in the groups of students with the same characteristics in terms of faculty and year of study there are differences of perception regarding the quality of the educational services determined, for example, by the presence in didactic activities. Students with high class attendance have higher estimates of the quality than the other groups and, also students who get higher grades are more satisfied with the quality of educational services than others.

## **5. CONCLUSION, LIMITATIONS AND FUTURE RESEARCH**

Measuring quality in higher education through a business-like approach is a new approach in the literature. Given the competition on this market and the increasingly market-oriented nature of the higher education institutions, it is obvious that each university management center must be interested in identifying the expectations of its own clients and hence to satisfy them. Romanian universities need models to measure their services quality from the students view.

Following the present paper, researchers interested in this field of study can understand the challenges, advantages, limits and difficulties of studying the quality of higher education services. By synthesizing what is presented in the paper, we would like to draw attention to the following:

- Studying the quality of higher education services from the student perspective, is a research area that needs to be developed in Romania;
- In the field of higher education, measurement of quality based solely on the perception of certain service features is recommended against the model of quality determination based on the discrepancy between expectations and perception;
- Starting from the consecrated models, the questionnaires applied in the Romanian universities must be contextualized according to the cultural, university and specialization aspects. As a result, it is hard to imagine that a valid and reliable questionnaire for the entire academic field can be made. We sustain the idea that the highest degree of generalization to

which research can be directed can be a questionnaire adapted to the national level in the context of a type of university (public or private) and a particular field of study,

- The questionnaire must be easy for the respondents to read and understand, so in the questionnaire must be retained just those quality characteristics that respondents attach importance to;
- It is advisable to apply the questionnaires differently, accordingly with the year of study;
- The sample of respondents should be balanced in terms of gender, age, presence in teaching activities, student grades.

Because such studies have not been carried out in the Romanian universities, the authors consider that an approach such as the one in the present paper is useful because it synthesizes what literature and practice offers so far, identifying the aspects to be considered for the subsequent development of relevant studies.

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