

# Methodological Opportunities for Improving the Quality of Higher Education Institutions

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## Abstract

As a consequence of the demographic tendencies of the developed countries the competition between higher education institutions is more and more intense in order to have and hold students. In this way they are interested in surveying their students' expectations and satisfaction to find out how and where to improve the institutions while the research also serves other purposes, as well. The present study is aimed at analysing the examinations directed at service quality assessment in higher education. The expectations, experience and the significance of further evaluations are examined. The analyses has happened with the help of literature overview and own quantitative researches. Results show that expectations and satisfaction are rather influenced by personality traits and the type of the given faculty topic than the real competencies.

**Keywords:** management, development, quality, education

**JEL, Classification:** I00, I02, M1

## Introduction

One of the several defects of satisfaction assessment is that the applied research models are of descriptive and not explanatory nature, i.e. they do not examine the origins of 'satisfactions'. Consequently, the development processes based on the results do not regulate where it would be necessary so the impact desired cannot be felt. Our primary objective is to understand what factors and mechanisms in the background define the expectation and satisfaction of clients in terms of the quality of the educational service. Second, we focus on how these factors can distort the perception of institutional quality and thus reduce the efficiency of developments based on satisfaction surveys. Such factors are examined that are likely to influence the feeling of satisfaction but have not been studied so far such as the investment vs. consumption motivation, the time factor, the current market value of the profession, institutional communication and the influencing power of personality traits.

The different approaches and effects of satisfaction assessments are examined in two subheadings: the environmental factors deducted from service and education economics, the quality research methods of service marketing. Then we introduce the antecedents of the signalling theory and finally the dynamics of students' efforts and expectations in the psychological aspect.

## Different Approaches and Effects of Satisfaction Assessments

### *1. Service economic approach*

When examining the service sector the exploration of the following factors must be made. The operating input of the higher education service providers is scarcer due to the unfavourable demographic tendencies and the mushrooming institutions; study programmes etc., which results in increasing competition. The students on the output side appear on the supply side of such a turbulent and far too quickly changing labour market where special expectations arise concerning the quality of education. The financing of the sector doubles. On the one hand, a distinguished state-owned network of education is kept (and maintaining it is becoming more and more difficult) while on the other hand, the share of the private sector in the market of self-financing trainings is getting bigger and bigger (see Fauconnier 2005).

Regulating the sector means the macro-level regulatory environment beyond the operational borders of the subjects (act on higher education; accreditation; supervising; managing institutions etc.).

The impact of the international environment and internationalisation (regionalisation, globalisation) can also be felt.

The approaches based on human capital theory examined only the financial return of education. However, nowadays several attempts have been made to assess the non-financial and external gains of education. Participants can also enjoy the advantages of learning if the future gains are not secured. How do we regard participation in education: as an investment or consumption? We suppose a lot depends on the level of socialisation before and after the service has been provided. Lazaer (1980) poses the question of what proportion of education can be regarded as investment and what proportion is consumption? According to him the response depends on income, social situation and abilities. It is likely with the passage of time that participation in education appears as an investment rather than consumption in the students' mind so the change in this preference system will also alter the relative importance of money, which also affects satisfaction.

It is also worth examining how strong the motivation of selection for the different study programmes is.

People tend to maximise utility, which, as mentioned above, is likely to depend on age and the utilisation of services, as well. For example, for a student the current maximum utility can be being admitted to a given higher education institution. They are happy to have a profession after graduation. However, a graduate will assess whether they maximised utility when he had chosen the institution on the basis of the list of possible job offers.

### *2. Service quality and satisfaction assessment*

Researchers are not unanimous to decide on the best definition and the best measure to assess the quality of service (Grapentine 1999, Grönroos 1984, Robinson 1999). Managing quality is made even more difficult by the fact that there are several grades and steps between the quality criteria set by the service provider and the perceived service quality of the client (e.g. planned quality, performed quality, quality image etc.). Parasuraman et al. (1985) developed the most widely applied model of service quality (the so-called gap model) based on qualitative interviews and customer focus groups. On the basis of the gap model quality parameters serve as reference points in assessing quality and the clients' expectations are contrasted with the perceived service. The result (i.e. the satisfaction of the client) depends on

the communication gaps. The solution lies in assessing, reducing and possibly eliminating communication misunderstandings (Zeithaml et al., 1993).

Tan (1986) conducted a review of the assessment methods used to assess teaching quality in US higher education, in which three types of studies are differentiated: reputational (subject evaluations from 'experts'), objective indicator and quantitative correlate studies. He concluded that: the best way to measure quality is by the use of multiple variables. Yet little success has been gained. Part of the problem lies in the fact that there is little theory to guide researchers in their selection of the 'right' combination of variables to measure quality. (Tan, 1986, p. 259) At present most universities use different variables, questions and assessment methods to assess quality most of which have been developed for in-house use without having their validity or reliability checked.

Clewes (2003) carried out a longitudinal examination on postgraduate students at the biggest British school of business for three years. The results explored three different levels of students' expectations. The first one is the situation before being admitted that mostly contains their expectations towards the course. The second expectation comprises the experience gathered during the course while the third one describes the value judgement of the service after the course so preferences change in time. Haller (1985) draws a similar conclusion.

Another interesting result is that the satisfaction of the postgraduate students is influenced by 'social climate' or 'interactions with other students'. The examination of Wiers-Jenssen et al. (2002) with approximately 10000 students shows a similar result. If we accept that satisfaction derives from the difference between expectations and perceived quality, the generalisation of the measure results on assessing quality is rather dubious. In this way, the segmentation of the sample is inevitable even in the case of relatively big populations.

Nevertheless, quality improvement based on satisfaction assessment is not free from methodological problems. It is an essential that real satisfaction level is not well measurable because satisfaction has variables in space and time. The students have different influencing affects according to the subjects - for example, the student's attitude to the subject, the room facilities, the instructor's knowledge (skills), personality or personal-flexibility. In fact, therefore the satisfaction level is subjective, cannot be really measured, since the individual's current judgment depends on the institution / course / instructor changing factors. (Bíró, 2009)

The experience of several projects on quality proves that the operationalisation of the client and the employee satisfaction modules is rather uncertain in complex quality models (such as EFQM model used in Europe). Defining the intangible quality parameters and assessing them without distortion is rather problematic generally in services and also in this area. Most flaws in assessment are due to the fact that decoding quality parameters is uncertain so the subjectivity of the responses is statistically not acceptable. When this should happen, such responses are mixed in the database whose content differs. It is like comparing the apple with the pear. Experienced opinion researchers say that even lack of response is better than a distorted one.

## **Applying Signalling Theory in Higher Education Services**

The quality perception of higher education is mostly made up of competence-based variables. The concept of competence can be classified in six categories (Málovics et al. 2005, p. 164.).

- The 'real' competence of the service provider: the competencies necessary for providing the service which are selected with the 'mutual consent of the profession'.
- The 'putative' competence of the service provider about the service: subjective judgement on their own competencies as a service provider.
- The 'judgement' of the service provider on the expertise and knowledge ability of the client.
- The knowledge of the client about service technology (expertise).
- The 'judgement' of the client on their own expertise related to the service.
- The 'judgement and thoughts' of the client on the service provider's competence. (This is the point of view of the client, i.e. the real marketing dimension).

It can be seen that communication noise naturally appears in the competence-based quality perception (Málovics et al., 2005).

Any service can hide special risks inside due to its distinguishing features that make them different from a physical product (Málovics et al., 2004). The non-physical appearance and inseparability resulting from its process-like nature are of primary importance. The first one refers to such characteristics of education that we cannot be informed about the future value of education by using our senses as a significant part of its success can only be assessed later on. The latter one means that the service provider and the client create the service product mutually by working together inseparably during the transaction. Due to these factors the risk assessment and satisfaction of both parties are continuously changing (before, during and after providing the service). These characteristics make higher education institutions use different signals for their quality by showing their quality-related competencies to their would-be and current clients on the one hand, and to the supervisory and controlling bodies, on the other hand. However, there can be several purposefully or accidentally made errors (flaws) that altogether can lead to the dissatisfaction of the students or the accrediting examinations.

Indicators stand for competencies and it depends on many factors which one will be selected. Such indicators are the published ranking order of the institutions (the international ranking of universities and colleges), the criteria of admission, the image created by the public relations activity of the institution, the external (physical) appearance of infrastructure and last but not least, the previous student satisfaction assessment results. The indicators can usually be assessed in a quantitative or semi-quantitative way, which makes quality ranking possible. At the same time, they are characterised by duality: they are partly defined by the market –primarily the students- and partly by the qualifying bodies. It is an important issue to decide how strongly the real competence dimension and the given adjective are correlated. Students decide on the basis of certain indicators what competencies the institution concerned has and this can influence their satisfaction although they might not choose the proper indicators in all cases.

The situation is further aggravated by the fact that higher education institutions must transmit signals in many directions and, moreover, realising expectations is also limited and even in certain cases it is the interest of the school to convey distorted signals. As a consequence, for example the expectation of a student being admitted does not correspond with the real competence of the institution. Some signals can be sent that are not counted on by the target groups and that is why they are not efficient. On the other hand, there also are signals that are not transmitted by all means but they are expected. We assume that in a given higher

education institution it varies from faculty to faculty what expectations and indicators count when it comes to assessing them.

The study of Mizrahi and Mehrez (2002) tries to model what the strategy of negotiation processes is like between the institution and the supervisory (accrediting) body representing the educational government in environments with different quality preferences. Strategic variables were examined in two extreme cases:

1. sensitive to quality
2. indifferent to quality.

The criteria of their model hypotheses such conditions that

- a) the educational institution can maximise utility, of low quality standard or quality maximising with high quality standard;
- b) feedback on quality is only exchanged between the educational institutions and the supervisory body, i. e. there is no signal transmitted to the environment outside (the market of education in the strict sense of the word and society itself in its broader sense).
- c) the educational institution can send two kinds of signals to the supervisory body about its own quality standard: low versus high quality criteria.
- d) the supervisory body decides on its behaviour (accreditation, allocation of funds) that basically can be flexible-laissez faire or authoritative- inflexible towards the educational institution on the basis of the signal above.

To analyse the strategic playground between the two parties we have to suppose that there is information asymmetry between the educational institution and the supervisory body, i.e. the educational institution can assess its quality standard exactly while the supervisory body may have limited or even distorted information. It can be illustrated well in the relation between higher education institutions and the accrediting bodies where the self-assessment of the institutions is rather soft despite the central quality criteria. Due to the information asymmetry outlined above a misleading signal may also hide among the communication strategies of educational institutions. Of course, it is always a one-way process, i.e. it really communicates the lower quality standard as higher.

It seems that the domineering strategy of the supervisory body is the same in both cases (the institutions with lower quality standards are regulated inflexibly while those with higher ones flexibly), and the higher education institutions are interested in sending misleading signals in a quality sensitive environment. The most surprising conclusion is that the direct impact of the supervisory body on quality improvement is slight as it is exclusively the development of the attitude of the environment (society) to knowledge that can enforce quality development in a strategic time span. If it is not applicable, the accrediting and quality assurance procedures of higher education rather show compliance with an institutional expectation than real conditions.

By further interpreting the model above it can be deduced that at least two impacts of the environment must be considered by all means. One of them is the impact of communication between the market and society and the institutions while the other is the influence of the competitors on quality strategy. In the case of an environment of a weaker competition (it is the so-called quality indifferent environment) it can take the form of opportunist behaviour towards the supervisory body. It means that the philosophy of 'live and let live' prefers the form of behaviour when the institutions mutually discard the low quality standards of their own.

According to the authors it is the governmental policy of increasing quality sensitivity if a ranking order is set up for the higher education institutions based on quality indicators and it serves as a criterion of selection when promoting or



remunerating civil servants (teachers). In our mind such a system could trigger a series of bargaining in the background that would make objective running questionable.

## The Psychological Dimension

Market tests show that consumer satisfaction depends on how big efforts must be done by a consumer to get the product, and also the expectations about the product. To a certain extent greater efforts result in greater satisfaction (see Cardozo's classic experiment, 1965). Under the term consumers' effort we mean the mobilisation of physical, mental and financial resources to obtain the product.

Two psychological theoretical frameworks provide explanation for the relationship between effort, expectation and assessment. One of them is the contrast theory; the other is the theory of cognitive dissonance. According to the previous one, the consumer whose preliminary expectations are higher than the real value of the perceived product will exaggerate this difference. For example, if someone with high level of expectations was admitted to a study programme at university is more likely to feel more disappointed than their peer who did not have similar expectations. Festinger's dissonance theory, however, gives an account of a contrasting effect. The person who expects to have a product of great value, and instead, they are given something of low value will perceive this difference and experience cognitive dissonance. One of the possible ways to reduce this dissonance is the over-evaluation of the price of the product. Going back to the previous example the student with high hopes will overestimate the service provided in order to reduce their feeling of inconvenience (Oliver, 1980).

Approaching the two basic principles of the two opposing theories is possible by introducing the concept of efforts. If the individual makes efforts in a situation it is more likely that the outcome of the action will have a kind of significance for them. If a significant effort is made, the impact of cognitive dissonance will prevail but if there is no effort at all or only to a slight extent, then the contrast theory is not important as the outcome may not be important. In the case if the consumer only takes few efforts and under-evaluates the service required than it was expected, the level of assessment is lower than that of the agent who made great efforts or whose expectations were higher. Furthermore, with the supposition of great efforts the process of dissonance reduction can intensify the difference between the types of service assessment of those who are disappointed or who are not. The extent of efforts made can also be devaluated.

## Discussion and Conclusion

Expectations and satisfaction are rather influenced by personality traits and the type of the given faculty than the real competencies. For example, a student of economics can take it as a sign of institutional competence if they are transferred to a higher wage category after graduation. However, a student of archaeology can assess their university based on totally different indicators when looking back.

In a certain higher education institution it differs from faculty to faculty what competencies and indicators serve as the basis for assessment by the students so the frequently 'cumulated indicators of satisfaction' in satisfaction assessment examinations are faculty-specific and in this way they cannot be compared.

The results of satisfaction assessment surveys function as a signal in higher education and in the business sector like the other indicators that distort when describing the quality of the institution due to their intangible, non-physical nature.

It can be supposed that in trainings of weaker quality different signals (and competencies) will be taken into account than in 'stronger' institutions regarding quality and satisfaction. It is likely that those who obtain less competitive degrees and have less chance of finding a job will be less satisfied regardless the real institutional competence. For example, in the case of investment motivation the satisfaction of the students of non-business faculties rather depends on their personality and the social network around them than the satisfaction of the students of trainings that socialise them for the rules of business life.

The putative utility maximisation and the satisfaction generated are positively related.

With the passage of time participation in education appears as an investment rather than consumption in the students' mind and changes in this preference system would include the alteration of the relative importance of income in the future.

There are methodological changes in improving the quality of higher education institutions as the students' satisfaction assessment has some methodological obstacles. If significant results could be explored by testing the correlations above (by qualitative and quantitative methods) between service quality and satisfaction as well as the moderating factors. It would beneficially contribute to the improvement of quality assurance methods applied in higher education so far and changes made in institutional communication with students and society by using the segment typology which is derived from the research results.

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