

STUDY REGARDING STUDENTS' SATISFACTION WITH INSTRUCTIONAL PROCESS AS A DIMENSION OF ACADEMIC PERFORMANCE OF INSTITUTIONS OF HIGHER EDUCATION

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Economic education in Romania has gone through many changes in recent years, in order to modernize and adapt to the requirements of the economy based on knowledge. But, regardless of the stage, students' satisfaction is a key criterion for assessing the relevance and the accomplishment of the mission of universities in society. The highest satisfaction should be a constant concern for managers of higher education institutions. In order to achieve this goal, it is very important to periodically determine which are the most significant factors for students, how satisfied are they and which is the performance of the higher education for these attributes. The knowledge transfer process and the degree to which we can speak of a modern university tailored to the needs of the business environment and focused on increasing the relevance of the educational process for the labour market can be appreciated taking into consideration the content of the educational activities. The objective of this research is to identify relationships between the importance, satisfaction and performance of the instructional process in the process of improvement of the university management and the creation of better university programs. Our analysis was based on an empirical research conducted in a major Romanian faculty in the field: Faculty of Economics and Business Administration of Cluj-Napoca. The research was carried out by means of the survey method using quota sampling. Findings have revealed a significant positive contribution of the assessed factors to the increase of the quality of educational process. Also the factors that characterize the instructional process are correlated. The results revealed students' concern to acquire practical knowledge. There is also a significant difference between students' expectations and students' satisfaction regarding the quality of the content of teaching activity. Unfortunately, in case of all factors the performance of institution was negative associated with a number of negative effects.

Keywords: institutions of higher education, educational management and marketing, quality of educational services, student satisfaction, instructional process.

JEL Classification: I21, I23, M39

1. Introduction

Brătianu and Pop (2007:9) stated that even if the educational management and marketing in Romanian universities aren't a novelty, the instruments used are often simple or inappropriate. In the present context, both the Romanian universities and companies face the same problems (Pop, et al. 2009: 215): establishing a connection with the environment, raising resources, developing and providing quality services that contribute to the social welfare of the community, attracting

new customers and building their loyalty, maintaining a good image, fighting the intensifying competition and so on.

The competition in the current educational environment is intense due to the internationalisation of education and the impact of information technology and communications. Given the present context of global economy, the situation is even more dramatic in the case of the economic education. This competition profoundly affects one (but not the only one) essential components of a university mission: the learning process, the essence of the educational process, focused on knowledge transfer and creation of skills and competences usable in the labour market. The degree to which we can speak of a successful university can be determined through the overall satisfaction felt by its main category of public, namely the students, taking into consideration the content of the educational activities. This element along with the evaluation process and the quality of the human resources represent the main components of the instructional process and thus their evaluation is the first step to develop better educational programs.

2. Literature review

In order to provide educational services at the European Union level, the Romanian institutions of higher education must improve the educational management and marketing practices, especially given that the percentage of the budget funded by universities and students increased. (DesJardins 2002:531).

The increasing competition among universities, the decrease in government funding, the students' expectations increase and the general decline in birth rate have led to the awareness of the importance of providing quality educational services in order to retain a sufficient number of students with high abilities (Canic and McCarthy 2000: 41; Li-Wei 2005: 863). Researches show that student's satisfaction is the factor that contributes most to students' loyalty (Helgesen and Nettet 2007:51; Brown and Mazzarol 2008:90). Student satisfaction is defined by Elliot and Healy (2001: 2) as "a short-time attitude resulting from an evaluation of a student's educational experience" which occurs when the current performance meets or exceeds the student's expectations (Parasuraman, Zeithaml and Berry 1985: 42). Research undertaken by Munteanu et al. (2010: 138) had also shown that the most important satisfaction factors are different in case of students with low and high performance.

Hishamuddin et al. (2008) stated that there is a positive correlation between the quality of educational services and student satisfaction, thus the improvement of the services can lead to higher satisfaction. Aldridge and Rowley (1998:202) have found that students' dissatisfaction affects the learning process leading to low performances or even to abandonment of the studies. The necessity to determine students' satisfaction in order to improve the education management was confirmed by Carey, Cambiano and De Vore (2002:97) which found that higher education managers are rarely focused on determining students' satisfaction and believe that the satisfaction level is higher than the real one.

3. Study objectives and methodology

The main objective of the study, namely identifying the current situation of the economic higher education in Romania by evaluating its empirical dimension and its relevance for the labour market and using the satisfaction of those directly concerned with these issues - the students, in order to create more performant educational programs. Strongly connected with the main objective of the paper (and subsidiary to achieve it) we considered also important to study the following aspects:

- O1. Identifying the performance of higher education institutions as difference between student's expectations and perceived value of received services.

- O2. Identifying the main factors that contribute to the satisfaction with the instructional process.
- O3. The contribution of the satisfaction with the instructional process to the overall satisfaction with the economic higher education.

This research was carried out by means of the *survey method using quota sampling* (year of study, line of study, specialization). It employed the interview technique while the questionnaire was the instrument of data gathering. The study was conducted on a sample of 490 students enrolled at the Faculty of Economics and Business Administration of the „Babeş-Bolyai” University of Cluj-Napoca. The hypotheses of the study were:

- H1. There are several significant differences between the expected level of the factors specific to the educational process (represented by importance) and the perceived value from the educational experience (represented by satisfaction).
- H2. The factors contributing to students’ satisfaction with the instructional process are highly correlated.
- H3. There is a dependency relationship between the factors which influence the instructional process and the overall satisfaction, all these elements significantly influencing the relevance of the educational process.

The evaluation of the educational process in terms of its empirical character, adapted to the requirements of the society as a starting point for development of performant economic educational programs, focused on the labour market needs, was carried out through one dimension of educational experience: the content of the teaching activity, which contains eight items. Students were asked to evaluate their academic experience by comparing the importance of the considered factors and their satisfaction with these factors using a six-point scale, ranging from (1) “not at all important” to (6) “very important” and from (1) “not at all satisfied” to (6) “very satisfied”. It has also been determined the “satisfaction with the instructional process” and the “overall satisfaction with the educational experience” using same scale.

First of all, we determined the internal reliability of the items used to measure the content of teaching activity, namely the importance and satisfaction scores. Thus, we resorted to *Cronbach’s alpha reliability coefficient*, Item-total correlation and Cronbach’s alpha “if item deleted”. The value of the *Cronbach’s alpha coefficient* was 0.889, indicating a high internal reliability. We also have a high internal reliability of the model when analyzing the reliability of the items used to evaluate the level of satisfaction with the educational process, because the *Cronbach’s alpha value exceeds 0.850*. Therefore, all the conditions are met and we can proceed to the next step, namely data analysis and the interpretation of the results.

4. Research Results

In order to achieve the first objective, namely identifying the three key dimensions of the educational experience – student expectations, their satisfaction and the performance of the educational institution, we have identified the mean scores for the importance and the satisfaction with the content of teaching activities (Table no.1).

Table no. 1. MIS, MSS and MPS regarding the content of teaching activities

	MIS	MSS	MPS=MIS-MSS	t-Student
<i>1.1. Valuable content of the courses</i>	5.44	4.38	1.06	t=17.932
<i>1.2. Interactiveness of the courses</i>	5.31	4.27	1.04	t=15.778
<i>1.3. Practical courses are based on case studies</i>	5.30	4.23	1.07	t=16.715
<i>1.4. Information is up to date</i>	5.33	4.43	0.9	t=13.411

	MIS	MSS	MPS=MIS-MSS	t-Student
1.5. Specialists from companies are involved in teaching activity	5.24	3.74	1.5	t=21.087
1.6. Students may choose the desired courses	5.30	3.94	1.36	t=21.842
1.7. The courses offer is adequate	5.34	4.39	0.95	t=14.998
1.8. Opportunity for internships	5.40	4.17	1.23	t=14.144
The content of teaching activity	5.34	4.20	1.14	(****)

MIS= Mean Importance Score; MSS =Mean Satisfaction Score; MPS= Mean Performance Score

**** significant at $p < 0.001$. Source: authors' calculations

Then, in order to identify the institution's performance, we analyzed the differences between the importance and the satisfaction with the analyzed factors, as in the presented methodology. The results show that we have high or very high importance for all the factors investigated. The most important aspects of the educational dimension of the content is "valuable content of the course", "opportunity for internships", "the courses offer is adequate", and "information is up to date". As we can see, students' first focus is on acquiring practical, relevant and complete knowledge in order to integrate easily into the labour market. Therefore, the opinions of the students can be successfully used as a predictor of the relevance of the economic education to the business environment (H3), because this aspect is their main concern through the instructional process.

"The involvement of specialists from companies in teaching activity" is the factor with the lowest mean importance score. This is probably due to the high confidence that students have in the skills of university professors.

The highest values of the mean satisfaction scores regarding the content of education are encountered for "information is up to date" (the fourth most important factor), "the courses offer is adequate" (the third most important factor) and "valuable content of the courses" (the most important factor). Just in case of "the involvement of specialists from companies in teaching activity" (the least important factor) and "students may choose the desired courses" the mean satisfaction scores are lower than 4 ("mostly satisfied").

Analyzing the differences between the mean importance score (as an indicator of the expected value of the service) and the mean satisfaction score (as an indicator of the actual value provided), we obtained positive results for all factors considered in the case of the content of teaching activity. Therefore, at least at the moment, there is a negative performance of the educational institution in the case of content of teaching, meaning that the delivered services are lower than students' expectations. In order to determine the reliability of the results, the differences between MIS and MSS were tested using the Student t-test, which confirmed the existence of significant differences between the two dimensions considered (H1).

The worst performance is recorded for "the involvement of specialists from companies in teaching activity". Although it is the factor with the lowest importance it seems that the institution is far from reaching the level desired by the students. If we also take into consideration the performance of "opportunity for internships", we may conclude that the partnerships or the collaborations between academia and the private sector are not enough developed.

Instead, the smallest difference between what the students want and what the students get is for "the information received is up to date" and for "the courses offer is adequate". However, the result is very interesting, as students are willing to take a higher number of courses than they actually do. This means the economic institutions of higher education should increase the number of the subjects and the number of classes and not reduce them as in the last years.

Analyzing the relationships between the dimensions of the educational process (using the Spearman's correlation coefficient, for ordinal variables), we have noticed that an increase in the satisfaction of any factor (Table no. 2) implies an increase in the satisfaction level for all the other factors (*H2 was confirmed*). The same influence is displayed on the entire instructional process. Thus, the satisfactions with "valuable content of the course" and with "information is up to date" are strongly linked to the satisfaction with "interactiveness of the courses" (the most intense correlation identified). Those students, who appreciate the participation of specialists from companies in the teaching activities, equally appreciate the opportunity to choose the desired courses. The assessment of the "valuable content of courses" also implies to take into consideration the amount of "up to date information". We may conclude that the "interactiveness of the courses" is assessed through the others elements of the quality of teaching content (the most by the "valuable content of the courses" and the least by "opportunity for internships"). But for the entire instructional process it's not as relevant as the "information up to date" and the "valuable content of the courses" which have a greater influence.

Table no. 2. The Correlations between the scores of students' satisfaction with the Content of teaching activity

Rho	I.P.	1.1	1.2.	1.3.	1.4.	1.5.	1.6.	1.7.
1.1	0.376		(**)	(**)	(**)	(**)	(**)	(**)
1.2.	0.337	0.632		(**)	(**)	(**)	(**)	(**)
1.3.	0.349	0.498	0.537		(**)	(**)	(**)	(**)
1.4.	0.382	0.529	0.552	0.475		(**)	(**)	(**)
1.5.	0.275	0.380	0.519	0.360	0.465		(**)	(**)
1.6.	0.317	0.470	0.493	0.430	0.380	0.538		(**)
1.7.	0.269	0.491	0.443	0.316	0.421	0.250	0.326	
1.8.	0.203	0.269	0.334	0.305	0.320	0.356	0.388	0.318

*I.P.=Instructional Process; Rho= Spearman's correlation coefficient; **significant at $p<0.001$.*

Source: authors' calculations

Next, we sought to determine which of the 8 factors used to assess the satisfaction with the content of teaching activities are the best predictors of satisfaction with the instructional process (O2.) through a multiple regression. First of all we converted the independent variables into standardized variables (z-scores) to avoid the multicollinearity problems. Only one significant predictor was identified: the valuable content of the course, the dimension which may be interpreted as the knowledge utility and relevance in the labour market (*H3*), (*Beta=0.250*). The value of F statistics obtained from the ANOVA table was 23.389 ($p<0.001$). The coefficient of determination ($R^2=0.276$) (standard error of the estimate=1.148) suggests that about one third of the variance of the satisfaction with the instructional process is determined by the selected factor. Next we tried to identify to what extent we can predict the overall students' satisfaction with education (Mean=4.27, SE=0.066) based on the satisfaction with the instructional process (Mean=4.33, SE=0.083) (O3.). The results of the linear regression allowed us to construct the following model: *Overall satisfaction with education=2.539 (0.335)+0.417(0.017)* Satisfaction with the instructional process*. Test value $F=29.928$ ($p=0.000$) from ANOVA table shows that the variation explained by the model is not due to chance, but to the factors considered. The coefficient of determination ($R^2=0.110$; Standard error of the estimate=1.229) indicates that 11% of the variance of students' overall satisfaction with education is explained by the satisfaction with the instructional process, while the rest of the variance is due to other factors.

5. Conclusions

The objectives of this study were firstly oriented to determine the expectations and students satisfaction with the content of teaching activities as a key dimension of the relevance of higher education to the society and in particular to the business environment. The results revealed students' concern to acquire practical knowledge, identified by their interest in "the valuable content of the courses", receiving "up to date information" and "opportunity for internships". Another result of this study shows that students may experience high levels of satisfaction both in the case of factors considered very important ("the valuable content of the courses") and in the case of factors considered less important ("practical courses are based on case studies"). The hypothesis of the existence of significant differences between students' expectations and students' satisfaction regarding the quality of the content of teaching activity had been verified. Unfortunately, in case of all factors the performance of institution was negative associated with a number of negative effects described above.

Factors that characterize the instructional process are correlated. Thus, the increase of satisfaction of any factor determines the increase of satisfaction for all other factors in both categories: the content of teaching activities and the quality of professors. Satisfaction with instructional process is most strongly related to satisfaction with the valuable content of the courses and the novelty of information, first one being the factor with the most significant contribution to the satisfaction with the instructional process (best predictor).

Latest findings of the study reveal a positive contribution of the satisfaction with instructional process to the overall satisfaction with education. Another conclusion we can draw is that the economic institutions of higher education should focus in case of recruiting and retaining strategies on different dimensions of the educational experience. Recruitment strategies must focus on the dimensions considered the most important in this case the valuable content of the course and the opportunity of internships. Retention strategies should be focused on ensuring student satisfaction and therefore be focused on improving the performance of the institution with the factors that contribute the most to their satisfaction with the instructional process.

Given the limits of research (the investigated population is not representative for the whole academic economic community) we believe that research objectives have been achieved by identifying some important factors to increase the relevance of higher education for business environment and society and some relationships that allow the improvement of the instructional process.

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