Csaba B. Illés, Tímea Kozma

Szent István University, Hungary

MOTIVATING FACTORS INFLUENCING INSTITUTION AND PROGRAMME SELECTION AMONG FIRST YEAR BACHELOR STUDENTS OF AGRIBUSINESS IN HUNGARY

CZYNNIKI DECYDUJĄCE O WYBORZE INSTYTUCJI I PROGRAMU PRZEZ WĘGIERSKICH STUDENTÓW PIERWSZEGO ROKU AGROBIZNESU

Key words: higher education, registration, selection among institutions, BSc in agribusiness
Słowa kluczowe: kształcenie wyższe, rejestracja, wybór instytucji, licencjat w agrobiznesie

Abstact. The general changes in the Hungarian higher education in the last few years have strained the competition between the different institutions and, as a consequence, the situation of several traditional agricultural training institutions has become difficult. More institutions have recognized the growing importance to identify the candidates' motivations in order to establish the institution's strategy and to keep and/or improve its competitiveness. In this paper we make a summary of the nationwide survey which was performed in 2008, and which was based by the results of the motivation enquiries regularly taken in our Faculty.

Introduction

The Hungarian educational system has changed fundamentally in the former two decades. The role of education has improved in the fields of socio-economical development, better quality of living, carrier management, and the establishment of better quality of working conditions and, in addition, the better use of the talent and abilities of the individuals. The institutional background of education has changed, the age limit of compulsory education has increased, the system of vocational training has also changed, the mid-level graduation system became general, the opportunities of higher education have increased and the development of adult training has accelerated [Barakonyi 2004].

The number of candidates to the higher educational institutions has increased since the 90ies continuously. The increase of the headcount level has developed not only the number of candidates, but also it has brought fundamental changes in the Hungarian higher educational system. In the one hand, there is an increase in the number of the participants of higher education, but in the another hand there is also a decrease as a consequence of the negative demographic trends.

As a consequence of these processes and despite the changes of the entrancing system, the knowledge level of the first year students show a wider deviation in comparison with the previous standards.

The situation is more serious in agricultural training programmes. The position of these trainings has become very difficult, since the prestige, the economic significance and the role in the employment of the agricultural sector has decreased. These negative changes have caused changes also in the students' attitude. The number of the applicants for the agricultural trainings has decreased not only on the whole, but also in the share of applications at the first place; the entrance limits of several agricultural training programmes have decreased radically. The government has reduced the supported headcount at the agricultural education, thus, the situation has worsened. In spite of the decrease of the quotas and the number of the candidates, the number of the agricultural institutes and faculties has remained at the same level, or, increased, by starting new programmes. It can be stated, that the agricultural education is one of the losers of the changes of the higher educational system.

Several institutions have recognized that the exploration of the candidates' motivating factors and the development of an overall strategy can improve and/or maintain the competitiveness of the given institution in these altering circumstances.

The background, objectives and method of the research

Tthe examination of the motivating factors influencing institution and programme selection among the first year students have been conducted for six years in the Faculty of Economics and

Social Sciences of the Szent István University, Gödöllő. On the basis of the results of these researches our surveys were expanded to a nationwide level (n = 1499), for 3 educational programmes (BSc in Agrobusiness and Rural Development (ARD); BA in Commerce and Marketing (CM); BA in Management and Business Administration (MB)) in 2008. The nationwide survey has examined all important Hungarian institutions which have ARD course, both CM and MB courses (6 university and 2 college faculties). The survey was extended both for full time and part time students.

In the survey we intended to explore the general motivating factors of the candidates which can influence the selection among institutions and training programmes, the different methods and habits of collecting information and the difference between motivating factors in the selection among the institutions of different locality.

In this paper we make a summary of the results of our survey on the motivating factors influencing institution and programme selection among first year full time and part time students of ARD course, and also make some comparisons between this course and economic courses (CM and MB courses).

The questionnaire has contained mainly closed questions, but also open questions and multiple choice questions have been included. In the course of the composition of the questionnaire we used the results of Lehota and Komáromi [1998] and Hetesi and Kürtösi [2008]. The questionnaire was completed at the registration of the first year students at the beginning of the 2008/2009 semester.

The questionnaire database was processed by the SPSS statistic programme. The first step of the evaluation was the calculation of the descriptive statistic indicators of the total database (frequency, relative frequency, distribution of the answers, averages and deviations of scale questions). After this process, the evaluation and comparison of the segments of the samples were conducted. The segments were made partly on educational and geo-demographic issues, such as BA/BSc course, type of the course (full time or part time), gender, income, place of residence. The chi-square test was used to show the significant coherencies and differences in nominal questions, and variance analysis was used in case of scale questions. The differences were considered significant at 95% level. For the evaluation of the inner construction of the scale questions (for example motivating factors) factor analysis was used, and, in special cases we used varimax rotation. According to the motivating factors different segments were established by cluster analysis (k-means clustering), but it exceeds the objectives of this paper.

The composition and introduction of the samples

The questionnaires were given to the registered students of ARD BSc course, the share of the appreciable answers were 65% (n=277). The proportion by gender was 50-50%. 60% of the sample has graduated at secondary school in case of full time courses, while in part time courses the half of the students graduated in secondary school, the other half graduated in technical secondary schools. Differences could be observed in the secondary school performances, namely 50% of the students of full time courses were above the 4 grade level (good), while this proportion was lower among the students of part time courses (at about 30%). Roughly half of the students of the correspondent courses are to be first generation intellectuals, while this proportion is 35% among the students of full time courses. The main elements of the questionnaire were the following:

– measuring the demographic data of the participants of the survey,
– examination of the factors of social scale of values,
– analysis of the motivating factors for the selection of universities, faculties and courses,
– the use of information sources for higher education facilities and determination of information gaps,
– estimation of the expected costs of higher education,
– determination of the possible competitors of the given courses.

Results of the research

Factors influencing the registration to university

In the first question those factors were examined, which can show the social appreciation of the given profession. The factors were ranked at a scale from 1 to 5 (1 is for not important, 5 is for very important).

According to the answers the most important factors of the social appreciation of the given profession (i.e. the course in question) are the prestige of this profession and the high salary. The possibility of managerial positions, the high level of independence and the social usefulness of the profession are slightly less important. The least important factor of social appreciation was the creativity of the work according to the answers of the questionnaire. (Table 1). In order to determine the inner coherency of

the answers a factor analysis was made, by which 3 main factors could be determined (Table 2). The factors have accounted for 64.5% of the variance of samples. ARD courses are close to the economic courses, only the rank of the F1 and F2 factors have changed. When analysing the structure of factors, it can be proved, that the factor of appreciation plays a determinant role in the 24.5% of the answers, and evidently, the sign of the individual appreciation (high salary) is the opposite of the social appreciation factor (social usefulness). The factor of working conditions is determinant in 21% of the answers, while this proportion is 19% in case of the factor of the profession.

The next question aimed at finding out which conditions of the ones listed the respondents considered important when applying to an institution of higher education. The difference between types of course is shown on Figure 1. Figure 1 shows that the students chose among the higher educational institutions carefully, in general, taking into consideration not only the standard of the courses, but also their own interest, personality and future plans. One of these plans is to continue the studies at master courses, which has appeared at the answers of the students of both full time and part time courses.

External factors such as „to get away from home" or „selection by pure chance" or „frequent applications from my home school" have modified the decisions least of all.

In the full time courses, as it was expected, the significance of such factors as „I can remain a student for longer", or the accommodation in youth hostel, the sporting and cultural facilities of the given institution had less importance, but, other factors (for example the easily accessible from home and to continue the family traditions, or the financial bacground of the family) were significantly more important. This can be explained by the fact that these students continue their studies parallel to their work, thus they spend only short time in the institution.

Students of the full time courses have no or minimal experiences at autonomous work, thus they preferred factors such as high salary, the prestige of the profession and the working possibilities after graduation. On the basis of a six-year database of our faculty, it can be stated that the distance between the residential place of the students and the educational institute has significantly decreased since the introduction of the Bologna system (2006).

One of its reasons is the linear educational system, namely, in the first half of the training the students are at the same level (bachelors' degree) either at the universities or the colleges, thus, the number of possible higher educational courses has increased. The growing importance of the distance between the residential place and the educational institution can be explained by the increase of the costs of the studies.

The residential place of the students are concentrated near the educational institutions (Figure 2) thus, the importance of the accommodation in youth hostels has decreased, even among the students of full time courses. The inner coherencies of the factors which determine the selection among institutions and courses were explored by factor analysis, by which 7 factors were differentiated.

Table 1. Factors determining the social appreciation of the given profession

Factors	ARD F	ARD P	Total (ARD)	Total (CM, MB)
Ranking and prestige of the profession	4.26	4.30	4.27	4.38
High salary	4.25	3.75	4.17	4.06
Managerial positions linked to the profession	3.80	3.53	3.76	3.81
High level of independence	3.65	3.68	3.65	3.54
Social usefulness of the work	3.60	3.77	3.63	3.67
Creative nature of the work	3.18	3.32	3.20	3.18

Abbreviations: ARD – BSc in Agrobusiness and Rural Development, CM – BA in Commerce and Marketing, MB – BA in Management and Business Administration, F – full-time course, P – part-time course.
Source: own calculations.

Table 2. Rotated factor matrix of the factors determining the social appreciation of the profession

| Factors	F1 factor of appreciation	F2 factor of working conditions	F3 factor of the profession
The significance of the factor [%]	24.5	21.0	19.0
Social usefulness of the work	0.819		
High salary	-0.716		
High level of independence		0.788	
Creative nature of the work		0.787	
Ranking and prestige of the profession			0.797
Managerial positions linked to the profession			0.717

Source: own calculations.
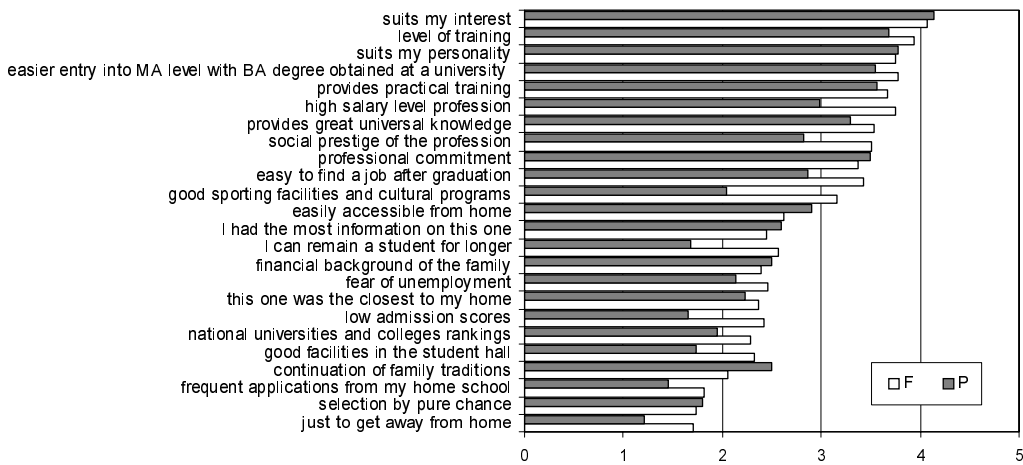
Figure 1. Motivating factors for the selection among different institutions and courses among the first year students of full time (F) and part time (P) courses
Note: 1 – irrelevant; 5 – very important
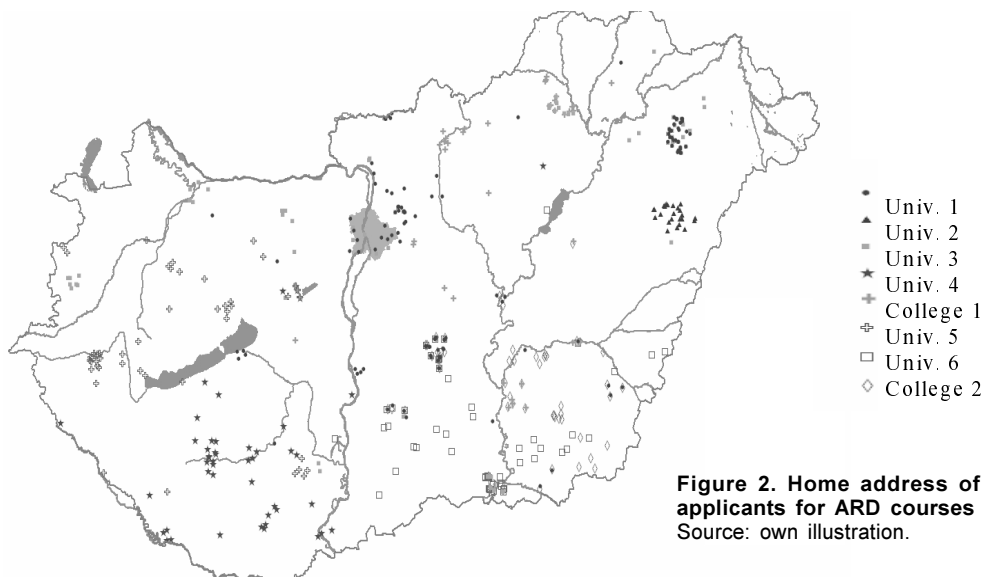Source: own illustration.

**Figure 2. Home address of the applicants for ARD courses**
Source: own illustration.

These factors explained the 58% of the variance in total, the share of the different factors in details can be represented by the following results: factor of personal interest 16.3%, the reputation of the institution 14%, infrastructure of the institution 7.1%, distance between the residential place and the institution 5.8%, factor of the acknowledgement of the profession 5.7%, the factor of well-based knowledge 4.9% and the family traditions 4.2%.

Evaluation of different information sources

In the questionnaire there were questions about the importance of different information sources about the given institutions and training courses. The different information sources could be ranked at a scale from 1 to 5 (1 is for not important, 5 is for very important).

According to our evaluation those information sources can be considered most important which were ranked at least by grade 3 (Figure 3). The students of both course types regarded the same four information sources as most important, namely the website of the faculty or institution;
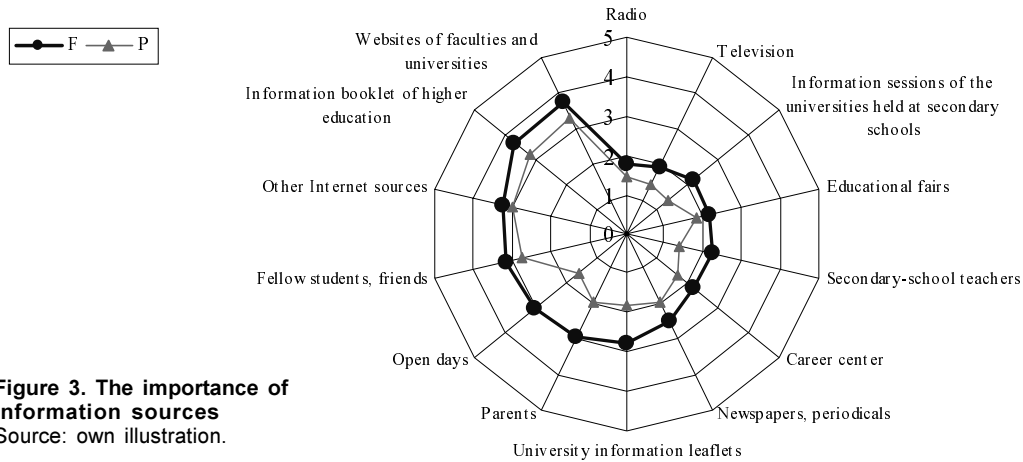
Figure 3. The importance of information sources
Source: own illustration.

information booklet of higher education; other internet sources; friends and fellow students. In case of the students of correspondent courses other information sources were ranked under the average grades, while the students of the regular course have specified three more information sources as important (grade 3): university or faculty open days; parents; and information leaflets.

According to the examinations at our faculty it can be stated that the importance and the rank of different information sources has changed radically in the last six years.

Among these sources the information booklet of higher education which is published by the Ministry of Education has been regarded as one of the most important information sources, but its dominancy has decreased continuously, moreover, in 2008 it has lost its former first place. The importance of the electronic information sources is growing significantly, mainly in case of the part time courses. The role of the personal connections is more important in the full time courses. These differences between the two course types can draw attention for the different use of marketing tools.

The inner coherencies of the information sources were explored by factor analysis. The analysis resulted four information factors (shown in Table 3) which explain the 56.6% of the deviations in total. The share of the information sources connected directly to higher education is 29.9%, the share of media tools as a separate factor is 10.4%, the share of the institutional information sources is 8.5% and the share of E-factors is 7.7%.

As compared to the former researches [Illés et al. 2005] the use of information sources shows a continuous change both from the institutional side and both from the students' side.

Most of the applicants to the Hungarian higher educational institutes generally postpone their decisions to the last deadline, in spite of their information level (which was sufficient according to

Table 3. Rotated factor matrix of information sources

Factors	F1 factor	F2 factor	F3 factor	F4 factor
Importance of the factor [%]:	29,9	10,4	8,6	7,7
open days	0,625	0,117	0,260	0,235
university information leaflets	0,599	-0,035	0,329	0,381
parents	0,587	0,238	0,022	-0,164
fellow students, friends	0,567	0,149	-0,254	0,117
secondary-school teachers	0,567	0,232	0,261	-0,119
radio	0,209	0,873	0,033	0,128
television	0,268	0,809	0,143	0,172
career center	-0,067	0,339	0,760	0,023
information booklet of higher education	0,093	-0,124	0,690	0,155
information sessions of the universities held at secondary schools	0,380	0,343	0,534	0,034
educational fairs	0,259	0,072	0,432	0,384
websites of faculties and universities	0,122	0,028	0,037	0,786
other internet sources	-0,187	0,233	0,112	0,707
newspapers, periodicals	0,345	0,393	0,182	0,424

Abbreviations: F1: factor of information sources connected directly to higher education; F2: factor of media tools; F3: factor of institutional information sources; F4: factor of E sources.
Source: own calculations.

the 93% of the students). 42% of the applicants made their decision in the last month before the application deadline, and 74% of the students sent the application forms few days before the application deadline. In the development of the schedule of the intensity of the PR activities these facts should be taken into consideration.

Conclusions

The nationwide survey has confirmed our hypothesis, namely that, the coherencies of the students' selection among different institutions and courses can be verified by statistical calculations. These results should be taken into consideration in the elaboration process of the schooling strategy of the given institution in order to ensure the successful operation and the continuous reinforcement.

According to our observations the examination of these motivation factors are taken into consideration as a tool of the schooling strategy, but it should also be used in the development of educational methods and the elaboration of the structure of the courses.

In case of secondary school students the following coherencies could be found as a result of the examination of motivating factors in the selection among institutions:

1. The most important factors of the selection of university/college, course and training type were the following: personal interest, educational level of the given institution, the personality, the future plans of the applicant, and (mainly at the full time courses) high salary.
2. The following factors were insignificant: „to get away from home", „selection by pure chance" or „frequent applications from my secondary school".
3. The results of the examination of the information sources showed that there are no significant differences between ARD BSc course and the two other economic courses (CM and MB), but the differences between the full time and part time courses were significant. This should be taken into consideration and the marketing tools should be differentiated according to the type of the course.
4. The role of the electronic information sources is increasing in the selection among institutions.
5. The distance between the residential place of the students and the institution became a more important motivating factor in the last few years.
6. The selection of the institution is more important than the selection of the course.
7. There are statistically verified differences in the selecting factors and the family and social background between the students of the full time (mainly state financed) courses and the students of part time courses.

Bibliography

Barakonyi K. 2004: Rendszerváltás a felsőoktatásban – Bologna folyamat, modernizáció. (The change of regime in tertiary education in Hungary. The Bologna Process, Modernization). Akadémiai Kiadó, Budapest.

Hetesi E., Kürtösi Z. 2008: Ki ítéli meg a felsőoktatási szolgáltatások teljesítményét és hogyan? A hallgatói elégedettség mérési modelljei, empirikus kutatási eredmények az aktív és a végzett hallgatók körében (Who is to judge the level of services provided in the field of higher education and how? The modells measuring student satisfaction, the results of empirical research among active and graduated students). *Vezetéstudomány*, vol 39, no 6, 2-17.

Illés B. C., Kozma T., Komáromi N. 2005: Factors of motivation to select institution among applicants to the Faculty of Economics and Social Sciences. *Bulletin of the Szent István University*, 237-246, Gödöllő,

Lehota J., Komáromi N. 1998: A középiskolai tanulók intézményválasztását meghatározó tényezők jellemzői és összefüggései. Characterictics and relationships of factors of choosing institutions from high school students. XL. Georgikon Napok, Keszthely, 345-349.

Warner D., Palfreyman D. 1996: Higher Education Management. The Society for research in to higher education and open university press.

Streszczenie

W artykule przedstawiono powody, dla których studenci pierwszego roku agrobiznesu na wydziale Nauk Ekonomicznych Uniwersytetu Rolnego w Gödöllő na Węgrzech zdecydowali o wyborze instytucji i programu nauczania.

Coressponding address:

Prof. Dr Csaba B. Illés, Tímea Kozma
Szent István University, Institute of Business Management
Páter Károly út 1. 2103 Gödöllő
tel. +36 28 522 000 ext. 2013
e-mails: illles.b.csaba@gtk.szie.hu, kozma.timea@gtk.szie.hu