Information and Knowledge; Communication

Education and Research Institutions The Professional Orientation Analysis of High School Students

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Abstract: The article deals with a number of aspects concerning the professional orientation of high school students.

Keywords: university; students; Spearman

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1. Introduction

Professional orientation of high school students is of great importance for future career choice and, also, for the good of higher education. For this reason, we performed a survey in major high schools in the city of Galati and Braila, which, with a total of 500838 inhabitants, is situated, after Bucharest, to the second ranks among Romania's urban areas. In the operation were investigated 738 students of class XII coming from 17 schools, constituting a representative sample of the total number enrolled.

2. The Overall Analysis of the Results

The first question of the questionnaire was: "Do you want to continue your education after high school graduation?". On this question, 99.32% of students answered "yes", only 0.68% desiring training interruption.

The second question asked students the accurate of formal education where they wish to continue their studies. Thus, while post-secondary schools were preferred by only 5.73%, the remaining 94.27% want to attend university (86.77% with frequency and 7.50% with part-time frequency or to the distance).

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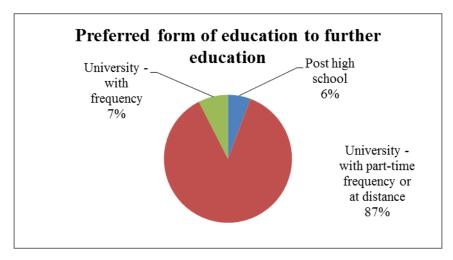


Figure 1.

The next set of questions focused on the advantages that the student believes that upon completion will have some form of higher education. On the first place was located the target to finding a job (34%), followed by the desire to continue their studies after graduating a university (28%), obtaining a higher remuneration for work (16%), acquisition of socio-vocational education (15%) and only in the last resort, a diploma (7%).

It is observed, from the responses, that the current economic difficulties have shifted the orientation of the period 1990-2000 in which it was intended, most often a diploma, to the post graduation employability. Also, it is noteworthy that almost a third of students do not want to interrupt studies with the first post-high school training course, appreciating the need for training by masters and / or PhD.

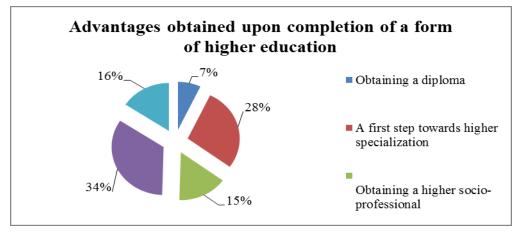
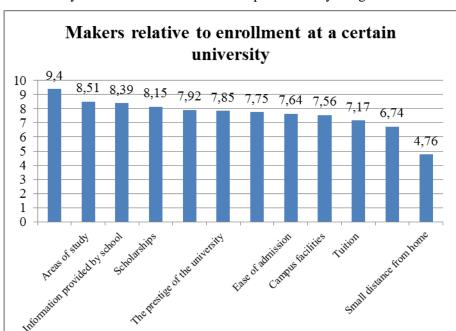


Figure 2.



Another set of questions focused on factors that contribute to the choice of the faculty. Students noted from 0-10 importance they assign a factor.

Figure 3.

Here is gratifying that on the first place are the job opportunities after graduation (with a score of 9.4 close to scoring maximum) which is a serious indicator of change Romanian system of teaching and learning, must focusing more on practical character.

Areas of studies and information provided by the college are somewhat related and is also an important factor in the decision guidance by a certain faculty, students giving them high enough grades: 8.51 and 8.39 respectively.

Getting scholarships ranks relatively lower among policy makers, simply because at the age of 18-19 years of interrogation subjects, they still do not realizing the financial difficulties which have to overcome their parents, especially when the future student will go to an institution in another place than home.

Relative to the degree and level of interaction with university staff we appreciate that the question was not very accurate, being not referring explicitly to teaching and/or support staff (secretaries, library etc..). For this reason, somewhat middle grade (7.92) reflects a trend of relative indifference to the subject.

Problem prestige university received a grade rather small (7.85) which shows (as we shall see further) weak involvement of teachers in secondary education coordinators relative to quality issues that would have to consider prospective students. How the quality of education is closely linked to employment opportunities after graduation note that there is a large discrepancy, students wanting a good job, but being less interested (in fact, are poorly aware) about the quality of their training that would place them on a appropriate place in the labor market. Here is maybe about mistrust of the use by Romanian society the individual to its actual capacity.

Part-time employment opportunities on campus is a factor which does not give pupils than average attention, because it is known the weak demand of the students in paid work request by the institution.

The problem of admission is somewhat neglected adimiterii (rated 7.64), students were informed that the majority of educational institutions not organized competitions for admission, this being carried out on the basis of external (and possibly baccalaureate some disciplines) and, on the other hand, sufficient number of places in all universities providing admission.

Campus facilities are towards the end of preferences (7.56 – the 9-th place out of 12) which is a real signal, especially given to the private educational institutions that pride, often with exceptional amenities, but focussed low effective educational process.

Tuition ranks tenth among the criteria (7.17) because of the obvious direction to State Universities, but also because of its failure to pay from their own sources.

Location and distance university from house are reduced to insignificant factors, the tendence of independence and distancing from family being age-specific. This is a warning to universities that focuses its campaigns on the idea of "staying in your town, you are close to home, costs are low and so on". It is observed from the above that all these so-called advantages are insignificant in the eyes of future students.

Should be noted that, assuming a normal distribution of responses subjects, with a higher probability of 0.95, they falls in the range: [5.47,9.83] so basically, the distance from home can actually be ignored as decision maker.

The next set of questions aimed at identifying human factors that can influence the enrollment to a certain college.

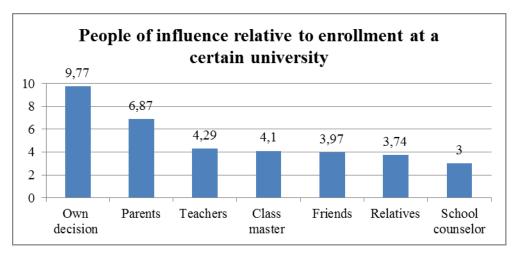


Figure 4.

A first analysis, reveals that is showing its age, decision overwhelming relative to the direction of further study of the matter belonging to the own decision. If parents have a second role (6.87) it is alarming the almost total lack of concern for the high school teacher from school orientation. The order is totally absurd, the exact inverse relationship with the role should have. In this triad of teachers, teachers of different specialties occupy a more important place than the class teacher, school counselor being virtually nonexistent.

This problem is not new, being, according to the author, a manifestation of indifference to both individual and exacerbation of egos different teachers, not today but yesterday many years, being to be proud of a large number of students admitted to the university, but no matter their skills for future job.

Also in this context, the role of friends and relatives is much higher than the school counselor (which is, most likely, a purely formal) proving that the Romanian pre-university education focuses more on the side of informative and not formative.

The next set of questions focused on the supply of informative media educational universities.

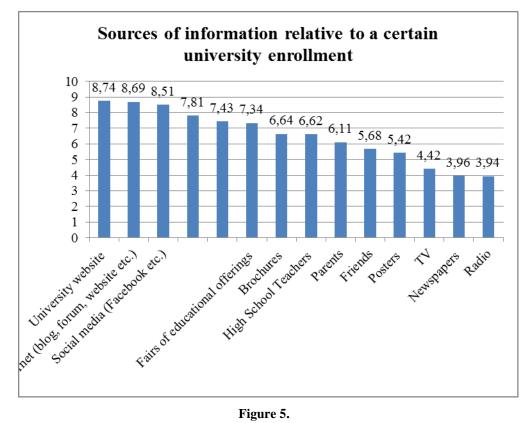


Figure 5.

Naturally, the first three places are electronic media, they tend enrolling in the last two decades to computerize all that. Trend isolation directs youth to obtain information from electronic sources, discussion forums and social networking sites are preferred (long distance) teachers, parents or friends.

The following three sources of information (visits to the location of the university, faculty presentations by teachers and educational fairs with deals) are presented as relatively important factors, but that, coupled with the above makers are not decisive in choosing a particular university.

The only factor that should be taken into account is that of the presentations by teachers because they could influence, through the information provided directly, choosing fields of study.

Traditional means of advertising are in a continuous fall, distributed brochures, posters, advertisements in the media being the last factors information. These aspects should be taken into account by policy makers of the universities and marketing departments, the expenses incurred on advertising campaigns in unnecessary directions being not amortized. The abundance of brochures and posters that overlap on the aggressive hypermarkets cause them to be the most often ignored. Local television commercials (high costs hindering access to major trusts) that have a very low audience, radio stations (that are played mainly by drivers -watching that young people 18-19 years rarely have own cars) or newspaper (today many of them appear only on the Internet - so enter in the first three categories) lead to high costs, the effect being with very low return.

The last set of questions relates to the field and study programs targeted to prospective students.

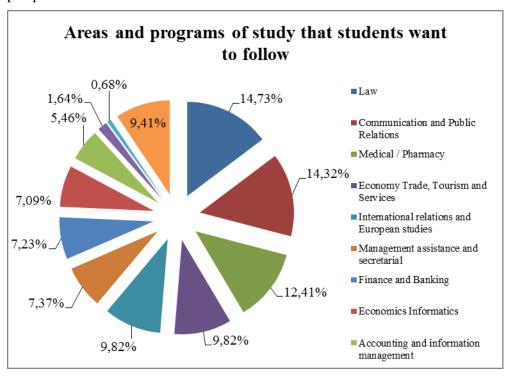


Figure 6

Areas and study programs offer an alarming trend for the Romanian society. The actual production or engineering specialties are situated in a basket of 9.41% with professions such as teaching, police etc.

In first place is the preference for specialization in the areas of law (14.73%), followed by those related to communication activities and public relations (14.32%). Options for a future career of doctor or pharmacist lags overall level of 12.41% of the students surveyed, following in the trend of emigration of health professionals to the developed European countries. We see little lower if this goal can be achieved effectively.

The economical specializations occupy places little weaker (Trade, Tourism and Services - 9.82%, Finance&Banking - 7.23%, Economic Informatics - 7.09%, Accounting and Management - 5.46%) but total, provides the first place - 29.6% preferred by future students.

3. Analysis of the Results by Category of Schools

A global analysis does not provide information so accurate, in the sense that a somewhat heterogeneous set of schools will "flatten out" guidance trends, often opposing. From the results of the first session of the baccalaureate in 2013, we rank the top 11 high schools (for other information not having sufficient informations) simply calling them in the following: High School k (abbreviated in what following: HS-k), $1 \le k \le 11$.

We have therefore the following percentages of graduation:

- HS-1 97.84%
- HS-2 97.51%
- HS-3 93.44%
- HS-4 91.97%
- HS-5 76.76%
- HS-6 72.09%
- HS-7 58.04%
- HS-8 57.28%
- HS-9 34.28%
- HS-10 27.77%
- HS-11 17.75%

At the first question, on the desire for further education, absolutely all high schools (we use this term to avoid obsessively repeat the phrase "high school students" responded 100% except HS-11 ho wants further study only 93.94%.

Regarding the type of education that is intended to be followed, again, absolutely all high schools have on the first place the higher education option. An interesting correlation is here between the level of the high school with the upcoming option. Thus, for example, if at HS-1: 91.43% want to go to university, at HS-10 are 91.30% and at HS-9: 90%. Post-secondary schools are required to HS-11 only from 9.38% despite the Baccalaureate Exam passing of 17.75%!

A first conclusion is obtained here is of poor professional guidance from the schools, as very little to promote post-secondary school students in the last academic year.

The advantage obtained upon completion of a form of higher education is somewhat correlated with the school. Thus, those schools that have graduation rate of over 50% baccalaureate, a diploma or future wages are factors almost negligible, while the desire to continue their education after graduation are important factors. In the last three schools, the situation is almost reversed, on top, being the opportunity to easily find a job, future salary and a diploma.

Again, the same observation as above: factors influencing the future destiny of students should highlight their possible correlation between their actual desires.

Considering the hierarchy of students options after the above indicators, we shall note for two schools the ranks $(r_1,r_2,...,r_n)$ and $(s_1,s_2,...,s_n)$ and we calculate the Spearman correlation coefficient of them:

$$S=1-\frac{6\sum_{i=1}^{n}(r_{i}-s_{i})^{2}}{n(n^{2}-1)}\in[-1,1]$$

It is known that if the two series are the same then S = 1 and when the two series of ranks are reversed when S = -1.

G.R. Thornton's calculations for various values of "n" shows the absolute values of S corresponding to a probability greater than 0.95.

Table 1. The level of significance of rank correlation for probability 0.95

n	P=0.95	n	P=0.95
5	0.933	18	0.487
6	0.843	19	0.474
7	0.781	20	0.462
8	0.725	21	0.450
9	0.681	22	0.440
10	0.644	23	0.430
11	0.626	24	0.420
12	0.599	25	0.412
13	0.575	26	0.404
14	0.553	27	0.396
15	0.535	28	0.389
16	0.517	29	0.382
17	0.501	30	0.375

Analysis of high schools, corresponding benefit offered by higher education graduation form chosen, reveals that there is a direct link between the perception of students from high schools 8, 9, 10 and 11 and partial between the 1-7 high schools.

A conclusion of this analysis is that the information and publicity campaign will be conducted differently in the two groups of schools, with a particular emphasis on

schools underperform on a growing awareness of their possibilities of future graduates.

The importance of exogenous factors contributing to the choice of the faculty, like that of humans, is largely about the same in different types of schools, the Spearman coefficient showing for almost all pairs of schools a direct link with a probability greater than 0.95.

The sources of information on educational offer of the universities reveal interesting aspects. If the university's website and various forums occupy top positions, social sites occupied the middle (despite 3rd place overall). It is noted that at the weaker high schools, their influence is greater (for example, it ranks at HS-9 the place 1, while at HS-1 the place 8) the justification being a high time lost by students on these websites detrimental training.

Relative to the programs of study options are found, especially in the worst-performing high schools, a lack of realism in the decision students.

Thus, if at HS-1: 35.29% of students seeking economics, 26.47% - medicine and 23.53% - law, at HS-10 (with percentage of 27.77% at Baccalaureate) 13.64% of the students want to become doctors, 45.45% - economists, 31.82% - lawyers. At HS-11 (graduating 17.75%) over 48% want to become economists and 14% - lawyers.

After analyzing the professional orientation of students we come to the conclusion that, simply, students (especially from weakest high schools) orient (linking factors of influence) "by ear", being in total disagreement with the overall level of preparation.

4. Conclusions

- 1. Students interested primarily by subsequent graduation employability;
- 2. Campus facilities, location and distance from the home of the university are hardly considered;
- 3. The decision to follow a certain university belongs almost entirely (97.7%) to the student:
- 4. The role of teachers in the school of origin in the professional orientation is almost zero;
- 5. Favorite sources of information are: university website, blogs, forums, social networking sites;
- 6. An important role in the orientation are that of university staff;

- 7. A negligible role of the brochures, posters, TV, radio or newspapers;
- 8. The programs of study intends to follow the future graduates are, in order: Economics 29.6%, Law 14.73%, Communication and Public Relations 14.32%, Medicine 12.41%;
- 9. Relative to post-secondary schools only 5.73% of students will move towards them.

5. Acknowledges

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6. References

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