

PSIHOLOGIE SOCIALĂ

STRUCTURAL UNEMPLOYMENT AND WORK MOTIVATION-ESSENTIAL PROBLEMS FOR GRADUATES IN ROMANIA

OCUPARE STRUCTURALĂ ȘI MOTIVARE A MUNCII - PROBLEME ESENȚIALE PENTRU ABSOLVENȚII DIN ROMÂNIA

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Abstract

The results of the specialists show that in different phases of economic cycles, in imperfect markets, the skills and competences of those who want a job are not in line with those required by vacancies. This conclusion is also valid for Romania. In Romania, there is no scientific prospecting at the national level of labor market developments. Universities are interested in offering their services in a very large amount, but do not have institutional mechanisms to track the matching between supply and demand and trajectory of graduates in the labor market. Universities do not know what graduates do after finishing their studies. There are no national statistics on the specialization areas of graduates who have a job. There are no elaborated studies on the migration of young people in general, especially those with higher education, in particular. Also, there is no official information on the unemployment among graduates in the specializations/ fields of the graduates. Research, limited in many ways, converges towards the need for coherence and professionalism in designing the future of education.

Keywords: the labour market, higher education graduates, structural unemployment, motivation.

Rezumat

Rezultatele specialiștilor demonstrează că în diferite faze ale ciclurilor economice, în piețe imperfecte, calificările și competențele deținute de cei care doresc câte un loc de muncă nu corespund celor solicitate de locurile de muncă vacante. Această concluzie se validează și în cazul României. Nu există o prospectare științifică la nivel național a evoluției pieței muncii. Univesitățile sunt interesate să ofere într-o cantitate foarte mare serviciile lor, dar nu dispun de mecanisme instituționale de urmărire a concordanței dintre cerere și ofertă, a traiectoriei absolvenților pe piața muncii. Universitățile nu știu

ce anume fac absolvenții după ce termină studiile. Nu există statistici naționale pe domenii de specializare a absolvenților care au o slujbă. Lipsesc studii elaborate privind migrația tinerilor, în general, a celor cu studii superioare, în special. Nu există informații oficiale cu privire la șomajul din rândul absolvenților de facultate pe specializările/domeniile din care provin absolvenții. Cercetarea converge spre ideea nevoii de coerență și de profesionalism în proiectarea viitorului educației.

Cuvinte - cheie: piața muncii, absolvenți din învățământul superior, șomaj structural, motivație.

Introduction: The purpose of the research was to study the major imbalances in the Romanian labour market in general and the career development of the graduate of the Faculty of Bioengineering in Iasi in particular. Research is current and important in that it considers a socio-demographic category of crucial importance for the future of any country: young people. In Romania, the unemployment rate among young people in Romania was 15.4% in 2017. Romania has a high level of emigration, the diaspora representing 17% (3.4 million) of the population (UN, 2017) [1, 3, 4,]. The Romanian economy is confronted with the coexistence of labour shortages in certain economic branches or geographical areas with surplus in others. The employment rate at national level is still low and unemployment is significant, although its rate is lower than the European average [2].

The paper is organized as a sample of graduates from Faculty of Medical Bioengineering University of Medicine and Pharmacy “Gr. T. Popa” Iasi. The research is descriptive for structural unemployment and experimental concerning the career evolution of young people with higher education.

The research methods were: do-

cumentary information, data collection, processing, analysis, interpretation, questionnaire survey, compatibility functions and Beveridge curve, S.W.O.T. and Delphi Technique. Bibliographic materials of O.N.U, O.M.S, Eurostat, I.N.S., other national and international bodies on unemployment and the situation of graduates with higher education on the Romanian labour market have been studied.

Structural unemployment Changes in the economy and human resources complicate the estimation of structural unemployment. The “hysteresis effect” is a first signal of the increase in structural unemployment. Hysteresis effect describes the process by which people who are unemployed suffer a disconnection from work. Using matching functions we took into account that there is a great heterogeneity of human resources and a high segmentation of market. An active labour market policies should be used to assist the unemployed workers in order to improve their matches.

Structural unemployment could be iatrogenic and it flows from stupid government policies. Unfortunately politicians aren't liable for malpractice suits [9, p.43]. Even the technology could cause unemployment. The gap between regions

has high increase: the rich areas, especially the Capital city and the Western provinces, advanced rapidly and achieved high real convergence rates, while the poor regions made little progress toward real convergence. People in wealthy households in Romania recorded earnings that were 7.2 times higher than those of poor households last year (INS, 2017) [5, 6].

Research the career evolution of graduates Faculty of Medical Bioengineering of Iasi Medical University. The Faculty of Medical Bioengineering at Grigore T. Popa University of Medicine and Pharmacy in Iasi offers academic programs and research in health and applied engineering fields [7, p.5]. Biomedical engineers use engineering principles

and high technology in health services. Biomedical engineers are employed in health services, medical equipment manufacturers, universities and research organizations.

Job titles vary depending on the nature of the work. As well as biomedical engineer, other terms that are used are bioengineer, design engineer and clinical engineer/scientist [7, p. 3].

Graduates of the Faculty of Bioengineering Between 2000 - 2015, the faculty graduated 875 people, of which 645 are graduates of 6 years of university education and 230 are graduates of 4 years of higher education. Years and after the duration of studies, their distribution is shown in Table 1. ang Graph 1.

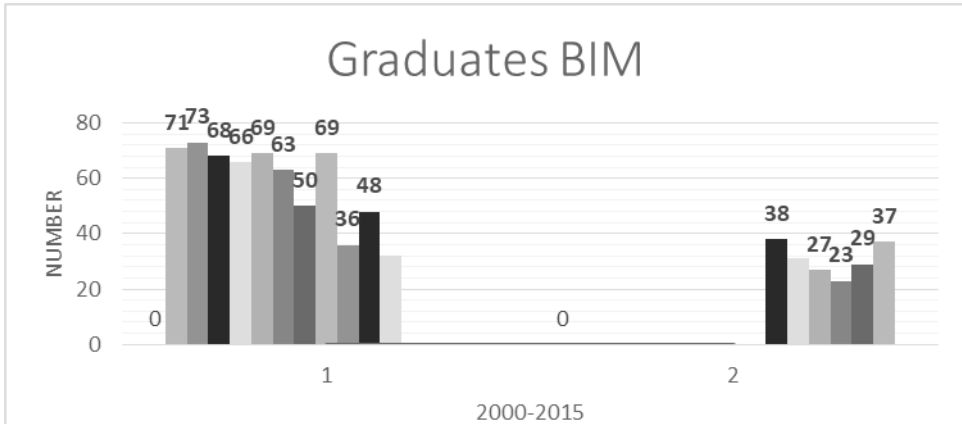
Table 1.

The situation of faculty graduates

No.	Year	6 years	4 years
1	2000	71	-
2	2001	73	-
3	2002	68	-
4	2003	66	-
5	2004	69	-
6	2005	63	-
7	2006	50	-
8	2007	69	-
9	2008	36	-
10	2009	48	38
11	2010	32	31
12	2011	-	27
13	2012	-	23
14	2013	-	29
15	2014	-	37
16	2015	-	45
Total		645	230
Total general		875	

The downward trend in the number of graduates is noticeable except in 2007, when their number was 69. A favorable situation was also observed in the years 2009 and 2010, the years in which the

6-year and the 6-year series for 4 years. The Bologna process has also made important changes in higher education in Romania.



Graph 1. Graduates BIM IASI, 2000-2015.

Career analysis. Career is a mix of organizational and individual factors. The perception of the post depends on the compatibility between what is desired (skills, needs, preferences) and what the job offers (motivation, affirmation, constraints, and opportunities). Career orientation is a relatively stable model of talents, values, attitudes and occupational activities. Career is a dynamic double-dimensional process:

- External - the objective sequence of positions that the individual takes on;
- Internal - the individual’s interpretation of objective experiences.

Individual progress is measured three-dimensionally depending on the movement within an organization or occupation: horizontal (development of skills and abilities); hierarchical movement (to

the top of the hierarchy); movement to gain influence and power. Concepts, career models are found in infinite combinations. Practice validates uniqueness in universality.

Career influences many aspects of a person’s life:

- how much money will you earn;
- what clothes to wear;
- what benefits will be gained from the job;
- for which organization / company will work;
- what interpersonal relationships will develop;
- what work will be done;
- where to work;
- how long it will work.

The research of the graduates’ faculty has limits and constraints:

- There is no well-established database on graduates of the faculty;
- I encountered delays, refusal from members of the organization;
- Many of the graduates who have been contacted did not respond;

The paper content is a summary analysis of the graduates careers of the Faculty of Bioengineering in Iasi, with the informational, statistical and conceptual limits that we have encountered in the research.

Research objectives From a theoretical point of view, our research aims to contribute to the image, reputation and credibility of the Romanian bioengineering school, the Romanian bioengineer. The practical objectives of the project are:

- Knowing the opportunities offered by medical bioengineering;

- Knowledge and dissemination of the opinions, recommendations, and appreciation of the graduates for the program;

- Raising awareness of the authorities in the interest of creating employment opportunities for graduates;

- Provide scientific support to all those interested in this field.

Methodology For the collection of field data, a survey was conducted based on the statistics, obtaining information from 347 persons from the 509 included in the sample (Table 2 and Chart 2).

Distribution by gender demonstrates that female dominance is maintained as number of graduates, sample, and respondents [8].

Table 2.

Number of graduates included in study and respondents, by gender.

Year	Graduated in study	Number of respondents	Men	Women
2000	33	14	5	9
2001	27	13	1	12
2002	42	30	8	22
2003	24	16	7	9
2004	34	27	8	19
2005	20	19	3	16
2006	53	50	14	36
2007	37	20	9	11
2008	31	17	7	10
2009	34	20	6	14
2010	39	25	5	20
2011	30	14	3	11
2012	23	16	7	9
2013	27	19	4	15
2014	37	22	4	18
2015	38	25	7	18
Total	509	347	103	234

The Delphi method and the S.W.O.T. Analysis were used to draw an image closer to the purpose of the work. Respon-

dents have highlighted the reasons for this faculty, as well as the motivations offered by the job they have.

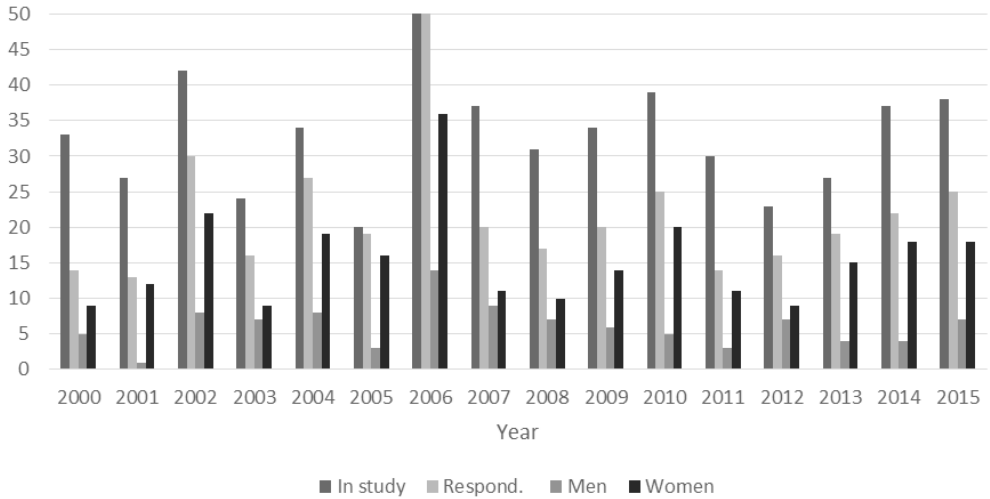


Chart 2. Graduates included in study and respondents, by gender.

Results Respondents, graduates of the Faculty of Bioengineering in Iasi, occupy professional positions in the following sectors of activity (Table 3, Chart 4.):

- Hospitals, imaging centres, Public Health Departments, laboratories: 66
- Research, education, IT: 75

- Pharmaceutical companies, drug and cosmetics organizations: 54
- Devices and medical equipment companies: 44
- Other activities other than studies : 45

Table 3.

Areas in which respondents work

Fields of activity	Men	Women	Total
Hospitals, Imaging Centers, Public Health Departments, laboratories	25	41	66
Research, education, IT	10	65	75
Pharmaceutical companies, drug organizations, cosmetics	19	54	73

Device and medical equipment companies	25	19	44
Other activities other than studies	13	32	45
Do not work or go through a postgraduate education	21	23	44
Total	113	234	347

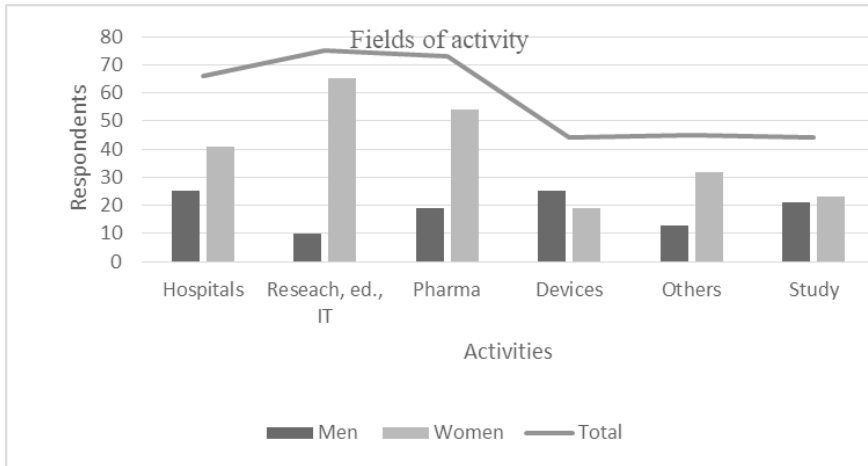


Chart 4. Distribution by fields of activity.

Occupational positions are: main bioengineers, bioengineers, managers, teachers, researchers, entrepreneurs, sales representatives, entrepreneurs, statisticians, statisticians, IT specialists, advertising, and auto mechanics. By country, the situation is as follows: Romanian bioengineers

work in Romania (266), Great Britain (34), Germany (14), France (11), Belgium (9), Italy, (8) (1), New Zealand (1), Netherlands (1), Switzerland (1), Republic of Moldova (1). The country breakdown is shown graphically in Table 4.

Table 4.

Respondents by country

Country	Graduates	%
Romania	266	76.66
Great Britain	34	10.02
Germany	14	3.64
France	11	3.17
Belgium	9	2.59

Italy	8	2.34
Canada	1	0.28
New Zealand	1	0.28
Switzerland	1	0.28
Netherlands	1	0.28
Moldova	1	0.28
Total	347	100.00

Conclusions Respondents highlighted the reasons for this faculty, as well as those of their academic environment and job satisfaction. Satisfaction is dependent on the labour market, wages, context and organizational culture, possibilities for personal development, ethical climate. The demotivation of young graduates is accentuated by the imbalance between the graduated specialty and the demand for work. Imbalances are also acute in the regional profile. 186 of the respondents chose to attend the courses of the Faculty of Medical Bioengineering in Iasi on the recommendation of friends, relatives, other graduates. 94 chose the field based on personal information, 67 participated in the promotion of the faculty in high schools and were attracted by the field.

In Romania, the profession is not recognized at its true value and there are few jobs for bioengineers on the market. The reasons for leaving the country were the pay (98%) and career advancement opportunities (87%). Countries with the slightest compensation of employees per hour are Bulgaria (5.1 euro), Romania (5.5 euro) (EUROSTAT, 2017).

The processing of the information obtained with the SWOT Analysis and the Delphi Method revealed the following:

→ School in Romania is old type (90%

of respondents).

→ There is no accent on interactivity (97% of respondents).

→ Classical teaching, memorization and faithful reproduction of the course (93%) are maintained.

→ The grid system, inefficient and ineffective, is used to train the future specialist (88%).

→ Practice and academic entrepreneurship are almost non-existent (93%).

→ Some teachers do not collaborate with students (77%).

→ There are discrimination, non-ethical behaviors, subjectivism, and marginalization (77%).

→ There is a feeling of generalized suspicion and lack of trust that is passed on to students (99%).

Those who work in Romania need decent wages and opportunities for personal development. Structural unemployment and labor market imbalances are validated by research In Romania there is no serious prospect of labor market developments at national level. Universities offer academic services, without asking whether graduates will integrate as they prepare for the labor market. Universities do not have any mechanisms to track graduate trajectories on the labor market. Universities do not know what graduates do after they leave

college. There are no national statistics by field of specialization of the number of graduates who have succeeded in engaging. The analysis of the graduate career of the Faculty of Bioengineering in Iasi was a special challenge and the results of the research, even if limited in many ways, converge to the conclusion: bioengineering is a topical field, of great interest and with multiple and real perspectives of evolution at both national and international levels. The medical bioengineering career is a future profession and depends on the degree of involvement of graduates, as well as on the opportunities offered by academic system and the labor market.

Concerning the structural unemployment, a number of occupations have been identified as mismatch priority occupations for Romania. They are either in shortage or in surplus. In Romania, there is no (official) data available on the incidence of surpluses. However some international studies (Skills Panorama, 2016) have been identified the following surpluses: agricultural workers, client information workers, clerks, retail and wholesale trade managers, street vendors and building and housekeeping supervisors. Shortage Occupations are: ICT professionals, teachers, health professionals, Forestry and others. Paradoxically, although bioengineering is a future profession that Romania needs, jobs for bioengineers are few and poorly paid.

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