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COMPETENCIES IN HIGHER EDUCATION SYSTEM: AN EMPIRICAL ANALYSIS OF EMPLOYERS' PERCEPTIONS

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Abstract

This study offers insight into the European Qualifications Framework (EQF), as agreed and detailed by the Romanian qualifications framework, applied to the economic sector. By means of a survey conducted on 92 employing companies, it validates the importance of competencies for the Romanian labour market and employers' degree of satisfaction with the competencies of business graduates. In terms of typology, employers attach more importance to transversal competencies than to professional competencies, both at conceptual level and as degree of acquirement following higher education. The empirical analysis provides data on employers' ranking of transversal and professional competencies and identifies the classes of competencies deemed to be in short supply on the labour market. Through its results, the study enhances the relationship between the higher education system and the labour market, providing key information for an efficient implementation of the competence-based education system.

Keywords: competencies, business graduates, employers' satisfaction, higher education, qualifications

JEL Classification: M10, A23, I23

Introduction

Within the context of enlargement of the European Union, tertiary education experienced significant changes triggered by the internationalisation of the labour market, students' and teachers' mobility, the increased competitiveness in finding a position matching one's training, respectively in ensuring the free development of young people's personality. The national and regional educational policies, in particular in higher education, shifted their focus on market-type solutions (Bleikli, 2000; Solbrekke and Karseth, 2006). The graduates of tertiary education had to be equipped with competencies, abilities, attitudes and behaviours able to secure them a job shortly after graduation, to become useful to the employing companies and to adapt quickly in the business environment.

The subject matter of this study is placed in the European context and is given by the pathway of the Romanian education system towards meeting the new requirements of the

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labour market. Over the last two decades, in Europe has emerged the competence-based learning system, aimed to develop the skills in young people which may help them perform within a knowledge-based economy (Chapman, Aspin, 2013). Moreover, this system ensures the mobility of the labour force and transparency in the European area and at inter-sectorial level. The European Union (EU) Member States have developed standards or qualifications frameworks under the influence of three prevailing models in this area: the British, the French and the German system (Winterton, 2009). As regional policy, European education, including higher education, was reformed according to the Lisbon strategy and the Bologna Process (EMD, 1999). Among others, the process managed to create a meta-framework of European qualifications in 2008, namely the European Qualifications Framework for Lifelong Learning – EQF. Some European countries shaped their national system on the EQF or updated the existing frameworks according to the guidelines of the Technical Working Group⁽¹⁾ - ECVET) (Winterton, 2009).

Romania adhered to the European guidelines on the new higher education qualification frameworks and aligned to the EQF. The rationale of this study is to observe how the competence-based education system is perceived by employers. The undertaking intertwines with some concerns expressed in the scholarly literature in relation to EQF conceptual and implementation matters. As such, Winterton (2009) states that in the European countries there is no common competence framework, from a conceptual point of view, and suggests the development of a clear definition of the competencies type and structure for the development of a common typology, flexible enough against the European cultural diversity. This opinion is shared by Weber (2010), who highlights the need for the development of a European Competence (skills and abilities) and Knowledge Agreement. Winterton (2009) suggests implementation drills through empirical surveys so that the competency demand can be observed for specific sectors and occupations. As Mulder et al. (2009) asserts, considering the background of the current developments towards a competence-based system, it is important to devise a comprehensive picture of the various opinions of educational stakeholders (students, teachers, employers, etc.). This research is intended to highlight, from the labour market perspective, how one of the outcomes of the Romanian competence-based education system is perceived in the period of post-EU accession: graduates' competencies. It reviews how the Romanian labour market is prepared to embrace the benefits of such a qualification framework, to what extent employers are acquainted with the concept of competency and how they rate the graduates of higher education in relation to the acquired competencies. Matter-of-factly, the research provides data on what competencies are important to employers when they hire graduates of the national education system, facilitating thus the implementation of EQF in Romanian education, respectively the development of a common competency pattern in the European area. In order to observe how employers perceive the competencies delivered by the education system, this research employs an empirical investigation, within a survey of Romanian employing companies, with emphasis on business education. Unlike other studies whose approach targeted teachers' and students' perceptions, this study explores the subject from the angle of an external category of stakeholders, the employers.

The study is structured as follows: the second section reviews the literature regarding conceptual and classification matters of competencies and sets forth the research questions; the third section describes the empirical research conducted as variables, sample and research tool; the forth section presents the survey results, while the final section comments upon the conclusions of the research.

2. Theoretical and implementation framework of competence-based education

2.1. Education and competencies

2.1.1. Competence-based education system

The literature on education was concerned, during the last three decades, with the need to align higher education to the requirements of the environment and with its contribution to economic development (Marchello, 1987; Leckey and McGuigan, 1997). Thus, a transition can be followed from teacher-centred learning to student-centred learning (Gilis et al., 2008). Avargil et al. (2012) advocate that the latter approach develops students' abilities in relation to personal efficiency, flexibility and life-long learning. Gradually, competence-based learning gained the status of a distinct pedagogy within the student-centred learning, as proved by Winterton (2009). Competence-based education shifts the emphasis on the learning outcomes.

According to the literature, the concept of competency originated in the American concerns emerging in the 1970s due to the lack of suitability of former solutions for measuring work performance, which were failing the current economic environment (Winterton, 2009). The psychologist McClelland (1973) is considered the father of this concept since he proved that intelligence tests used to forecast work performance were no longer relevant. According to Mulder et al. (2009) the practice of competence-based education was developed at this time, in incipient form, founded on the improvement of behavioural abilities. From the United States of America, these ideas spread to Europe in the 1980s through multinational corporations. Three models distinct from the American one were developed: the British, the French and the German model (Winterton, 2009). Currently, the concept of competency is employed by vocational and technical education systems and in higher education.

As institutional policy related to competencies, the first efforts to implement the concept in the European area occurred in the 1990s. The Lisbon Council concluded in March 2000 (ECoun, 2000) that an essential requirement in order to adjust EU education and training systems to society's demand of knowledge is to increase the transparency of qualifications. As a result of the Council and Committee's further measures, the European Qualifications Framework (EQF) is founded in 2005, (EMC, 2005 ; EMD, 2010), as a core tool for the development of the European Higher Education Area - EHEA. The purpose of EQF is to make qualifications comprehensible across the entire EU area, by promoting the international mobility of labour force and enhancing the process of continuing education. Agreed among European institutions in 2008 (Ecoun, 2007; EP&Ecoun, 2008), EQF was to be implemented in Europe, and EU member states were encouraged to align their own qualifications systems to this framework.

2.1.2. Competency: conceptualisations and typology

A study which reviewed the particular literature of Gilis et al. (2008) reveals that there is not a widely accepted definition of competency. Thompson (2009) explains this finding through the existence of various theoretical, methodological and practical approaches.

Based on Gonczi's (1994) reasoning, the literature developed a series of definitions for competence. Gresalfi et al. (2009) understands this concept as a cluster of personal skills or abilities, beyond the specific work-related environment. Winterton (2009) defines competence as the ability to explain knowledge, respectively as the understanding and skill

to meet the standards prescribed by the employer. Mulder et al. (2009) sees competence as a cluster of capabilities embedded in the area of knowledge, skills and attitudes imperiously required to accomplish tasks and solve problems and to be capable to practice a certain profession, within an organisation, job, role or situation.

As suggested by Winterton (2009), the EQF vision is linked to qualities which would ensure individual development, such as flexibility, adaptability and responsibility. The European qualifications framework defines competence as the proven capacity to use personal, social and/or methodological knowledge, abilities and capabilities, in work or learning circumstances and for purposes of professional and personal growth (EComm, 2009). EQF developed 8 key competencies (EP&Ecoun, 2006) which have at core critical thinking, creativity, initiative, problem solving, risk assessment, decision making and constructive emotional management.

The term used in this research is competence seen as an outcome, which mirrors the requirements of a job, according to Tate (1995) and Rowe (1995). In other words, it explores the competencies which reflect what a person knows and is capable to do, in order to accomplish the tasks required by a given occupation (Winterton, 2009).

As regards the typology of competencies, the literature differentiates between specific/technical knowledge and abilities (hereinafter referred to as professional competencies), and transferable knowledge, abilities and attitudes (hereinafter referred to as transversal competencies) (Leckey and McGuigan, 1997). In relation to transversal competencies, literature brings forth the argument that, over the last two decades, there was a disagreement between the demand of economically developed or developing countries and the offer of such competencies by higher education (Leckey and McGuigan, 1997). It is pointed out that even more than professional competencies, the market highly values transversal competencies such as communication skills, teamwork, initiative, flexibility, reasoning, analysis and problem solving, interaction and efficiency skills (Leckey and McGuigan, 1997; Emiliani, 2006).

Studies conducted in European countries have highlighted the increasing importance of general knowledge and competencies in the detriment of discipline-related knowledge and competencies (Paul, Murdoch, 2000; Schomburg, 2000). For example, Brown and Smetherham (2006) show that, despite the importance of the qualification held by a graduate, it does not suffice to prepare such individual for a certain occupation. The job-related requirements entail, beside the specialist knowledge, social skills, emotional intelligence, team work abilities (Goleman, 1996).

The study of Azevedo et al. (2012), based on a questionnaire addressing business graduates and employers from four European countries (Austria, Great Britain, Slovenia and Romania) gives evidence of the importance attached to the eight transversal competencies proposed by EQF.

A study initiated by the European Commission (Ecomm, 2010), which examined the perception of European employers' (EU and non-EU countries) on graduates' employability, reveals, among others, the degree of importance attached to certain competencies and abilities that graduates should be equipped with. Among the areas of specialisation of the recruited graduates the most frequent were business, economic and technical studies. As for how competencies were ranked, priority was given to teamwork by the vast majority of company representatives. With reference to Romania, respondents rated

as the most important team work, computer literacy, and respectively adaptability to new situations. When interviewed about the types of abilities that future higher education graduates should possess, employers designated as essential both professional and transversal competencies (i.e. number and computer literacy, reading and writing skills).

Jurse and Tominc (2008) prove for Slovenia the differentiation between the importance attached to competencies and the extent to which they are acquired, from the perspective of three categories of respondents to a questionnaire: business graduates, employers and faculty. The concretisation degree of the professional competencies involved in the study is slightly more elevated than for the majority of transversal competencies surveyed.

The CHEERS survey (Careers after Higher Education - A European Research Survey) reviewed the types of knowledge and competencies expected by employers in nine European countries (De Weert, 2007). As regards competencies, a comparative study between the competencies expected by employers and their level in the graduate work force shows that the greatest gap occurs in the case of non-cognitive competencies, such as teamwork, problem solving, planning and coordination, communication skills and assumption of responsibility.

2.1.3. Competencies in Romanian education

In the aftermath of the Bologna Treaty, Romania adheres to the EHEA initiative and responds to the obligation undertaken by the Ministers of Education through the Bergen (2005), London (2007) and Leveun (2009) declarations. From 2005 onwards, syllabi start to be founded on competencies and educational outcomes. As an EU member state in 2007, Romania shows a permanent concern to ensure the long-term compatibility between the competency demand and supply on the labour market. To this end, the National Qualifications Framework in Higher Education (CNCIS) was designed, as a unique tool which defines the structure of qualifications and ensures national recognition, as well as the international compatibility and comparability of the qualifications conferred by universities.

CNCIS, the EQF-aligned Romanian qualifications framework, presents professional competencies as the capacity of selecting, combining and using effectively the integrated, coherent, dynamic and open assembly of knowledge, abilities (cognitive, behavioural, relational) and other acquisitions (values and attitudes) specific to a professional activity, for the purpose of successfully solving issues inherent to the respective profession, in an effective and efficient manner. Transversal competencies constitute the assembly of capabilities which transcend a certain area, respectively academic programme, and are transdisciplinary in nature, such as speaking skills, problem solving and decision making, acknowledging and respecting diversity and multiculturalism, learning autonomy, entrepreneurial spirit and initiative, openness to lifelong learning, observing and maintaining professional values ethics, the ability to manage time effectively, the ability to work in team and to motivate the others.

In economics and business, attempts have been made to align Romanian education to the European standards, in practice, yet the reliability of such processes is proven merely at theoretical level. So far, the adjustment of the bachelor's and master's degree curricula to the competence-based system has been completed only formally and further efforts are in order to implement this system at the level of learning and evaluation processes, so that students can truly develop abilities valued on the labour market. To this end, this research sheds light on how the labour market views the educational output, so that in time the bond

between the educational institutions and the labour market can strengthen to the benefit of student-centred learning.

2.2. Research questions

1) How is the importance of applicants' competencies perceived in the hiring process on the labour market?

The research examines the extent to which the labour market is acquainted with the content of the competencies concept, their type and how well they 'translate' the knowledge and abilities that a Romanian higher education graduate should possess. As such, it can be pointed out what type of competencies a graduate should possess in employers' opinion. This objective of the research considers McClelland's theory (1973), according to which competencies can be identified and developed. Although this topic has been tackled by countless studies, no consensus has been reached as yet on the hierarchy of the competencies required by employers (Capelli, 1992). In an ever-changing environment, it is only natural that employers should seek not only a set of specific knowledge and competencies, but also the capacity of applicants to operate with the same in different contexts. Moreover, it is to be expected that the importance of competencies should vary according to a series of variables such as the line of business, job description and the personal preferences of the company or employer.

The present study examines a list of 21 professional and transversal competencies, designed starting from the review of literature, the general framework provided by EQF and the national CNCIS framework. The length of the competence list in the second category is in agreement with the literature opinions that transversal competencies are better appreciated on the labour market than professional competencies. This type of competencies differentiates between an employee who merely completes tasks and a high performing employee. The study relative to the Romanian market, conducted under the sponsorship of the National Qualifications Agency, through the European project DOCIS⁽²⁾, along with other academic studies (Jurse and Tominc, 2008), also supports this finding.

2) What is employers' degree of satisfaction with the competencies acquired by applicants in general and by business graduates in particular?

In this area, an agreement can be noted between the competencies offered by the education system and their embodiment as knowledge, abilities and attitudes actually acquired by graduates, as seen through employers' eyes. This research attempts to verify the results of other studies on this subject matter, conducted for European countries, including Romania. Moreover, it analyses the relationship between the perceived importance of competencies and employers' satisfaction with the competencies of the young graduates in business.

3. Research methodology

3.1. Research sample

The employers' expectations were analysed by means of a quantitative research, employing the questionnaire as data gathering tool. As regards the sampling technique, the non-probability quota sampling technique was chosen (Trochim, Donnelly, 2006). Although it preserves the limitations of non-probability sampling, this technique is similar to stratified

probability sampling, as it ensures that each group/category is represented in the sample. In this way, should the relevant characteristics be well identified, each group which possesses the respective characteristics may be represented in the sample of the survey, securing thus the variety of individuals included in the sample. Given the exploratory nature of this study, the last option was considered the most appropriate, i.e. non-probability non-proportionate quota sampling. The characteristics considered in the survey of employers' needs relate to the nature of ownership (public/private companies), the company size (small/medium/large), and the business sector (services/manufacturing).

The final survey sample included 92 companies. The average age of the companies participating in the study is of 14 years, ranging from more than 90 years from incorporation to under 1 year. In what concerns the line of business, they are very diverse, including: trade, manufacturing (clothing, footwear, furniture, wire-based products), consultancy, telecommunications, constructions, real estate, education, tourism, transport. As regards the form of business organisation, 59.8% are limited liability companies, 25% are joint stock companies and 15.2% are state institutions.

One of the chief criteria in the selection of employing companies was their experience in hiring higher education graduates in business. On average, in the companies included in the sample 30% of the previous year's total employment rate represented graduate labour force. A management representative or a human resources officer responded to the questions for each company. The main condition was the respondent's experience in the selection process. As for the respondent's position in the employing company, 55.4% fill a position in the human resources department, while the others belong to the management staff. The respondents' average time of service in the organisation is of 6.3 years. As such, it was ensured that the individuals responding to our questionnaire had at least one year's service in the organisation, to be able to provide relevant answers for the entire organisation. Considering the positions filled within the organisation, another variable looked into was the respondent's education. The majority are higher education graduates: 53.2% have a bachelor's degree and 42.4% have a master's degree. Only 4.4% of the respondents have not completed higher education.

3.2. The research tool: the questionnaire

Starting from the questionnaire templates designed and applied in similar researches (Fuller, 2000, De Weert, 2007), a questionnaire focused on employers' perspective was devised. In terms of content, the questionnaire attempted to identify the importance of competencies and the employers' degree of satisfaction with the applicants' competencies in general, and with the competencies of business graduates in particular. Since the questionnaire was developed as a quantitative tool, close questions are prevailing; nevertheless, given the exploratory nature of this study, open questions have also been included. Since one of the goals of the survey is to identify possible relevant aspects for employers in hiring graduate workforce (of which some might have been omitted), the phrasing of the questions was intended to give respondents the opportunity to express their opinions freely, so that we may identify new potential sub-topics of interest.

As regards the validity of the tool, considering the non-probabilistic nature of the sample, the study does not expect to achieve high external validity (the results cannot be generalized to the entire population). Nevertheless, we endeavoured to achieve good construct validity, through the design of the questionnaire. Thus, for the operationalization of the

main variables measured by the questionnaire, we attempted to cover a large range of the dimensions that can be included therein.

4. Results and discussion

4.1. Importance of applicants' competencies from employers' perspective

The empirical study attempted to gain insight into employers' perspective on the importance of competencies in the hiring process. The questionnaire listed a series of competencies pursued in the selection process, and the respondents in the sample rated their importance on a 1 to 5 scale.

Table no. 1: Importance of applicants' competencies in the employment process

Competencies	Mean Importance	Standard deviation
Accountability in completing tasks	4.86	0.38
Efficient activity planning and organisation	4.71	0.53
Promptness and efficient time management	4.65	0.55
Task completion capacity	4.62	0.57
Ability to learn quickly, to adapt	4.61	0.56
Results orientation	4.54	0.63
Job-related practical competencies	4.51	0.68
Efficient teamwork skills	4.48	0.75
Job-related specialist knowledge	4.47	0.78
Communication and interaction skills	4.44	0.72
Proactive approach, initiative, out-of-the box thinking	4.29	0.81
Computer literacy	4.20	0.98
Capacity to work under pressure	4.16	0.82
Competencies specific to the activity of the organisation	4.09	0.71
Ability to stimulate the others	3.76	0.93
Document and report drafting skills	3.72	0.99
Foreign languages	3.69	1.05
Negotiation skills	3.68	1.02
Leadership	3.36	1.09
The ability to analyse and question things	3.33	1.05
General knowledge in other fields	3.01	0.97

Upon reviewing the responses received, it can be noted that most competencies are considered important by employers and rated above average. The highest rated are the *accountability in completing tasks* (mean 4.86), *efficient activity planning and organisation* (mean 4.71), *promptness and efficient time management* (mean 4.65). On the other hand, the least important selection criteria are *general knowledge in other fields* (mean 3.01), *the ability to analyse and question things* (mean 3.33) and *leadership* (media 3.36). Increased importance is particularly attached to features related to applicants' active involvement in the work place, and less to their knowledge. Nevertheless, the *job-related practical competencies* are rated as rather important (mean 4.51), while *general knowledge* is rated as less important.

Considering the wide diversity of components contemplated by employers in the selection process, we considered appropriate to identify the main latent dimensions of these competencies. The exploratory factor analysis was applied to this end. In assessing the sample suitability, the Kaiser-Meyer-Olkin (KMO) was used, whose value $KMO = 0.74$ exceeds 0.5, the value recommended so that the sample could be considered suitable for factor analysis. The factor analysis of the main components generated five factors with an explanatory power greater than 1 (Eigenvalue >1). The percentage of the total explained variance is of 60.5. A communality greater than 0.57 was achieved for each of the items included, which accounts for the fact that they are well explained by the extracted factors. The saturation threshold for each item within the factors was established at 0.5. Varimax, an orthogonal factor rotation method was employed, obtaining 5 factors. By analysing the results, the loaded variables for each of the factors can be observed (table no. 2).

Table no. 2: Structure of factors regarding competencies in the hiring process

Competencies	Factors					Alpha Cronbach
	1	2	3	4	5	
<i>Generic competencies</i>						0.793
Foreign languages	0.802					
Computer literacy	0.767					
Negotiation skills	0.659					
Leadership	0.517					
The ability to analyse and question things	0.516					
General knowledge in other fields	0.514					
<i>Participatory competencies</i>						0.807
Results orientation		0.798				
Proactive attitude, initiative, out-of-the-box thinking		0.610				
Accountability in completing tasks		0.503				
<i>Interpersonal competencies</i>						0.750
Communication and interaction skills			0.740			
Efficient teamwork skills			0.733			
The ability to stimulate others			0.595			
<i>Organisational competencies</i>						0.830
Efficient activity planning and organisation				0.685		
Capacity to work under pressure				0.592		
The ability to learn quickly, to adapt				0.532		
Promptness and efficient time management				0.510		
Document and report drafting skills				0.504		
<i>Professional (specific) competencies</i>						0.860
Capacity to perform job-related tasks					0.855	
Job-related specialist knowledge					0.650	
Job-related practical competencies					0.520	
Competencies specific to the organisation					0.517	
Eigenvalue	7.18	2.16	1.51	1.27	1.15	
% of explained variance	32.6	9.8	6.9	5.8	5.4	

The review of the results points out the two classes of competencies: transversal competencies (included in the first four factors) and specific competencies (included in the fifth factor). The content of each factor obtained shall be outlined below.

In the 1st factor, entitled *Generic competency*, the saturated items are: foreign languages, computer literacy, negotiation skills, leadership, the ability to analyse and question things, general knowledge in other fields. In the 2nd factor, entitled *Participatory competency*, the saturated items are: orientation towards work results, proactive attitude, initiative, out-of-the-box thinking, and accountability in completing tasks. The 3rd factor, entitled *Interpersonal competency*, comprises: communication and interaction skills, efficient team work skills, and the ability to stimulate others. The 4th factor was entitled *Organisational competency* and comprises: efficient activity planning and organisation, capacity to work under pressure, the ability to learn quickly, to adapt, promptness and efficient time management, document and report drafting skills. The 5th factor, entitled *Professional (specific) competency* comprises: the capacity to perform job-related tasks, job-related specialist knowledge, job-related practical competencies, and competencies specific to the activity of the organisation.

Another hypothesis tested via this study states that there are differences in the perceived importance of competencies according to the financial performance of the organisation. It was examined whether the better financially performing companies give preference to certain competencies. Upon analysing the relationship between *turnover* and *company profit* and the preference for certain competencies, it can be noted that all Pearson *r* correlation coefficients are statistically insignificant ($p > 0.05$). This shows that an increase in turnover or profit is not directly linked to a stronger preference for certain competencies.

4.2. Employers' satisfaction: differences between applicants vs. young business higher education graduates

The survey was further pursued to examine: (a) the level of satisfaction with applicants' competencies in general and (b) the level of satisfaction with the competencies of young graduates in business. One of the initial hypotheses was that there are differences between the level of satisfaction with young higher education graduates and applicants, in general. In order to identify any such difference, two distinct questions were addressed for the two categories.

As regards employers' level of satisfaction with the applicants' competencies, they generally declare to be contented. The highest level of satisfaction is indicated for *accountability in completing tasks* (mean 4.10), *promptness and efficient time management* (mean 4.09), *efficient teamwork skills* (media 4.07). The least satisfactory are rated to be *general knowledge in other fields* (media 3.01), *the ability to analyse and question things* (media 3.13), *leadership* (media 3.15). Similarly to the questions related to importance, there are also great differences in terms of the satisfaction with the *specialised practical competencies* (mean 4.44) and the *general knowledge* of the applicants (mean 3.50).

The next point under review is the level of satisfaction with the competencies of young business graduates. As expected, the level of satisfaction had lower rates for almost all competencies. The greatest differences occur for the *capacity to perform tasks* (difference of 0.66), *leadership* (difference of 0.60), *job-related specialised knowledge* (difference of 0.44), *efficient activity planning and organisation* (difference of 0.43). It can be concluded that in the development of these skills, work experience contributes greatly. Nevertheless,

for some competencies work experience does not seem to have a positive effect, which does not put young graduates at a great disadvantage versus experienced applicants. On the contrary, for a series of assessed criteria, employers consider that young graduates are better trained. For example, graduates are at advantage for the following competencies: *general knowledge in other fields* (difference of 0.49), *computer literacy* (difference of 0.34), *the ability to learn quickly*, (difference of 0.19), *proactive approach* and *out-of-the box thinking* (difference of 0.12). Yet, this advantage should be analysed in relation to the importance attached to these competencies by employers.

Table no. 3: Employers' satisfaction with the competencies of applicants and young graduates in business

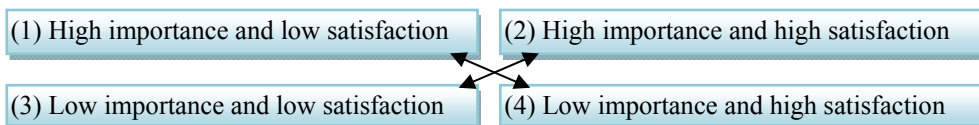
Competence	Satisfaction Mean		Differences (G-A)
	Applicants (A)	Graduates (G)	
Task completion capacity	3.95	3.29	-0.66
Accountability in completing tasks	4.10	3.80	-0.30
Promptness and efficient time management	3.98	3.55	-0.43
Ability to learn quickly. to adapt	4.04	4.23	0.19
Proactive approach. initiative. out-of-the box thinking	3.76	3.88	0.12
Results orientation	3.98	3.92	-0.06
Communication and interaction skills	4.03	3.97	-0.06
Effective teamwork skills	4.07	4.03	-0.04
Ability to stimulate the others	3.27	3.05	-0.22
Job-related specialist knowledge	3.94	3.50	-0.44
General knowledge in other fields	3.01	3.50	0.49
Leadership	3.15	2.55	-0.60
Foreign languages	3.56	3.85	0.29
Computer literacy	3.93	4.27	0.34
The ability to analyse and question things	3.13	4.02	-0.11
Document and report drafting skills	3.48	3.11	-0.37
Capacity to work under pressure	3.80	3.42	-0.38
Job-related practical competencies	4.05	3.89	-0.16
Competencies specific to the activity of the organisation	4.09	3.95	-0.14
Promptness and efficient time management	4.09	3.76	-0.33
Negotiation skills	3.40	3.06	-0.34

4.3. Importance-satisfaction relationship

In order to achieve high pragmatic utility for the results, the relationship between the competencies' importance for employers and the satisfaction degree with the applicants' competencies was further analysed. While employers can be highly satisfied with graduates' training in terms of certain competencies, the same competencies may not be deemed very important, and consequently play a minor role in rating their satisfaction with graduates' quality.

The review according to the interaction Importance - Satisfaction makes responses fall under one of the four categories:

Figure no. 1: Importance - Satisfaction interaction



Among these categories, relevant are first and foremost those of high importance, as they play a determining role in the assessment of employers' general level of satisfaction with graduates' training quality. Of those rated as important, some dimensions will be satisfactory while others less satisfactory.

The competencies perceived as satisfactory and important point out the strengths of graduates' training and are particularly relevant for monitoring and maintaining employers' satisfaction at high standards. On the other hand, the competencies perceived as unsatisfactory, but considered important by employers, play a determining role. Hence, such competencies constitute the main opportunities of improvement in the effort to enhance the quality of the learning process in higher education.

Figure no. 2 represents the relationship obtained for the importance of competencies and employers' corresponding levels of satisfaction.

Considering that as a rule, the importance of all competencies was rated by employers as higher than their level of satisfaction (mean values greater than 4 for importance, respectively mean values lower than 4 for satisfaction), the large majority of competencies are found in the quadrant of competencies assigned high importance and a relatively lower degree of satisfaction.

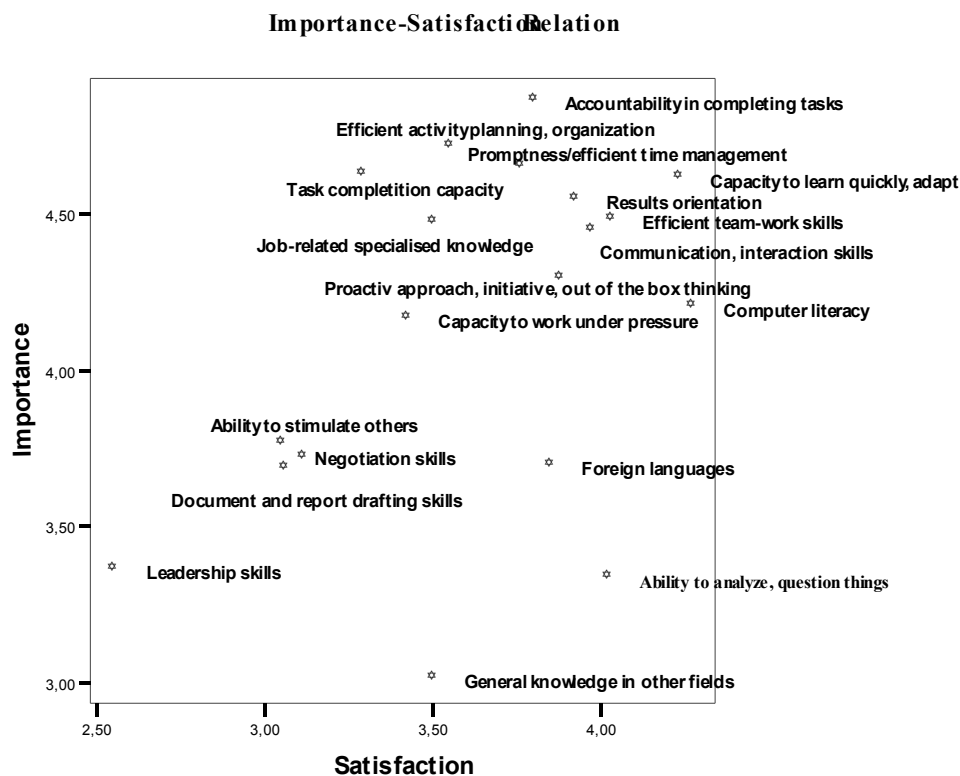
Among the competencies rated as important and satisfactory in the same time we point out the transversal competencies: *the ability to adapt quickly, the ability to work effectively as a team*. It is safe to assume that they are important to employers, and are also rated as fairly satisfactory. In what regards the competencies considered to be less important, but even less satisfactory, reference is made to *general knowledge in other fields, negotiation skills, leadership*.

Of great concern are the competencies rated by employers as important, but in relation to which the training of business graduates is less satisfactory. Among these we can make mention of *planning and efficient time management, task completion capacity, job-related specialised knowledge, assuming responsibility*. These represent the relevant competencies for the improvement efforts channelled to increase the quality of higher education graduates' training. Practically, this quadrant indicates the weaknesses in graduates' training from the perspective of the labour market requirements, which should be the starting points in any undertaking for the improvement of students' quality.

In order to gain further insight into the competencies for which employers deem that universities should provide additional training, the questionnaire included a question addressing this very problem. Responses indicated that *assuming accountability* (33% of respondents), *efficient activity planning and organisation* (31% of respondents) and

proactive approach, out-of-the box thinking (28% of respondents) were the competencies most frequently referred to by employers as requiring additional training. These results come in support of previous ones, highlighting the importance of organisational skills and participatory competency.

Figure no. 2: Relation between importance of the competencies and employees' satisfaction



Conclusions

The education system has the difficult mission to fulfil the requirements of the labour market and to develop the right competencies in young graduates, so as to turn them into well-performing employees. Assuming responsibility for the human resource quality has to go hand in hand with implementing a set of strategies aimed to ensure the quality of education, the chief condition being to be highly aware of the internal and external environment requirements. By being familiar with the competencies expected by employers, educational institutions gain important feedback which enables them to channel the teaching-learning process so as to address the labour market needs efficiently.

Summarising the analysis conducted in this research undertaking, as regards the competencies contemplated by employing companies, the results proved the increased importance of competencies regardless of the organisations' financial standing. The result

is supported by the study of Azevedo et al. (2012), which attests this finding for four European countries, including Romania.

In terms of typology, the results highlight a higher degree of importance attached to transversal competencies than to professional competencies. Romanian employers seem to be prone to hire applicants who assume responsibility and display a proactive behaviour in the workplace. The results obtained bring further arguments that educational institutions should not only convey knowledge, but also build these transversal competencies, which can be operated in various circumstances and render flexibility to the work force. This message tallies with those conveyed by other studies on this topic, among which relevant for Europe is the study of Paul and Mursoch (2000), and is at the same time somewhat different than that of the more recent study of the European Commission (Ecomm, 2010), which finds the two categories of competencies, across both European and non-European countries, relatively equal in importance. The explanation may stem from the perception of non-European countries which do not apply European qualifications frameworks, in particular the EQF. As for the hierarchy of transversal competencies, this research ranked as the top three the following: assuming responsibility, efficient activity planning and organisation, promptness and efficient time management. This hierarchy differs from that presented in the European Commission's study, which lists teamwork skills, computer literacy and adjustment to new situations. Such competencies are confirmed by this study when they verify the concordance degree of the competencies acquired with employers' expectations, namely in concrete, implementation situations, not only at declarative level.

Another objective of the study was to assess employers' level of satisfaction with the training of business graduates. Romanian employers seem overall pleased with the graduates' educational outcomes, especially in terms of transversal competencies such as assumption of responsibility, promptness and efficient time management, teamwork skills. Moreover, young graduates are rated as being equipped with additional transversal competencies, such as general knowledge in other fields, respectively computer skills. The results of this study confirm the message conveyed by Jurse and Tominc's study (2008), yet invalidates De Weert's study (2007). The explanation lies in the evolution of education to match the market requirements, as well as in the contextual differences, linked to the national education system and the labour market when it comes to ranking the competencies actually acquired by graduates.

The main limitations of this study relate to the limited sample to which the research instrument was applied and the sampling technique employed, which does not enable the generalisation of results to the entire population of Romanian employing companies. With this as a starting point for research continuation paths, it is necessary to conduct such surveys from time to time, to ensure a permanent connection between the educational system and the labour market requirements. Above all, it is recommended to look into employers' requirements in a particular manner for each field area and educational level, types of jobs and employing companies. Thus, universities would receive permanent feedback from the beneficiaries of graduate work force.

The central idea of this research underlines the importance of obtaining feedback from employers on the quality of graduates' training. Nevertheless, we should be aware that despite the labour market expectations, the role of higher education is much more complex, and not simply subordinated to employers' requirements. As such, considering the dynamic nature of the labour market, we consider that the education system should not merely serve

employers' momentary requirements, but build general, transferable competencies, enabling young people to adapt rapidly to the ever-changing market requirements.

Notes

⁽¹⁾ ECVET Technical Working Group is the group having developed the European Credit Transfer System for Vocational Education and Training (VET) within a strategy meant to support the development of qualifications and competencies at European level, the system being similar to that established for higher education under Bologna Declaration;

⁽²⁾ <http://www.anc.edu.ro/index.php?page=docis>

Projects supporting this research

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The Project *Window towards employment of graduate labour force* under the Sectoral Operational Programme Human Resources Development 2007-2013; Priority axis 5 'Promoting active employment measures'; Key area of intervention 5.1 'Developing and implementing active employment measures'; POSDRU/104/5.1/G/78225 Contract; Beneficiary Babeş-Bolyai University of Cluj-Napoca.

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