

**SOFT SKILLS: FROM UNIVERSITY TO THE WORK ENVIRONMENT.
ANALYSIS OF A SURVEY OF GRADUATES IN PORTUGAL**

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Abstract

In knowledge based economy, soft skills format pro-active and entrepreneurial behaviors. Once they provide answers to complex company questions, the *academic curriculum* should highlight a diversity of *skills* in graduates to build an open and flexible mind to uncertain and volatile market imperatives. In this article we compare graduates' opinion on university acquired *soft skills* and those which are actually applied in organizational context. Results demonstrate a significant difference in perception, which might reveal a structural maladjustment in the interaction between universities and enterprises. A questionnaire was used, designed in a Likert scale, which was handed out to graduates of different universities and different areas of knowledge between March and April 2012.

Key-words: education, entrepreneurship, knowledge, performance, productivity, skills, university

JEL CLASSIFICATION: A23, M53, M54, O15

1. Introduction

Knowledge based economy is structured and developed with economic agents holding multi-qualified capacities, with broad and supplementary skills to effectively solve everyday problems, capable of enhancing their creativity, as well as aligning with the creativity of peers, group and organization. Thus, the individual needs autonomy and values such as sociability, conscience, freedom, holism and intent in order to fulfill a professional activity. Therefore, all these variables lead to the development of personal and organizational performance. Though not sufficient, this is the environment required to establish the ground for human talent, for creativity and for economic and social dynamism.

This article discusses different individual skills and competences, which bear the growth of their performance levels and organizational sustainability. Our attention is particularly dedicated to *soft skills* as they are seen as the ground for all other skills, notwithstanding their interesting contribution for the configuration of meta-competences.

Therefore, the article reveals the importance of soft skills in the dynamization of the social-economical fabric and in the complete fulfillment of the human being. Using a specific questionnaire, we have then heard those holding an academic degree, their sensitivity towards the *soft skills* (i) acquired throughout their degree and (ii) their implementation in the organization. Results should be interpreted wisely, concerning the size of the sample. However, we hope that potential further analysis might produce positive results in a curricular restructuration and in the (re)design of educational politics, guided towards the edification of a society converging into immaterial and intellectual energy, from which soft skills are part of.

The article is structured in two parts. Part one reflects a theoretical framework on skills considered relevant to a sustained evolution of the information society. Part two deals

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with the empirical application, which precedes the discussion and implication of results, followed by bibliography.

2. Soft skills and information society

In nowadays highly informational society and in a labor market ruled by imperative watchwords such as flexibility, adaptability, mobility, creativity, lifelong learning, group learning, among others, skills are no longer seen as a pure synonym of competence. Therefore, according to OECD (2003:2), skill is faced as “the ability to successfully meet complex demands in a particular context. Competent performance or effective action implies the mobilization of knowledge, cognitive and practical skills, as well as social and behavior components such as attitudes, emotions, and values and motivations. A competence – a holistic notion - is therefore not reducible to its cognitive dimension, and thus the terms competence and skill are not synonymous”. This analysis is focused on the integrated perspective of competence, as opposed to a more distinctive perspective. Thus, its importance lays in the multidimensional talent, according to the Germanic point of view. In its turn, distinctive competences are individual, intended for task specificity, as the example of the Anglo-Saxon point of view. Therefore, in the integrated perspective, competences are produced in the *input* perspective, opposite to the Anglo-Saxon point of view, where they are faced as *output*.

Hence, the integrated perspective demands education to have a more “enterprising influence” on people, essential for globalized and based on knowledge economies, since entrepreneurship is the engine for economic development (Bonnet, 2012:05). For that reason, Bonnet believes education depends on young students’ entrepreneurship. This author goes even further stating that an entrepreneurial organizational network has the potential to be innovative as it reveals higher sensitivity to the importance of personal creative skills and development. Such development is achieved through an increased spiritual life, which reflects directly on organizational performance (Neck & Milliman, 1994; Turner, 1999). That is the main reason why this perspective believes that a person fulfilling a job is not only body and physical strength, but also soul and spiritual, moral and emotional strength. The combination of these strengths feeds creative chains in organizations, favours interaction and information sharing and leads to an environment of interactive learning. This facing the base elements of creativity, innovation and sustainability in highly competitive global markets, where great competitive advantages are built on immateriality and focussed on people, claims for new approaches to educational and labor markets. Therefore, concepts and instruments from sociological and psychological sciences are being used in the literature of economical and business sciences, and attention is drawn to the positive relationships established between economical growth and the variables of individual, group and organizational performance. The European Commission (2006) clearly states that there is a positive correlation between entrepreneurship and economic growth, position shared by Bonnet (2012).

Regarding this new guideline, specific skills, though important, are no longer captivating the core importance of intelligent organizational attention. In Civelli’s opinion (1997), *people* as traditional productive factor are losing importance when compared to their own skills, which are valued in a more particular way. He adds that the corpus of knowledge, skills, experience, job position and organizational status stood as safety factors for the individual, whose reality is reversing due to challenges facing society and

all institutions, especially higher education institutions. Hence, education should provide formal qualifications and personal skills, since the labor market does not only depend on *specific skills and knowledge*, but also on proactive competences, namely problem solving, autonomous work and other attributes which positively influence individual performance (Fallows & Steven, 2000:76).

Such guideline originates in concerns with economic growth, situation which has been present since the 1980's, despite the tendency to increase during worldwide economic difficulties. However, the inconsistent behaviors of economical agents, namely at a soft skill level, might build their own causes, because the "shortsighted" perspective on patrimonial, organizational and social values, along with some undermining of the immaterial aspect, has contributed to enlarge such divergences. Therefore, institutions such as the European Union have already seen competences in a perspective of human global fulfillment, which demonstrates concern for social humanization. Thus, the individual is believed to have the necessary capabilities for a certain job, though not enough, admitting that not all acquired knowledge might be applied. This European guideline aims at aligning the individual characteristics with the characteristics of a productive activity, which reignites the importance of discussing learning systems and their goals. Such perspective matches the axioms of human capital, considering each human element works as a molecule in the brain of the organization, which leads us to assume that looking after the human capital is looking after the organization, with its physical, mental, emotional and psychic condition. Concerning this subject, Davenport (2000:39) considers the human capital to have four components:

(i) capability; (ii) behavior; (iii) effort; (iv) time.

Capability is translated in the worker's expertise. It involves ability, knowledge and talent, while behavior is associated to stimuli revealed through values, emotions, ethics and relationships. Nevertheless, effort is translated into an aware and deliberate application of mental and physical resources (Durán, 2004). However, one cannot ignore the virtuousness presented by the circle of such components, since effort promotes ability. For its part, ability leads to reflection and brainstorming, which ferments creativity in the organization and adds extra and new values to human capital. Similarly, time is a crucial resource to the production, usage and control of new knowledge, drawing attention to how fast technologies become obsolete. Thus, the development of human potential is key for society and organization development (Vargas Trepaud, 2005:120), since knowledge is forwarded through the mind of people. Hence, an efficient knowledge management is recognizing the importance of human capital, since organizational capabilities such as ability, experience, creativity and know-how spring from people's minds. These abilities form the basis of competitive advantages as knowledge is stored in neuronal inter-connections in the brain (Durán, 2004). This is the reason why the term *meta-ability* is used to designate a group of attributes such as self-control, enthusiasm, perseverance, empathy and self-motivation.

Authors like David & Lopez (2001) underline the importance of human capital in productivity, competitiveness and social development. This global development appeals to the dynamics of the immaterial component, just like Goleman (1996) when associating the emotional intelligence to the capacity to successfully lead organizations. Emotional intelligence is also connected to organizational performance and success, perspectives which depend on creativity and on development and application of human talent. In the

context of these guidelines, Mansfield (2004) appeals to people's awareness to how important competences are in the performance of duties, at the same time introducing a few permissives, such as: "more multi-skilled workers are needed – people who are capable of adapting quickly to new skills demands and changing methods of work organization" (Mansfield, 2004:299).

The importance of Mansfield (2004)'s arguments is filled with the variable *trust*, which for Davis *et al.* (2000) is a source of competitive advantages as well. Trust, among others, presents a number of rewards in consolidating performance and competitiveness, as the example of sociability and intra-organizational cooperation, as well as allowing a more effective discussion of all arguments inherent to the economy of uncertainty and risk (Lewis & Weigert, 1985). According to Rode *et al.* (2007), trust is so important in nowadays organizations that it resembles social capital intra and inter groups, with the power to leverage their sustainability. Therefore, in Bakker *et al.* (2006)'s opinion, trust is considered the top element in social capital and a strategic ingredient in the *soft skills*.

3. Between labor market and teaching market

In a context of change and complexity, the learning society needs personal, organizational and social goals to be redefined (European Commission, 1995), since current societies are influenced by internationalization movements and by the demolition of borders among countries, peoples, cultures and civilizations. This new perspective entails the whole academy to take responsibilities, namely the students, who demonstrate more conscientiousness while learners. As pledged by the European Commission (1995), the future society will then know how to invest in brainpower which is a attribute of societies where (i) one can teach and learn, and on the other hand (ii) where each person is responsible for participating in their own qualification. A cognitive society is based on three "thriving shocks":

- (i) *the information society shock,*
- (ii) *the globalization shock and*
- (iii) *the scientific and technical civilization shock.*

Such social shocks imply searching for self-reliance skills, which ought to be mastered by graduates in the labor market. However, Hawkins & Winter (1996) believe the graduate must also obtain other skills, as part of a labor market team. Elements of "meetings skills, negotiation skills and networking skills" must be gathered and associated to other general skills, such as market knowledge, management skills and the use of information technologies. According to Hawkins & Winter (1996:05), knowledge and skill in specific areas, the so called specialist skills, stand as the final element, in order for workers to become experts in aspects related to the disciplinary area of their course or promising market niche. Due to the combination of such principles, Hawkins & Winter (1996:9), leave a few recommendations to students, such as: (i) increase your self-awareness, (ii) make an informed decision about what, how and where to study, (iii) gain relevant work experience, (iv) develop skills for the workplace, (v) set aside opportunities to reflect on your learning, (vi) use your contacts: develop the art of networking, (vii) explore alternative career options, (viii) practice negotiation skills, (ix) do something completely different, (x) don't panic! You don't have to be perfect.

Such feeling is also shared by Stagg (1996:11) stating a school curriculum should be broad, comprehensive and balanced in order to "*prepare pupils for the opportunities, responsibilities and experiences of adult life*". The author goes on affirming that the

curriculum should promote students' spiritual, moral, cultural, mental and physical development. In such a context, the curricular plan should prepare students to identify opportunities and to take responsibilities and experiences throughout their life. During the 1990s, educational vocation in the United Kingdom was debated at the Business and Technology Education Council (BTEC), similarly to what happened to new qualification and skill training programme (Laughton & Montanheiro, 1996). There was a serious concern in linking the educational system to the labor market and the needs for a high nobility performance. BTEC's political stand allowed demonstrating the importance of *learning by doing*, where informal learning plays an important role in the process of intellectualizing the individual and the society. Therefore, attention is drawn to the urgency for a skill boosting curriculum, which should include eight common skills: (i) numeracy, (ii) learning and studying, (iii) identifying and tackling problems, (iv) design and visual discrimination, (v) information gathering, (vi) communicating, (vii) information processing and (viii) working with others. However, BTEC has incisively introduced a more sophisticated strategy for the production of common skills. According to Laughton & Montanheiro (1996:19), they include:

- a) managing and developing self,
- b) working with and relating to others,
- c) communicating,
- d) managing tasks and solving problems,
- e) applying numeracy,
- f) applying technology
- g) applying design and creativity

A survey about those seven skill vectors was administered to graduates. The key question was: "Considering your previous education, especially the BTEC course you have completed, how did it contribute to your professional/business position or any further academic study you are now taking?" (Laughton & Montanheiro, 1996:20). Results seemed clear, as about 50% answered that training prior to their course had been important or very important. Yet, the other part states that the course was not decisive or had little contribution. The other questions aimed at discovering how important the soft skills were when compared with hard skills. Thus, they were asked to "Rank the importance of the common skills to you nowadays by indicating the usefulness of these skills to your employment, work or academic situation on a scale ranging from 10 (very much) to 1 (very little)", as in table 1:

Table 1 Importance of common skills

Common skill	Mean average	Standard deviation
Managing and developing self	7.72	2.14
Working with others	7.83	1.83
Communicating	8.21	1.83
Managing tasks/solving problems	7.61	2.23
Applying numeracy	5.21	2.46
Applying technology	5.75	2.27
Applying design	4.93	2.56

Source: Laughton and Montanheiro (1996: 22)

Results show that soft skills are more valued and applied on a corporate daily basis. To highlight the fact that all others are very aware of the importance of soft skills, considering the averages obtained for all variables whose average is, on a scale of one to ten, equal to or greater than 7.61 (Communicating, 8.21; Working with others, 7.83; Managing and developing self, 7.72; Managing tasks/solving problems, 7.61). On the other hand, answers related to technical skills obtain fewer answers, with an average below 5.76 (Applying technology, 5.75; Applying numeracy, 5.21; Applying design, 4.93). It is also verified that the standard deviation is more consistent with the soft skills, with a lower average compared with all others.

Higher education models have, however, insisted on core skills (Binks, 1996:26), despite the author realizing that there seems to be a higher awareness of the lack of personnel with transferable skills, contrary to the case of academic knowledge. The author still adds that there is an increase in the search for licensees with personal skills, though not disregarding the academic competences. In this context, flexibility is becoming a prerequisite for the labor market, whose characteristic is fed by *soft skills*, contrary to the recent appreciation of hard skills (Binks, 1996:28). When human capital inside the organizations is encouraged, the development of competences is accelerated (Athey & Orth, 1999), with its capital holding key traits for flexibility and adaptability (Atkinson, 1984; Garavan *et al.* 2001; Waterman *et al.*, 1994), representing strategic aspects in the current informational revolution.

4. Empirical application

Population, methodology and instrument

Bearing in mind the strategic importance of graduates' performance in the labor market, our main concern was the repercussion of soft skills. Attention was directed to soft skills obtained during a graduate's academic journey, confronting these skills with their applicability in the companies. A survey aimed at licensees was made, regardless the course and university attended. The survey was divided into three groups. The first group described the respondent and focused on questions about gender, age, education, course, University and graduation year. The following group inquired about the respondent's professional status, area of activity, years of working, company size and monthly net income. Group three focused on soft skills, performed according to a seven-point Likert scale, where 1 (one) corresponded to a minimal closeness of agreement and 7 (seven) corresponded to a maximal closeness of agreement.

The survey was submitted to a pre-test. It was handed out to 20 (twenty) working graduates in two distinct cities in northern Portugal: Braga and Mirandela. Some doubts and suggestions rose from the pre-test, which contributed for the quality of the final survey. Among them were emotional and spiritual questions. Since such questions bewildered most respondents, some demonstrating no knowledge about such theme, some questions were adapted and others deleted. The pre-test was repeated on a second stage. The final survey was built on *Questionform* (<http://questionform.com/>) and the link e-mailed to students enrolled in our Masters course, asking them to answer it and pass it along their graduate friends.

General profile of respondents

A total of 261 surveys were gathered between March and April 2012. Since the survey was strategically made of optional answers, we were forced to put aside 88 questionnaires

as they were not filled out, which reduced the sample to 173 surveys, with the gender distribution (see table 2):

Table 2 Gender distribution of respondents

Gender	(n)	(%)
Men	53	30.6
Women	120	69.4
Total	173	100.0

Source: Own elaboration

As expected, 51.4% of respondents ranges between 25 and 34 years of age, as demonstrated by table 3.

Table 3 Age distribution of respondents

	Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Until 24 years	33	19.1	19.3	19.3
	From 25 to 34	89	51.4	52.0	71.3
	From 35 to 44	33	19.1	19.3	90.6
	From 45 to 54	12	6.9	7.0	97.7
	Over 55 anos	4	2.3	2.3	100.0
	Total	171	98.8	100.0	
No answer		2	1.2		
Total		173	100.0		

Source: Own elaboration

52% of respondents were licensees, as expected. Almost all areas of knowledge were present, highlighting the amount of graduates in Applied Linguistics. Answers also reveal that graduates work in multiple labor areas, especially Law, Banking, Footwear, Media, Consultancy, Accounting, Construction, Education, Energies, Teaching, Training, Hotels sector, Computers, Research, Human Resources, Health, Services, Entertainment, Textile, Translation, Sales and Clothing.

84.4% (n=146) of respondents are employed and 15% (n=26) are unemployed. However, 0.6% (n=1) does not provide information about the current professional situation. Also the fact that respondents come from distinct geographical areas, namely the districts of Aveiro, Braga, Bragança, Leiria, Lisboa, Porto, Vila Real and Viseu in the national market. Though in a smaller percentage, some respondents who were born and studied in Portugal are working abroad, as in Belgium, Spain, England, Macao and the Check Republic.

Regarding the company size, and analyzing the answered questions, the most expressive percentages indicate extreme groups, that is 38.2% work for companies with over 250 employees and 14.5% work for very small companies, up to 9 employees (see table 4).

Table 5 demonstrates the distribution of respondents by monthly net income bracket. In terms of valid answers, 60.4% earns a monthly net income equal to or higher than 999€. Important to say that 35.7% of respondents earn a monthly net income no higher than 750€. Since it is a skilled workforce, with an academic degree, and contrasting it with the current Portuguese national minimum wage of 485€, it is clear that the wage index for graduates is low.

Table 4 Respondents by company size

Company size		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Until 9	25	14.5	16.6	16.6
	From 10 to 19	15	8.7	9.9	26.5
	From 20 to 29	5	2.9	3.3	29.8
	From 30 to 49	11	6.4	7.3	37.1
	From 50 to 99	11	6.4	7.3	44.4
	From 100 to 199	13	7.5	8.6	53.0
	From 200 to 250	5	2.9	3.3	56.3
	Over 250	66	38.2	43.7	100.0
	Total	151	87.3	100.0	
No answer		22	12.7		
Total		173	100.0		

Source: Own elaboration

Table 5 Respondents by monthly net income

monthly net income		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Until 499€	21	12.1	13.6	13.6
	From 500€ to 749€	34	19.7	22.1	35.7
	From 750€ to 999€	38	22.0	24.7	60.4
	From 1000€ to 1499€	32	18.5	20.8	81.2
	Over 1500€	29	16.8	18.8	100.0
	Total	154	89.0	100.0	
No answer		19	11.0		
Total		173	100.0		

Source: Own elaboration

5. Results and discussion

Aiming at the analyzes of the empirical application by Laughton & Montanheiro (1996), the following questions were taken into account (see table 6):

Table 6 Questions taken into account

About University	About the company	designation to be used in the analysis	question designation
13.2	14.2	X ₂	Oral communication skill
13.3	14.3	X ₃	written communication skill
13.4	14.4	X ₄	Initiative to solve problems
13.6	14.6	X ₆	decision making ability and self-trust
13.8	14.8	X ₈	analysis and concision skills
13.12	14.12	X ₁₂	team work related skills
13.16	14.16	X ₁₆	inter-personal skills
13.17	14.17	X ₁₇	Ability to (re)act in a stressful environment
13.18	14.18	X ₁₈	Ability to create and share new ideas
13.27	14.27	X ₂₇	critical and cooperative spirit
13.28	14.28	X ₂₈	willingness to share experiences
13.30	14.30	X ₃₀	Initiative and creativity

Source: Own elaboration

In those twelve questions, respondents were asked to grade on a scale of 1(minimum) to 7 (maximum) their opinion on (i) the input received throughout their course and (ii) usefulness in the company where they work. Answers are demonstrated in tables 7 and 8.

Table 7 Skills obtained in University (in percentage)

Item	Answer type (degree of agreement)								Mean	Std deviation
	1	2	3	4	5	6	7	NA		
X ₂	1.2	1.7	6.4	14.5	22.0	23.7	5.2	25.4	4.96	1.265
X ₃	0.6	1.7	4.6	9.8	19.7	30.1	8.1	25.4	5.26	1.222
X ₄	2.3	2.9	13.3	15.6	18.5	19.7	2.3	25.4	4.52	1.393
X ₆	2.9	4.0	15.0	16.8	17.3	16.8	1.7	25.4	4.33	1.421
X ₈	1.2	0.6	6.4	14.5	18.5	22.5	11.0	25.4	5.15	1.318
X ₁₂	1.7	4.6	7.5	12.7	18.5	22.5	6.9	25.4	4.84	1.473
X ₁₆	2.9	4.0	6.4	15.0	19.7	18.5	8.1	25.4	4.78	1.517
X ₁₇	4.0	8.1	8.7	13.9	20.8	13.9	5.2	25.4	4.36	1.605
X ₁₈	2.3	5.2	6.9	11.0	19.1	26.0	4.0	25.4	4.79	1.477
X ₂₇	2.3	4.6	7.5	11.6	20.2	19.1	9.2	25.4	4.84	1.535
X ₂₈	1.7	4.0	9.2	9.2	18.5	27.2	4.6	25.4	4.86	1.446
X ₃₀	5.2	4.6	8.1	15.0	20.2	16.8	4.6	25.4	4.74	1.585

Source: own elaboration [Legend: NA (no answer)]

Table 8 Skills applied in the company (in percentage)

Item	Answer type (degree of agreement)								Mean	Std deviation
	1	2	3	4	5	6	7	NA		
X ₂	1.7	0.6	1.2	5.6	11.6	17.9	28.9	32.9	5.89	1.363
X ₃	1.7	0.0	1.2	6.9	10.4	23.1	23.1	33.5	5.80	1.306
X ₄	1.7	0.0	1.2	4.0	13.3	22.5	23.7	33.5	5.85	1.265
X ₆	2.3	0.0	1.7	3.5	18.8	25.4	16.2	34.1	5.63	1.305
X ₈	1.7	1.7	1.7	5.8	9.2	27.7	17.9	34.1	5.64	1.402
X ₁₂	1.7	0.0	3.5	5.8	8.7	22.5	23.7	34.1	5.76	1.391
X ₁₆	1.7	0.0	1.7	2.3	9.8	28.3	22.0	34.1	5.90	1.234
X ₁₇	1.7	0.0	2.3	6.4	9.8	25.4	19.1	34.1	5.64	1.402
X ₁₈	1.7	1.2	1.2	8.9	19.1	24.3	9.8	34.1	5.31	1.371
X ₂₇	2.3	0.0	2.3	5.2	13.3	27.2	15.6	34.1	5.60	1.342
X ₂₈	1.7	0.6	1.7	8.1	16.2	24.9	12.7	34.1	5.46	1.298
X ₃₀	2.3	0.0	4.0	7.4	14.5	26.0	11.6	34.1	5.37	1.378

Source: own elaboration [Legend: NA (no answer)]

Tables 7 and 8 demonstrate the existence of different closeness of agreement as to how the respondent feels about what was formally learnt at University and what is applied in an organizational context. Graduates who have never been employed did not answer the question, as instructed, on their feelings about the workplace. The closeness of agreement at companies is high, contrasting with the feeling got from the University. The average result for the company is between [5.31 and 5.90], contrasting with the average result for the University, with results between [4.33 e 5.26]. Also, and apart from X₂ (oral communication skills) and X₃ (written communication skills), the standard deviation is smaller in companies, which indicates a greater average dispersion for Universities. Since

we live in a more cognitive and intelligent society, the efficiency in resource affection is greater. Therefore, we believe a reflection upon the tendency reveled by the answers obtained to be important, considering the negative externalities which may arise.

In a second stage, we have decided to gather all answers in three groups:

- (i) group 1: all answers scored with a closeness of agreement 1, 2 and 3, which is represented by column A=(1+2+3) on table 8;
- (ii) group 2: only answers scored with level 4, represented by column B= (4);
- (iii) group 3: all answers scored 5, 6 and 7, represented by column C= (5+6+7).
- (iv) NR: a residual group, matching people who did not answer the question.

These groups were built attending certain aspects. The first group refers to negative answers and the third to positive answers. Group 2 reflects neutral answers. As the questions about soft skills were the same for both University and Company, it was decided to create a comparative chart, as demonstrated by table 9.

Table 9 Contrast between soft skills “obtained at University” and “useful at the company” ordered by group (in percentage)

Item	answers concerning the feelings towards the University				answers concerning the feelings towards the Company			
	A= (1+2+3)	B = 4	C = (5+6+7)	NA	A= (1+2+3)	B = 4	C = (5+6+7)	NA
X2 (Oral communication skill)	9.3	14.5	50.9	25.4	3.5	5.6	58.4	32.9
X3 (written communication skill)	6.9	9.8	57.9	25.4	2.9	6.9	56.6	33.5
X4 (Initiative to solve problems)	18.5	15.6	40.5	25.4	2.9	4	59.5	33.5
X6 (decision making ability and self-trust)	21.9	16.8	35.8	25.4	4	3.5	60.4	34.1
X8 (analysis and concision skills)	8.2	14.5	52	25.4	5.1	5.8	54.8	34.1
X12 (team work related skills)	13.8	12.7	47.9	25.4	5.2	5.8	54.9	34.1
X16 (inter-personal skills)	13.3	15	46.3	25.4	3.4	2.3	60.1	34.1
X17 (Ability to (re)act in a stressful environment)	20.8	13.9	39.9	25.4	4	6.4	54.3	35.1
X18 (Ability to create and share new ideas)	14.4	11	49.1	25.4	4.1	8.9	53.2	34.1
X27 (critical and cooperative spirit)	14.4	11.6	48.5	25.4	4.6	5.2	56.1	34.1
X28 (willingness to share experiences)	14.9	9.2	50.3	25.4	4	8.1	53.8	34.1
X30 (Initiative and creativity)	17.9	15	41.6	25.4	6.3	7.4	52.1	34.1

Source: own elaboration [Legend: NA (no answer)]

As demonstrated above, respondents show distinct levels of agreement regarding the soft skills obtained at University and those useful in an organizational context. Except for

variable X_3 (written communication skill), where the intensity of positive answers is identical, the amount of positive answers in all other variables was much higher towards the companies. The following variables are worth mentioning:

- variable X_6 (decision making ability and self-trust), with a maximal positive answer percentage of 35.8% for University, contrasting with the Company's 60.4%. Average is 4.33 and 5.63, for University and Company respectively, while standard deviation is 1.421 for university and 1,305 for the company.
- variable X_4 (Initiative to solve problems), with positive percentages reaching 40.5% for University and 59.5% for Company. The average values are 4.52 and 5.85, for University and Company respectively, while standard deviation is 1.393 for University and 1.265 for Company.
- variable X_{16} (inter-personal skills), with positive percentages of 46.3% for University and 60.1% for Company. The average values are 4.78 and 5.90, for University and Company respectively, while standard deviation is 1.517 for University and 1.234 for company.
- variable X_{17} (Ability to (re)act in a stressful environment), with positive percentages reaching 39.9 % and 54.3%, for University and Company respectively. Average is 4.36 and 5.64, for University and Company correspondingly, while standard deviation is de 1.605 for University and 1.402 for Company.

As tables 10 and 11 demonstrate, Spearman correlation coefficient is positive for both University and company. Overall, they are substantial positive correlations, although the alliance between Decision making ability and self-trust (X_6) and Initiative to solve problems (X_4) might be considered a strong alliance. All associations are statistically significant, for a level of 0.01.

Table 10 Correlations Spearman's rho (University)

	X_6	X_4	X_{17}	X_{16}
X6 (decision making ability and self-trust)	1.000			
X4 (Initiative to solve problems)	0.740**	1.000		
X17 (Ability to (re)act in a stressful environment)	0.545**	0.503**	1.000	
X16 (inter-personal skills)	0.539**	0.600**	0.619**	1.000

***.* Correlation is significant at the 0.01 level (2-tailed). *.*.* Correlation is significant at the 0.05 level (2-tailed). Source: own elaboration

Table 11 Correlations Spearman's rho (Organization)

	X_6	X_4	X_{17}	X_{16}
X6 (decision making ability and self-trust)	1.000			
X4 (Initiative to solve problems)	0.616**	1.000		
X17 (Ability to (re)act in a stressful environment)	0.435**	0.506**	1.000	
X16 (inter-personal skills)	0.404**	0.507**	0.461**	1.000

***.* Correlation is significant at the 0.01 level (2-tailed). *.*.* Correlation is significant at the 0.05 level (2-tailed). Source: own elaboration

According to the demonstrated sentiment, data seems to indicate that the amount of dedication paid by the university to soft variables such as initiative to solve problems, decision making and self-trust abilities, interpersonal skills and the ability to react to and act in a stressful environment, do not match corporate demands. Such conclusion may be a sign from the labor market that there is a serious need to restructure the academic curriculum in order to make adjustments to face all the changes companies meet nowadays. Such variables gain visibility since they are part of organizational competitive heritage. It then makes sense to insist on their development because they provide sustainability to the competitive advantage.

However, other variables deserve special attention, such as team work related skills, critical and cooperative spirit and initiative and creativity, whose answers are more expressive in the corporate usefulness than University acquiring. This group of variables is relevant for high performance and challenges in organizational change, namely at the level of implanting and feeding innovative processes. They also play a strategic role in boosting the entrepreneurial spirit and its absence may translate as holding on to organizational passivity, which weakens productivity. Consequently, we believe it is relevant to rethink all soft skills to be produced and cultivated in Society in general, particularly at the University, in order for graduates to represent a distribution channel for all intangible actives in the knowledge economy and in the society characterized by the informational revolution.

6. Conclusions and implications

This article translates the results of long-term thinking which is still taking place and whose surveys are still in circulation. One of its limitations is the size of the sample. However, the results obtained converge to the results obtained by Laughton & Montanheiro (1996). Both outcomes indicate the importance of new thoughts on corporate needs. Simultaneously, they indicate the need to reflect upon the role of University, repositioning it in the center of society as an Institution which produces and spreads knowledge par excellence, making it more intelligent, more efficient and more inclusive. Along this path there is also the need to rethink the curriculum and align it with corporate needs. According with Monteiro & Curiel, (2010:28), transversal skills must be developed in all courses and degrees. There is a substantial difference when contrasting the closeness of agreement between what the graduates acquired at University and what they apply in their workplace, as demonstrated by the data analysis. In our perspective, such differences:

- (i) obstruct the implementation of a new organizational culture directed toward an economy based on knowledge,
- (ii) make the proliferation of intelligent performances harder, especially at an organizational level, and
- (iii) affect corporate productivity and competitiveness with external economies over society and well-being.

If such reality were real, it would obliterate Mansfield (2004:299)'s opinion, when he states that "more multi-skilled workers are needed – people who are capable of adapting quickly to new skills demands and changing methods of work organization". In fact, the answers obtained indicate behaviors and attitudes typical of the traditional economic and social models, which are not aligned with the abrupt changes in the information society.

Data also show that there are needs in the (v) spirit of initiative and creativity, and the same happens (vi) in the presence of critical and cooperative spirit. Both aspects obstruct the organizational entrepreneurship, thus not efficiently supporting innovative processes, which might lead to a social and population scourge, due to the proliferation of its negative effects over society. Thus, as a consequence of social mutations and the importance of immaterial and intellectual assets, it seems urgent to rethink the economic and social models. In fact, all the energy involving such resources claims for behaviors and attitudes of *a new man*. Therefore, the University will have to play a more significant role instead of settling to producing and spreading specific and instrumental skills. The *trust* asset, sometimes associated with competitive advantages, must be fertilized and boosted throughout students' academic path. If that does not happen, skills such as entrepreneurship, decision making, persuasion and charisma in handling people and the importance of working autonomously yet interacting with peers and group will weaken and fade personal performance. From that moment on, independence, corporate performance and longevity will be conditioned.

Based on all that was said above, it is urgent to integrate soft skills into the academic curriculum for they are a strategic component in qualifying individuals and companies. Since these are being valued and sought out by the business fabric, they can represent a business opportunity for Universities, besides their social importance and their inclusive competence.

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