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THE STUDENTS' PERCEPTION OF THEIR SOFT SKILLS – BASED ON RESEARCH RESULTS FROM HUNGARY AND SERBIA

Abstract: In the 21th century the talented employees and their knowledge and skills are the most important assets of the organizations. In relation to graduated students of economics and management studies employers often value soft skills more than technical and professional skills. Therefore, higher education institutions have a significant role in the advancement of the employability of their students – developing not only their knowledge and professional-technical skills, but soft skills, too. The aim of this paper is to introduce the results of a few international research concerning the role of university-level study programs in the development of the students' soft skills. Besides, the paper presents the results of a questionnaire-based research on the students' perception of the importance and development of soft skills in Hungary and Serbia. Based on the data obtained in 2023 from students of Budapest Business University and Faculty of Economics in Subotica, University of Novi Sad we will show the students' perception of the most important soft skills, their opinion on where the soft skills may be developed, how important is university in developing soft skills and what soft skills may a teacher help to develop. The research hypothesis is that students from Hungary and Serbia have similar perception on the importance and development of soft skills. The IBM SPSS Statistics 26 program is used for statistical analysis. The obtained results may be a useful input for the evolution of university level study programs for students' soft skills development both in Hungary and Serbia.

Keywords: soft skills, students' perception, Hungary, Serbia

1. INTRODUCTION

The rapid changes in economic, social, political and technological environment mean a constant challenge for workforce and their competences. In the era of "war for talents" universities have an important role in the improvement of the employability of their students – developing not only their knowledge and professional-technical skills, but soft skills, too.

The industrial revolution 4.0 requires highly competent human resources, therefore universities, as institutions developing the human capital of a nation, are required to not only to training the students and prepare them for work, but to promote the graduates' future personal and career development, too. Higher educational institutions have to develop study programs which prepares students for the changing contexts and complex expectations of the global labour market.

Authors Kember, Leung, and Ma (2007) about seventeen years ago had emphasized that there had been an expanding interest for and recognition of soft skills that can support students to achieve academic and job-related aims upon their graduation. During the last ten years the development of soft skills of the students had become a crucial role in

education. Guerra-Báez (2019) considers that dynamic business environment requires from employees a set of competencies and soft skills such as critical and strategic thinking, problem solving, communication and flexibility. Tang (2019) underlines that higher educational institutions are grounds where scholars get their socialization and develop a variety of knowledge, skills, attitudes, and characteristics that shake the manner they act in a broader society. It is important to highlight that the significance of soft skills depends on the dimensions of organizational and national cultural – there may be significant differences in the importance of various soft skills in different countries and organizations worldwide. But nowadays there are general requirements, too, as the process of globalization and digitalization require the cooperation of employers from different countries and cultures.

The aim of this paper is to introduce the results of a few international research concerning the role of university-level study programs in the development of the students' soft skills. Besides, the paper presents the results of a questionnairebased research on the students' perception of the importance and development of soft skills in Hungary and Serbia. Based on the data obtained in 2023 from students of Budapest Business University and Faculty of Economics in Subotica, University of Novi Sad we will show the students' perception of the most important soft skills, their opinion on where the soft skills may be developed, how important is university in developing soft skills and what soft skills may a teacher help to develop. The research hypothesis is that students from Hungary and Serbia have similar perception on the importance and development of soft skills. The IBM SPSS Statistics 26 program is used for statistical analysis.

2. THEORETICAL BACKGROUND

It is well known that knowledge may be divided into hard skills and soft skills. Asbari et al. (2020) emphasize that hard skills can produce something that is visible, explicit and direct, they can be assessed from technical or practical tests. Escola-Gascon and Gallifa (2022) stress that hard skills are technical competencies specific to a particular discipline or field of work. Hard skills - related to technical aspects to perform several tasks in work, can produce something that is visible, explicit and direct results, can be assessed from technical or practical tests, are easily documented, formed and articulated and usually constitute, knowledge inherent in higher education, can be created, written and transferred between higher education activity units, are traditionally limited to the development and acquisition of formal learning through subjects taught in schools.

There are lots of definitions of soft skills, and they mainly depend on context. Life skills proposed by the World Health Organization, Division of Mental Health which defines them as a set of socio-affective skills that are necessary for interaction with others and that make it possible to cope with everyday demands and challenging situations. The concept of soft skills differs from that of social skills, because social skills are part of soft skills but the latter are additionally formed by skills to learn, analyse, manage time, and innovate. Escola-Gason and Gallifa (2022) underline that soft skills represent psychological attributes that express how people learn, think, and act. Asbari et al. (2020) consider that soft skills form the knowledge that is still in the minds of humans and is highly personal so that transformation requires personal interaction. Kallioinen (2010) highlights that soft skills refer to dynamic, interpersonal psychological attributes that describe a person's different ways of learning, thinking, and acting. The adequate measuring soft skills is important because they are variables that allow students to predict their professional future and career orientation.

There are many classifications of soft skills. One of them, developed by author Robles (2012) differentiate the following groups of soft skills: integrity, communication, flexibility, teamwork, and work ethics, courtesy, responsibility, social skills, positive attitudes, professionalism. On the contrary, author Caeiro-Rodriguez, et al. (2021) based on HERA project developed the following classification: 1) technical skills - related to technical aspects; 2) metacognitive skills - related to the management and improvement of the cognitive process; 3) intrapersonal skills - related to attitude towards things (creativity, adaptability, self-discipline...), 4) interpersonal skills - improve one's capabilities to work with others; 5) problem-solving skills - help to identify the source of a problem and find an effective solution. The attempt to develop acceptable classification of soft skills have two problems: the attributes included in the classifications change depending on the context and type of task to be performed; and in most classifications, the difference between hard and soft skills is not well-defined.

Edeigba (2022) emphasizes that despite of the rising awareness of universities and students about the importance of soft skills there is a significant gap between the students' soft skills and the employers' expectations about soft skills. The differences in skills acquired from universities and the expectations of employers is known as the "expectation gap". The expectation gap is becoming wider because of the rapid changes in the employers' expectations and the impossibility of tertiary education institutions to incorporate these requirements rapidly in the study programs. Author Schulz (2008) underlines that the most missed soft skills are communication skills, business knowledge and project management skills. On the other hand, author Guerra-Báez (2019) thinks that university lecturers have a special responsibility regarding soft skills, because during students' studies lecturers have a significant impact on the development of students' soft skills. Lecturers should be active and practice various soft skills with their students. One of the most effective and efficient way of soft skills development is to include soft skills training into the teaching of hard skills. The advantage of it may be found as more attractive courses and the better success rate of learners. Besides, students have to be very active in this process, too, in order to experience their capabilities, strengths and weaknesses concerning soft skills. There are different approaches for soft skills development, like role-plays or classroom debate.

The literature review shows that the main strategies used to develop soft skills in the tertiary education combine different activities linked to the curriculum that allow practical application.

In case of soft skills development in Hungary the results of Horváth-Csikós, Juhász & Gáspár (2022) support that even if professional knowledge, information technology skills and language are taken as fundamentals, soft skills are also determining. In additions, students emphasize the soft skills that help navigating in the volatile, uncertain, complex, and ambiguous world: resilience in conflicts, teamwork, problem solving skills and communication. The research unfolds a determining friction; namely, that these soft skills are ranked as most influential, but the present education system contributes very little to improve them, as students feel. Moreover, it seems that it is not the formal education system that enables people to acquire soft skills but rather the workplace and informal relations. University internship programs are a good example of the transition between higher education and the labour market and may be an important source of the soft skill development. This would be particularly important to ensure they learn in a real working environment, including professional situations, and acquire management skills that could be utilized at workplaces following graduation. Furthermore, if students find an internship that matches their skills, their employability might increase after graduation. The results of authors Cseh Papp, Molnár and Juhász (2023) conducted among business students in Hungary showed no correlation between the skills students develop during their university education and those during their internship; on the other hand, the correlation between soft skills to be improved in the future workplace and the soft skills acquired at university is only coincidental. The research results also confirmed that internships are not consistently contributing as they should, i.e., give students a hands-on experience of company operations or test and develop the hard and soft skills they have acquired at university. Based on the study findings, it is evident that the perceptions of all stakeholders (university, student, and employer) must be explicitly discussed prior to professional practice to ensure the same expectations from all three parties, making mutual communication and efficient dialogue one of the most crucial factors.

In case of Serbia authors Sretenović, Slavković and Stojanović-Aleksić (2022) stress that in the last few decades, companies – like other organizations world-wide – have to face with constant challenges, such as globalization, competition, IT technologies. Companies need competent and talented employees who have the soft skills which will help them to adopt to the changing business context. Research conducted by Babić and Slavković (2022) in 2011 in Serbia showed that enthusiasm, teamwork, flexibility and communication skills are the highly ranked soft skills that managers from all sectors expect from their employees. The research of Milić et al. (2023) on perception of engineering students in Serbia has shown that when it comes to the importance of various soft skills needed for future careers, students rated team work and communication skills as the most important, and creativity and leadership as the least important soft skills. When students rated their own levels of soft skills, problem solving and flexibility/adaptability were rated with the highest scores, while presentation skills and stress management were ranked lowest. The results show that students are becoming more aware of the importance of non-technical skills. But there is still a gap between the importance level of skills needed for future work and the level of student's self-assessment of soft skills. The results suggest that educational institutions, professors, students and companies have to cooperate in order to succeed and develop students' hard and soft skills.

3. RESEARCH METHODOLOGY

In order to analyse the students' current perception on their soft skills a questionnaire-based field research was conducted on the importance and development of students' soft skills in Hungary and Serbia. In Hungary the questionnaire was filled out mainly by business students of Budapest Business University, while in Serbia the participants were students of Faculty of Economics in Subotica, University of Novi Sad. The on-line anonymous questionnaire was filled out by university students of all levels (bachelor, master and PhD students) from October 2022 till March 2023. The number of respondents from Hungary was 661, while from Serbia it was 245. The research was focusing on students' perception of the most important soft skills and their opinion on how important is university in developing soft skills. The questionnaire consists of 19 questions about the demographic characteristics of the respondents, the degree of development of soft skills and the importance of soft skills, for the labor market. The following 22 soft skills were analyzed in the survey: professional skills, language skills, it skills, communication, good communication skills, appearance, time management, critical thinking, leadership skills, entrepreneurial skills, ability to work in teams, ethical and moral skills, strategic thinking, time management skills, planning and organizational skills, presentation skills, self-awareness, problem solving skills, empathy, creativity, flexibility, stress management and emotional intelligence. The surveyed students answered on a five-point Likert scale from completely agree (the most important at all).

The research hypothesis is as follows:

H1: There is a statistical significant difference in the importance of soft skills depending on whether the students are from Hungary or Serbia.

H2: There is a statistical significant difference in the development of soft skills depending on whether the students are from Hungary or Serbia.

The set hypotheses were analyzed using the independent t test within the SPSS program.

Concerning the sample overview, we have to highlight that in Hungary about half of the respondents (about 55 %) were female, while in Serbia the great majority of represents (80%) were female. The respondents' age distribution shows that the in Serbia great majority (96%) of respondents is between 21 and 29 years, while in Hungary the majority (72%) have less than 20 years. This difference may be caused by the different education systems, as in Serbia children begin the elementary school with 7 years, not with 6 as it us the case in Hungary. In Hungary the great majority (91%) of respondents have secondary school education, i.e., they are bachelor level students, while in Serbia the two thirds (66%) of the interviewees are master students, with college or university education, while one thirds of respondents are undergraduate students. This structure does not represent the institutions student structure of the analysed institutions. In Hungary students with work experience dominate the sample, while in Serbia the majority (57%) of analysed students have no experience. These differences point out to the differences in the education system and the labour market position of students in the analysed countries.

4. RESULTS AND DISCUSSION

Before testing the hypotheses we analyzed some important attitudes of the surveyed students from Hungary and Serbia using descriptive statistics and made a comparison.

In the questionnaire-based research interviewees were asked to identify the most important soft skills the employers expect from a candidate with a university education and to value how they meet these requirements concerning the soft skills. A five-point Likert scale was used to document the answers. Table 1 presents the students' perception about the ten most important skills employers expect from university graduates in Hungary and Serbia and their perception on how they meet these expectations. The means and the standard deviation data are presented.

The most important skills		on employers' expectations swith tertiary education	Students' perceptions on the level of their soft skills		
	Hungary	Serbia	Hungary	Serbia	
	(Mean)	(Mean)	(Mean)	(Mean)	
Communication skills	4.76	4.46	4.14	4.28	
Good communication skills	4.56	4.48	4.11	4.38	
Language skills	4.55	4.48	4.13	3.77	
Ability to work in team	4.56	4.4	4.27	4.29	
Planning and organizational skills	4.55	4.37	3.82	4.27	
Problem solving	4.37	4.34	4.08	4.04	
Flexibility	4.39	4.33	4.10	4.26	
Presentation skills	4.24	4.26	3.50	3.96	
Creativity	4.27	4.19	3.89	4.01	
Time management	4.1	4.39	3.73	4.02	

Table 1. The respondents' perceptions about the most important soft skills(1- not important at all 5-the most important)

Source: Own research

According to the obtained data students both from Hungary and Serbia consider that employers expect from university graduates the following skills: communication skills, language skills, teamwork, planning and problem solving, flexibility and creativity. Based on the students' self-evaluation they have the highest level of teamwork skills, flexibility, communication skills, planning and organization skills. The students consider that they have lower level of presentation skills and time management skills. Students assume that they meet the employers' requirements the best concerning their ability to work in teams and flexibility.

Table 2 presents the data on respondents' opinion about importance of soft skills and how education develop soft skills.

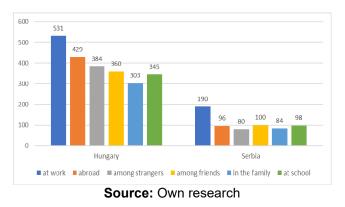
Table 2. The respondents' perceptions on importance and development of soft skills(1- not important at all 5-the most important)

Statements about soft skills	Students' agreement (1-5)		
	Hungary	Serbia	
Soft skills are more important in today's labour market than technical skills	3,74	4,09	
Soft skills can be learned at school	3,13	3,08	
Education prepares students for the challenges of the labour market.	2,41	3,09	

Source: Own research

Students consider that for employability soft skills are very important - equally or more than hard skills – but do not think that soft skills can be learned at school and education fully prepares them for work. The figure 1 shows the Respondents' perception on where they can improve their soft skills.

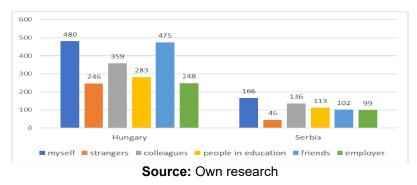
Figure 1. The respondents' perceptions on where they can improve their soft skills



The data presented in figure 1 show that students from Hungary and Serbia both think that they can mainly develop their soft skills at work or abroad.

Figure 2 represent the obtained data on the respondents' perception on who may influence the development of their soft skills.

Figure 2. The respondents' perceptions on who may influence the development of their soft skills



In Hungary the students consider that they themselves and friends have the most important influence on the development of soft skills, while in Serbia students think that they and their colleagues have the most important influence on the development of soft skills. According to the interviewed students, people in education do not have important influence in that process.

For the Hypothesis testing we used Independent t test in the software SPSS. The table 3 and 4 shows the results of the Hypothesis testing.

Group statistics					
	Country	Ν	Mean	Std. Deviation	Std. Error Mean
Importance of soft skills	Hungary Serbia	661 245	2.6378 4.1472	.35671 .52454	
Development of soft skills	Hungary Serbia	661 245	3.8612 4.0095	.42741 .52565	.01662 .03358

Table 3. County influence on importance and development of soft skills

Source: Own research

Table 4. Results of Independent t test

Independent Sample Test		Levene's Test for Equality of Variances		T-test for Equality of Means				
		F	Sig.	t	df	Sig (2- tailed)	Mean Difference	Std. Error
Importance of soft skills	Equal variances assumed Equal variances not assumed	43.992	.000	49.356 41.614	904 331.220	.000 .000	1.50938 1.50938	.03058 .03627
Development of soft skills	Equal variances assumed Equal variances not assumed	13.141	.000	4.348 3.958	904 370.028	.000 .000	.14830 .14830	.03411 .03747

Source: Own research

Using Individual t test, it was determined that there is a statistically significant difference between the students from Hungary and from Serbia regarding the importance of soft skills from the angle of labor market. As authors Caggiano, Schleutker, Petrone, & Gonzalez-Bernal stated that "students' soft skills are adapted to the needs of the socioeconomic environment", it is to be expected that there are differences (2020, p. 4031). Furthermore, it was determined that there is a statistically significant difference between the students from Hungary and from Serbia regarding the development of soft skills. The reason for such a result could be that the soft skills competences are not acquired in the same level at university from different countries because there are differences in curricula design framework and even in EU countries (Cinque, 2016). For example, in some EU countries this topic is very important while in other is still emerging and is in the process of development (Cinque, 2016).

5. CONCLUSION

The industrial revolution 4.0 requires highly competent employees who have professional competences and soft skills to successfully cooperate in the global business context. The development of soft skills during a formal tertiary education is challenging as soft skills form the knowledge that is in the minds of humans and is highly personal so that transformation requires personal interaction. A more efficient way of offering soft skills training to students is to embed it into the teaching of hard skills. But it may be reflected in the lecturers' teaching methodology requiring some re-thinking and redesign of existing hard skill courses.

The results of the research on the students' perception of the importance and development of soft skills in Hungary (Budapest Business University) and Serbia (Faculty of Economics Subotica – University of Novi Sad) show that students consider that employers expect from university graduates the following skills: communication skills, language skills, teamwork, planning and problem solving, flexibility and creativity. Based on the students' self-evaluation they have the highest level of teamwork skills, flexibility, communication skills, planning and organization skills. Students consider that soft skills may be only partially learned at universities.

We have to take into account the differences between labour market conditions in different countries. Furthermore, the structure of job occupations between countries are different as well as university curricula design which should be in the

line of such specific conditions. That is why in our empirical study we determined that there is statistically significant difference between importance as well as development of soft skills between students from Hungary and Serbia. Based on the above it may be concluded that the importance of tertiary education in developing soft skills in Serbia is

moderate. The limitation of the research is the different sample size and structure from Hungary and Serbia. Future research has to focus on more representative sample from both countries to test if the differences in results are due to the different student perception or due to the different educational system and structure of students.

REFERENCES

Asbari, M., Purwanto, A., Ong, F., Mustikasiwi, A., Maesaroh, S., Mustofa, M., ... & Andriyani, Y. (2020). Impact of Hard Skills, Soft Skills and Organizational Culture: Lecturer Innovation Competencies as Mediating. *EduPsyCouns: Journal of Education, Psychology and Counseling, 2(1)*, 101-121.

Babić, V., & Slavković, M. (2011, June). Soft and hard skills development: a current situation in Serbian companies. In *Proceedings of the Management, Knowledge and Learning International Conference* (pp. 407-414).

Caeiro-Rodríguez, M., Manso-Vázquez, M., Mikic-Fonte, F. A., Llamas-Nistal, M., Fernández-Iglesias, M. J., Tsalapatas, H., ... & Sørensen, L. T. (2021). Teaching soft skills in engineering education: An European perspective. *IEEE Access*, *9*, 29222-29242.

Caggiano, V., Schleutker, K., Petrone, L., & Gonzalez-Bernal, J. (2020). Towards identifying the soft skills needed in curricula: Finnish and Italian students' self-evaluations indicate differences between groups. *Sustainability*, *12*(10), 4031.

Cinque, M. (2016). "Lost in translation". Soft skills development in European countries. *Tuning Journal for Higher Education*, 3(2), 389-427.

Cseh Papp, I., Molnár, Cs., & Juhász, T. (2023). Soft skills of business students in relation to higher education internships. *Problems and Perspectives in Management.* 21(4), 113-126. doi:10.21511/ppm.21(4).2023.09

Edeigba, J. (2022). Employers' expectations of accounting skills from vocational education providers: The expectation gap between employers and ITPs. *The International Journal of Management Education*, 20(3), 100674. https://doi.org/10.1016/j.ijme.2022.100674

Escolà-Gascón, Á., & Gallifa, J. (2022). How to measure soft skills in the educational context: psychometric properties of the SKILLS-in-ONE questionnaire. *Studies in Educational Evaluation*, 74, 101155. https://doi.org/10.1016/j.stueduc.2022.101155

Guerra-Báez, S. P. (2019). A panoramic review of soft skills training in university students. *Psicologia Escolar e Educacional*, 23. <u>https://doi.org/10.1590/2175-35392019016464</u>

Horváth-Csikós, G., Juhász, T., & Gáspár, T. (2022). Soft skills on sale-how students consider soft skills and corporate expectations. In: *BGE Szemelvények*. Budapest, pp. 246-253.

Kallioinen, O. (2010). Defining and comparing generic competences in higher education. *European Educational Research Journal*, 9(1), 56-68.

Kember, D., Leung, D. Y., & Ma, R. S. (2007). Characterizing learning environments capable of nurturing generic capabilities in higher education. *Research in Higher Education*, *48*, 609-632. DOI: 10.1007/s11162-006-9037-0

Milić, B., Spajić, J.,Lalić, D., Ćulibrk, J. & and Bošković, D. (2023). Assessing soft skills in information systems engineering students: importance and self-assessment. *Proceedings of IS2023 International scientific conference*.

Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today's workplace. *Business communication quarterly*, 75(4), 453-465.

Schulz, B. (2008). The importance of soft skills: Education beyond academic knowledge.

Sretenović, S., Slavković, M., & Stojanović-Aleksić, V. (2022). Conceptual framework of remote working in Serbia: towards gender differences. *Anali Ekonomskog fakulteta u Subotici*, 58(48), 51-64. <u>https://doi.org/10.5937/AnEkSub2248051S</u>

Tang, K. N. (2019). Beyond Employability: Embedding Soft Skills in Higher Education. *Turkish Online Journal of Educational Technology-TOJET*, *18*(2), 1-9.