BASIC SOFT SKILLS AS AN INTEGRAL COMPONENT OF STUDENT COMPETITIVENESS: CASE OF HIGHER EDUCATION IN UKRAINE

[a]SERGII D. RUDYSHYN, [b]TETIANA V. KONONENKO, [c]MARINA V. KHROLENKO, [d]VITALII S. KONENKO, [e]STANISLAV P. MERDOV

[a]Olexander Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, 41401, Ukraine.
[b]Donetsk Law Institute MIA of Ukraine, Kryvyi Rih, 50065, Ukraine.
[c]Olexander Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, 41401, Ukraine.
[d]Olexander Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, 41401, Ukraine.
[e]Donetsk Law Institute MIA of Ukraine, Kryvyi Rih, 50065, Ukraine.
E-mail: [a]rud_prof@ukr.net, [b]tanya.val1505@gmail.com, [c]mari.anna.nerozna@gmail.com, [d]npu.institute@gmail.com, [e]dencicov@yandex.ru

Abstract: this study intends to identify the most necessary comprehensive skills that will increase students' ability to find a suitable job after graduation, as well as to identify the importance of soft skills in the student competitiveness in the labour market. The author selected several general scientific methods for the study, including an attempt to adapt the grouping and modelling method to the theoretical representation of the relationship between soft skills and student competitiveness. The article identified several promising areas of research, which will allow us to focus on in-depth study of the issue and its comprehensive scientific substantiation. The results of the study have several limitations that correlate with the previously identified areas of future research. They include only the theoretical substantiation of the hypotheses and the limitations of possible methods.

Keywords: "soft skills", "hard skills", professional adaptability, student competitiveness, functional skills, personal skills, student professional development program

1 Introduction

Preparing students for a successful career is an important part of the work of every teacher and institution in general. In today's world, most educational and professional development programs do not, however, cover the skills that employers look for in job applicants. In particular, we are talking about such qualities as emergent leadership, adaptability, tolerance, and responsibility. All this is called soft skills today, and the Ukrainian version of "skills" is extremely often used by recruiters during interviews. This concept has not emerged recently and has a sufficient theoretical background, as evidenced by significant coverage in scientific and journalistic articles, blogs, websites of the world leading companies, etc.

In-depth study of the concept of soft skills arouse some difficulties, in particular, screening of information among all the variety of published achievements of science and journalism. Summarizing the references, including those not comprised in this article, the author concludes that soft skills are extremely important, and their development will inevitably lead to career growth, achievement of goals, financial independence, and stability. In particular, the paper (Koval, 2015) emphasizes the "fundamental change in the strategic goals of education and the transition to its anthropocentric, humanistic model, the formation of a new educational paradigm, and innovative teaching methods". The scholar's point of view is consistent with the views of the researcher, (Schulz, 2008) who emphasizes the importance of full integration of soft skills into the educational process. The World Bank analysts (World Bank, 2016) substantiated the hypothesis of the need to develop soft skills in terms of preparing students for future professional activity. This hypothesis was later developed in the work (Heckman & Kautz, 2012).

There are still discussions among scholars about the types of soft skills and their optimal set for prestigious job seekers in various fields. For example, work (Kozhushkina, 2018) presented a generalized classification of skills. Researchers in work (Berglund & Heintz, 2014) arranged the necessary skills for technical students. Article (Capretz & Ahmed, 2018) proposes a classification of skills for IT workers. Scientists in work (Yan et al., 2019) identified the most effective methods of training basic soft skills in Chinese higher educational institutions (HEIs) based on the experience of Australian higher educational institutions. The problems of effective methods of soft skills development in students of different academic majors are still unsolved, which is of great interest among high school teachers. (Hlazunova et al., 2019; Dluhunovych, 2019; Kazachiner, 2019; Nakhod, 2018; https://www.uschamberfoundation.org; Deming, 2017)

The literature review identified the most theoretically rich works that contain a thorough analysis of the conceptual framework:

1. Article (Dewiyani, 2015) advanced the issue of taking into account the type of personality during the soft skills development in students. The results obtained by the author regarding the prioritization of soft skills for each personality type are of theoretical value. Researcher in work (Patacsil & Tablatin, 2017) made earlier attempts to take into account personality types studying the skills of students of the Information Systems Department in solving mathematical problems.
2. Authors of the article (Guerra-Báez, 2019) applied gap analysis to determine a set of skills students should have during an internship in companies operating in different fields. This study was an attempt to adapt gap analysis to the study of soft skills.
3. In the work (Devedzic et al., 2018) outlined a method of developing soft skills in senior students outside the main curriculum.

Another research issue is the problem of measuring students' skills and their impact on future employment. Researchers in the article (West et al., 2016) substantiated the list of principles for different soft skills. Scientists in the work (Heckman & Kautz, 2013) initiated a discussion on the impact of teaching quality on the dynamics of soft skills development. In the paper (Wilkie, 2019) concluded that "achievement tests, which are most often used to assess soft skills, do not sufficiently reflect the personal skills, goals, motivation, and preferences that are valued in the labour market." Returning to the issue of student competitiveness in the labour market, scientists in work (Ortega, 2016) rightly noted that "modern teaching methods in high school are not adapted to modern conditions in the labour market." In article (Glazunova et al., 2017) compared success of students with different skill sets in the labour market.

The concept of soft skills is comparable to the concept of life skills proposed by the Department of Mental Health of the World Health Organization (1994), which defines soft skills as a set of socio-affective skills needed to interact with other people and to cope with everyday requirements and difficult situations. (Devedzic et al., 2018) Soft skills include personality traits, social qualities, communication, language, personal habits, and interpersonal communication skills that describe a person's relationship with other people (Schulz, 2008). There are dozens of soft skills that include competent and comfortable communication, collaboration and teamwork, critical thinking, problem-solving, leadership and responsibility, decision-making, flexibility and adaptability, time management, initiative and self-government, social and civic competencies, entrepreneurship, etc (Glazunova et al., 2017). These skills are complemented by special professional skills — hard skills, which are associated with a set of skills and the person's ability to perform a certain type of subject task or activity, such as working with machines, computer programming or statistical analysis (Vijaya, 2013). Functional skills are more cognitive, easier to learn and assess, as opposed to soft skills, which are more related to emotional and social intelligence, while being more problematic in terms of training and assessment. There is speculation that high school teachers may recognize students'

soft skills during studies and in other extracurricular situations, but they usually assess them subjectively, intuitively, and subconsciously (Devedzic et al., 2018). From the teachers' point of view, the main challenge in measuring students' soft skills is to monitor and assess how students develop those skills. In addition, there is still a lack of experience and recommendations for measuring and assessing students' soft skills. Quite a lot of effort and initiative has been applied to developing assessment methods to measure soft skills, but it is difficult to find examples of particular indicators for soft skills and experience of using these methods in practical assessments (Wilkie, 2019).

Although there is a broad consensus on the need to differentiate between cognitive and non-cognitive skills, there is less consensus on how to define soft skills and group them into general categories for the purpose of research and decision-making. There is also no clear consensus on which skills and their categories are most important (Monteiro de Carvalho & Rabechini Junior, 2015).

The most common soft skills structure is known as the Big Five, and includes the following broad categories and characteristics: (Heckman & Kautz, 2012)

Openness to New Experiences — the American Psychological Association (APA) defines it as "the tendency to be open to new aesthetic, cultural, or intellectual experiences." People who are "open" have a wide range of interests and are often positioned as interesting, artistic, creative and unconventional.

Conscientiousness – the APA defines it as a "tendency to be organized, responsible, and hardworking." Conscious people are purposeful, effective, ambitious, and self-disciplined. They have a strong professional ethic, are persistent in overcoming obstacles, can postpone immediate satisfaction in favour of long-term goals, while not being impulsive. These characteristics are most strongly associated with success in learning outcomes.
Extraversion – the APA defines it as "the orientation of one's interests and energies towards the outer world of people and things, rather than to the inner world of subjective experience." Extroverts are friendly, sociable, confident, energetic, enterprising, and full of enthusiasm.

Agreeableness – the APA defines it as "the tendency to act in a cooperative, unselfish manner." Agreeable people are often described as sensitive/receptive, modest, flexible, socially inclined, altruistic, and tolerant.

Emotional Stability – according to the definition of APA, it refers to "predictability and consistency in emotional reactions, with absence of rapid mood changes."

There is still a question to which scholars still do not have a clear answer, namely: What is the importance of these skills, and how to effectively develop them during studies at high school? (26) Several important research findings may shed some light on the relationship between skills and competitiveness:

- Both soft skills and hard skills are related to the future success of students in the labour market, in fact, their competitiveness. Although different skills may be more important for different activities, research shows a strong correlation between cognitive and non-cognitive skills and success in professional life. At the same time, the research (Wilkie, 2019) showed that cognitive skills alone cannot explain all the differences in life outcomes, and that soft skills are also associated with benefits that go beyond studies, health, happiness, and social behaviour.
- Developed skills often generate new skills (Guerra-Báez, 2019). Hypothetically, soft skills and hard skills are associated with career success, and it is also true that these skills are often interrelated, and that a combination of both skills can lead to the highest results.
- It is better to develop certain skills from an early age, but the window of opportunity for the development of soft skill" can be much wider; thus, soft skills can be developed regardless of age, social status, level of education, living environment, etc (Devedzic et al., 2018).
- Soft skills can help low-welfare students to reduce the gap with more successful peers to successfully interact with the people around them and face new challenges. Some studies show that soft skills can be particularly important in helping poor students overcome shortcomings and be better prepared for the labour market, and therefore have every chance of getting a competitive job and being successful (Schulz, 2008).
- Both breeding and the educational institution have a significant impact on the future competitiveness of students. If there is no positive outcome, it may be the result of poor implementation of the educational process. Thus, family breeding, the social environment of the student, and higher education together are important in the formation and development of soft skills (World Bank, 2016; Skaife et al., 2016).

Therefore, we support the hypothesis that the level of development of soft skills is one of the defining components of student competitiveness, but empirical confirmation of this hypothesis has not been found so far, which is of great interest. Thus, the objective of this study was to identify the most necessary skills that will allow students to find a suitable job after graduation, as well as to identify the importance of soft skills in the competitiveness of students in the labour market.

2 Methods and Materials

During the research, we started primarily from general scientific research methods. In particular, we used the method of abstraction and grouping to identify the most appropriate skills of students; as well as the modelling method to distinguish the relationship between soft skills and competitiveness.

The research of scholars considered by the author of this article during its preparation testifies to a few attempts to obtain empirical results, which is due to the lack of measures of both components: soft skills and competitiveness. It is extremely important in modelling the results and their practical interpretation to be based on data that reflect real trends in student skills and their level of competitiveness, but today surveys are one of the main sources of information. Their results can hardly be considered absolutely objective, while they are still significant. In particular, surveys in this area are limited not only by the lack of soft skills measures, but also by the personal expectations of respondents regarding the assessment of their abilities, underestimation or exaggeration of soft skills, etc. Besides questionnaires, interviews are popular.

The main hypotheses of the study include:

- Assumptions about the close relationship between soft skills and student competitiveness in the labour market. Using the modelling method, we attempted to schematically represent this relationship and justify its weight taking into account various factors of influence;
- Soft skills are an integral element of student competitiveness. To confirm this hypothesis, we used a survey method (Scaffidi, 2018).

The objects of this study were 10 largest universities in Ukraine (identified in the rating of the largest universities in Ukraine 2020, which is prepared annually by the portal Osvita.ua):

- Taras Shevchenko National University of Kyiv.
- National University of Kyiv-Mohyla Academy.
- Igor Sikorsky Kyiv Polytechnic Institute.
- Ivan Franko National University of Lviv.
- V. N. Karazin Kharkiv National University.
- Danylo Halytsky Lviv National Medical University.
- Lviv Polytechnic National University.
- Odesa I. I. Mechnikov National University.
- Yuriy Fedkovych Chernivtsi National University.
- Uzhhorod National University.

We selected last year students because of: the opportunity to evaluate the "soft skills" already obtained during their junior years in the university, the presence of a formed opinion on the quality of the curriculum. Also, senior students are either looking for the first job or are already combining work and study. The last criterion affected the sample of students, respectively, 50% of those already working and 50% of students who were looking for a job at the time of we conducted the survey.

The total number of students involved in the empirical part of the experiment was 200 students. To ensure gender equality, the distribution between men and women was equal, 100 men and 100 women. We developed the author's questionnaire after reviewing the literature and focus groups of students of different majors. It was intended to capture:

- demographic data of respondents;
- compliance of the curriculum with expectations;
- experience of development and attitude to soft skills;
- the impact of soft skills on competitiveness in the labour market.

The author considered the questionnaire for validity for individuals, tested on a sample of students, and revised accordingly. Participants' responses were rated on a 5-point Likert scale (Nagang et al., 2015) ranging from 1=strongly disagree to 5=strongly agree.

The method of study and generalization was used due to the need to identify the most useful skills in terms of competitiveness. The methodology of this research is also based on a system approach in revealing and solving the problem of selecting the most appropriate skills to increase the student competitiveness.

3 Results

Undoubtedly, students are potential employees of profitable companies and future employers. It is essential to invest in soft skills to make their competitiveness in the labour market grow. These are soft skills that will help students to transform into important corporate resources. So, what student competitiveness means? The competitiveness of an individual in a more general sense is a set of knowledge, skills and capabilities that will help the employee to get the maximum income in the chosen field of professional activity and significantly improve the quality of his life. If we consider this concept in terms of the labour market, and each student as a particular product ("labour"), competitiveness should be interpreted as a set of quality and cost characteristics that meet the employer's needs in the chosen socio-economic sphere. This set can be conventionally divided into hard skills and soft skills. Until the 90's of the last century, hard skills, or functional skills, were considered basic for the beginning of a professional career and only later employers realized the importance of developing soft skills to achieve positive results in terms of company development, as well as its financial and economic goals. We can assume that in the context of globalization and a significant increase in competition in the market, the relationship of functional and personal skills is one to one, i.e. they are equally important in shaping the student's competitiveness in the labour market. However, it is worth emphasizing that this assumption is true for students, but for people with work experience and applicants for executive positions this relationship shifts towards soft skills. The experience of many companies shows that hard skills allow students to get a job, and soft skills allow making a successful career.

Review and study of existing approaches to the classification of personal skills made it possible to group skills, taking into account their relationship with competitiveness (Figure 1), as well as the selection of each of their mandatory components, as well as useful skills that will positively affect the job seeker's image after graduation (Table 1). It is important to keep in mind that there is no single definition for any of these cases, all soft skills were measured from different points of view, and the definitions presented serve to present the general concept only. Thus, there is a need to substantiate in more detail the need to develop skills that depend on the future field of the student's professional activity.

Table 1. Student's soft skills grouping

Item No.	Skill groups	Required skills	Useful skills
1	Communicative Skills	Ability to clearly, effectively and confidently present their ideas orally or in writing; ability to practice active listening and response skills; ability to clearly and confidently represent the audience	Ability to use technology during presentations; ability to discuss and reach consensus; ability to communicate with people having different cultural backgrounds; ability to expand their own communication skills; ability to use non-oral skills
2	Critical Thinking and Problem-Solving Skills	Ability to identify and analyse problems in a difficult situation and make an informed assessment	Ability to think further, the ability to draw conclusions based on reliable evidence
3	Team Work	Ability to build mutual understanding, interact effectively and work with other people	Ability to contribute to the planning and coordination of team work
4	Life-Long Learning & Information Management Skills	Ability to find and manage current information from various sources; ability to generate new ideas, independent learning ability	Ability to develop an inquisitive mind and seek new knowledge
5	Entrepreneurship skills	Ability to identify employment opportunities	Ability to offer business opportunities; ability to create, examine and search for business opportunities and jobs; ability to be self-employed
6	Ethics, Moral & Professionalism	Ability to professionally understand the particulars of economic crises, environmental, social and cultural aspects of life. The ability to analyse and make decisions on ethics-related issues	Ability to practice ethical attitudes in addition to accountability to society
7	Leadership skills	Knowledge of basic leadership theories; ability to manage projects	Ability to understand and alternately be a leader and follower; ability to control team members

Thus, each of the above soft skills consists of several sub-skills. These sub-skills fall into two categories. The first category determines the soft skills that everyone should have, and the second category represents the soft skills that increase one's competitiveness in the labour market. However, it should be emphasized that the development and practice of both sub-categories is a prerequisite for building a successful career in the chosen field. All elements of soft skills must be developed by each individual student, and assessed effectively and comprehensively. In fact, the responsibility for this task lies with high school, which must build educational programs taking into account the growing demands of employers and the changing relevance of the set of basic skills towards soft skills.

Using the modelling method, we made an attempt to distinguish the relationship of soft skills (Figure 1). The previously proposed hypothesis can be supported by a schematic representation of changes in the level of competitiveness, taking into account the factor of development of certain skill groups. In the simulated situation, it is advisable to have well-developed communication, critical thinking and problem-solving skills at the first stage of search for a decent job. According to a survey of employers in the United States, these skills are, in the opinion of employers, basic for all job seekers, including those without work experience (78% of respondents). In fact, according to analysts, the availability of these basic skills can fill gaps in the lack of previous work experience. It is logical that the conditions of modern market relations dictate the requirements for future employees, and previous work experience is a great advantage in the selection of personnel. Therefore, students try to start a professional activity while studying. The literature review and practice show that, first of all, it is not always possible to get the desired job and position. However, the first work experience allows people, in addition to basic skills, to gradually develop lifelong learning skills, information management and entrepreneurial skills.

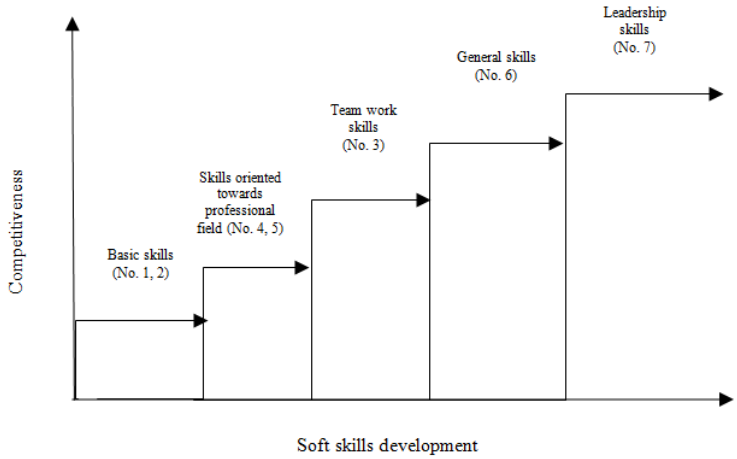

Figure 1. Hypothetical representation of the model of the relationship between soft skills and student competitiveness

Regarding the next group of skills, which has a positive impact on improving the competitiveness of students, namely teamwork skills, there is some discussion about its classification in the third group. Employers do not usually demand teamwork skills at first, as not all operational tasks and not all professional activities require it. Regarding the next group of "general" skills, their development begins in early childhood and continues throughout life. The final link of the presented model is leadership skills. They are important in the job search phase, but are more pronounced in daily operational tasks and career advancement.

The issue of a set of necessary and basic skills for students is sufficiently studied. Instead, more and more discussions arise around the issue of adaptation of existing educational programs in terms of forming a rational relationship between students' hard skills and soft skills. In general, soft skills can be developed in students through formal learning and compulsory curriculum, as well as other learning activities, according to two models: autonomous and built-in. In case of an autonomous model, students have the opportunity to develop soft skills through special courses and various types of practices that are carefully planned for this purpose. Typically, these educational components are offered in the form of university courses (for example, English language, majors, etc.), and elective courses (e.g., public speaking, critical thinking, etc.). A few years ago, these courses were more optional, but increased competition among high schools and in the labour market has led to changes in curricula due to the separation of these courses as compulsory or optional elements of educational programs. The number of courses and credits in this category depends on the curriculum design and program requirements. An autonomous disciplinary model can also be initiated by encouraging students to enrol in several additional courses, which may be credited as a secondary course different from the initial program. Completion of these courses will allow students not only to increase their competitiveness, but also to obtain additional information for the future employer to set out in their CVs.

As for another model (built-in), which, subjectively in part, can be considered more successful, the approach of introducing soft skills in teaching and learning activities throughout the curriculum is used. It does not require the student to take special courses, as in an independent subject model. Instead, students learn to master soft skills through a variety of formal learning activities that are planned and implemented using particular strategies and methods. Thus, the content and learning outcomes that must be achieved for the relevant courses are retained. Learning outcomes related to soft skills will be integrated, and will be part of the learning outcomes of the relevant courses. The effectiveness of using this model is directly proportional to the skills and abilities of teachers to use different strategies and teaching methods that are completely focused on students. This model also provides for active teaching and learning with the active student involvement.

For the last few years, employers, realizing the importance and necessity of professional staff, have been working towards the preliminary training of employees for work in various fields. In highly developed countries, an increasing number of companies are focusing on student education as part of their business strategy. They see value in teaching students the skills needed to succeed in the workplace, and thus strengthen their competitiveness. The most striking example of such cooperation is Nike (Oregon Schools, AVID), which launched the Classroom Solutions initiative. Investing in Classroom Solutions has allowed educators to more effectively help young people develop the skills needed for future professional activity. On the other hand, employers can help establish and develop soft skills by providing teachers and administrations of educational institutions with access to proven professional development programs from recognized educational non-profit organizations. Thus, it is quite possible to assume that employers are also interested in the developed soft skills of employees, which will have a positive impact on the overall financial results of the company.

The survey conducted among students of Ukrainian universities allowed to confirm the hypothesis that soft skills is an integral element of student competitiveness (Table 2). However, only 24% are confident in employment immediately after graduation. The number of respondents who could not decide on the answer is also worth noting. The percentage of such respondents is quite significant, which indicates some uncertainty about the effectiveness of training and the future in general. Also we could specify which exactly skills were highly evaluated (Figure 2), particularly: team work, ethics, moral & professional, communicative skills.

Table 2. The results of a survey of students

Question	Likert scale				
	1 - strongly disagree	2 - partially disagree	3 - hard to say	4 - partially agree	5 - completely agree
The curriculum at university meets your expectations	16%	9%	30%	22%	23%
During my studies I learned how to articulate my ideas clearly, with confidence and communicate effectively	7%	2%	26%	33%	32%
The acquired skills will allow me to analyse problems situations more deeply and respond to them	5%	7%	30%	40%	18%
I understand and know how to work in a team	1%	3%	12%	29%	55%
After graduation, I will be able to analyse and make decisions, will be responsible to society	2%	5%	14%	38%	41%
The acquired leadership skills will allow me to manage various projects in the future	11%	16%	36%	20%	17%
The skills developed during the training will allow you to get a job immediately after graduation	19%	22%	35%	13%	11%

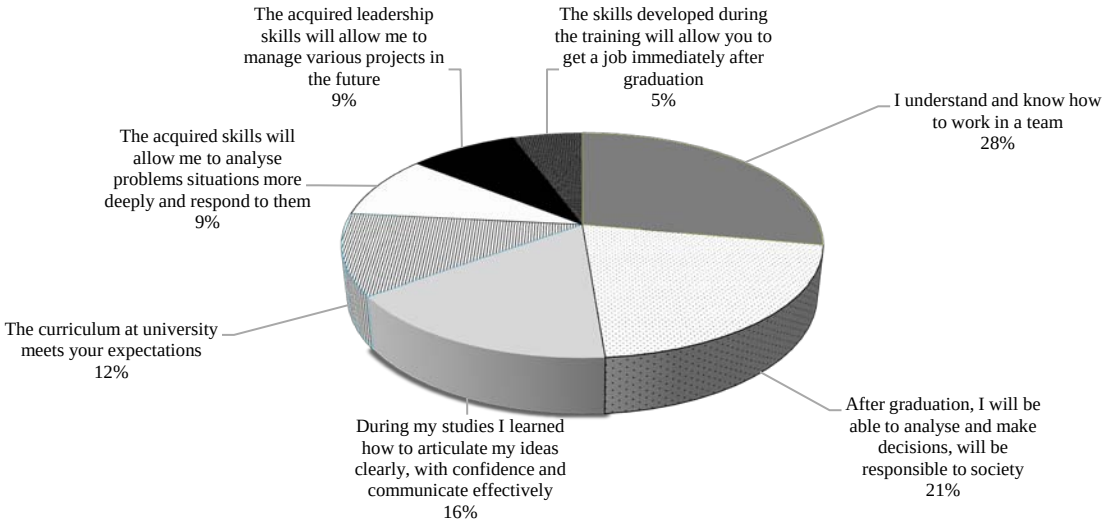

Figure 2. Representation of survey results

4 Research Limitations

The main limitation for this study is only the theoretical justification of the hypotheses and the limitations of possible methods due to the lack of developed indicators for measuring soft skills and student competitiveness.

5 Discussion

This study was a contribution to the study of the problem of developing soft skills in students in terms of forming their competitiveness in the labour market. First of all, the study expanded previous research as regards explaining the importance of soft skills in the professional development of students; (Guerra-Báez, 2019) second, the study of the relationship between competitiveness in the labour market and skills acquired during training; (Heckman & Kautz, 2012) third, ways to integrate and adapt educational programs of higher educational institutions to new employment conditions taking into account the employers' growing demands to potential candidates (Dewiyani, 2015).

As a result of the development of the hypothesis of a close relationship between soft skills and the competitiveness of students in the labour market, the author presents a schematic model, which demonstrates not only the importance of each of the selected groups of soft skills in general competitiveness, but also close relationship of these concepts, taking into account the changing factor of modern requirements of employers and the labour market in general (Deming, 2017; Ortega, 2016; Skaife et al., 2016).

The study of soft skills and the study of various existing scientific approaches (Schulz, 2008; Devedzic et al., 2018; Skaife et al., 2016) identified several groups of skills that develop students to varying degrees, including: communication skills; critical thinking and problem solving skills; team work; lifelong learning and information management skills; entrepreneurial skills, ethics, morals and professionalism; leadership skills. Using methods of study and generalization, an attempt was made to confirm the hypothesis that soft skills are an integral element of student competitiveness. The above statements have not fully covered the open issues.

6 Conclusions and Recommendations for Future Research

This study gave an idea of the importance of developing soft skills in students and their impact on future competitiveness in the labour market.

Studying the most appropriate list of personal skills, we identified several groups that have a significant impact on the formation of the future professional portrait of students. In particular, we identified the following groups: communication skills, critical thinking and problem-solving skills, teamwork, lifelong learning and information management skills, entrepreneurial skills, ethics, morality and professionalism, leadership skills. Based on the reviewed studies and valid scientific results, we made an attempt to present a schematic model of the relationship between soft skills and student competitiveness. Along with the main results of the study, we made a conclusion about the importance of parenting and high school for the development of soft skills in students and their practical application.

In addition to the obtained results, we revealed the line of further research. First of all, it is worth paying attention to a more detailed study and development of quantitative and qualitative indicators that will provide an opportunity to more objectively assess the level of competitiveness of students of higher educational institutions. The results of the study can be considered preliminary due to several limitations that correlate with the previously identified areas of further research. They include only the theoretical substantiation of the hypotheses and the limitations of possible methods due to the lack of developed indicators for measuring soft skills and student competitiveness.

This study also provides an opportunity to further examine the issue of the development of soft skills at different levels of development of children and adolescents, determine the role of parents and high school in shaping student consciousness, and justify the factors influencing professional and personal skills.

Literature:

1. Berglund, A., Heintz, F. (2014). Integrating soft skills into engineering education for increased student throughput and more professional engineers. Available from: https://www.lth.se/fileadmin/lth/genombrottet/konferens2014/11_Berglund_Heintz.pdf
2. Bridging the soft skills gap. How the business and education sectors are partnering to prepare students for the 21st century workforce. Available from: https://www.uschamberfoundation.org/sites/default/files/Closing%20the%20Soft%20Skills%20Gap.pdf
3. Capretz, L., Ahmed, F. (2018). A call to promote soft skills in software engineering. *Psychology and Cognitive Sciences – Open Journal*, *4*(1). Available from: http://dx.doi.org/10.17140/PCSOJ-4-e011
4. Deming, D.J. (2017). The growing importance of social skills in the labor market. *The Quarterly Journal of Economics*, *132*(4), 1593-1640.
5. Devedzic, V., Tomic, B., Jovanovic, J., Kelly, M., Milikic, N., Dimitrijevic, S., et al. (2018). Metrics for students' soft skills. *Applied Measurement in Education*, *31*, 283-296. Available from: https://doi.org/10.1080/08957347.2018.1495212
6. Dewiyani, M.J. (2015). Improving student's soft skills using thinking process profile based on personality types. *International Journal of Evaluation and Research in Education (IJERE)*, *4*, 118-129.
7. Dewiyani, M.J. (2015). Improving students soft skills using thinking process profile based on personality types. *International Journal of Evaluation and Research in Education (IJERE)*, *4*(3), 118-129.
8. Dluhunovych, N.A. (2019). Soft skills as a necessary component of training IT professionals. *Bulletin of the Khmelnytsky National university*, *6*, 239-242.
9. Glazunova, O., Kuzminska, O., Voloshyna, T., Sayapina, T., Korolchuk, V. (2017). Eenvironment based on Microsoft Sharepoint for the organization of group project work of students at higher education institutions. *Information Technologies and Learning Tools*, *62*(6), 98-113.
10. Guerra-Báez, S.P. (2019). A panoramic review of soft skills training in university students. Psicologia Escolar e Educacional.; 23. Available from: https://doi.org/10.1590/2175-35392019016464
11. Heckman, J.J., Kautz, T.D. (2012). *Hard evidence on soft skills. NBER Working Paper 18121*. Cambridge, MA: National Bureau of Economic Research. Available from: http://www.nber.org/papers/w18121
12. Heckman, J.J., Kautz, T.D. (2013). Fostering and measuring skills: Interventions that improve character and cognition. NBER Working Paper 19656. Cambridge, MA: National Bureau of Economic Research. Available from: http://www.nber.org/papers/w19656
13. Hlazunova, O.H., Voloshyna, T.V., Korolchuk, V.I. (2019). Development of "soft skills" in future specialists in information technology: methods, tools, evaluation indicators. Open Educational E-Environment of Modern University, 93-106.
14. Kazachiner, O.S. (2019). "Hard skills" and "soft skills" of an inclusively competent foreign language teacher. *Innovative pedagogy*, *1*(10), 153-156.
15. Koval, K.O. (2015). The development of "soft skills" in students – one of the factors for their employment. *Bulletin of Vinnytsia Polytechnic Institute*, *2*, 162-167.
16. Kozhushkina, T.L. (2018). Interpersonal interaction as an integral part of "soft skills" of students of pedagogical college. *Scientific journal of NPU named after MP Drahomanov*, *63*, 77-81.
17. Monteiro de Carvalho, M., & Rabechini Junior, R. (2015). Impact of risk management on project performance: the importance of soft skills. *International Journal of Production Research*, *53*(2), 321-340.
18. Nagang, T.K., Yunus, H.M., Hashim, N.H. (2015). Soft integration in teaching professional training: novice teacher's perspectives. *Procedia – Social and Behavioral Science*, *183*, 835-840.
19. Nakhod, S.A. (2018). Significance of "softskills" for the professional development of future professionals in socionomic professions. *Scientific Journal of NPU named after M.P. Drahomanov*, *63*, 131-135.
20. Ortega, T. (2016). Goodspeed, untangling the soft skills conversation. The dialogue Leadership for the Americans. Available from: http://1m1nttzpbhl3wbhhgahbu4ix.wpengine.netdna-cdn.com/wp-content/uploads/2016/05/Soft-Skills-InDesign-English-v4.pdf
21. Patacsil, F.F., Tablatin, C.L.S. (2017). Exploring the importance of soft and hard skills as perceived by it internship students and industry: A gap analysis. *Journal of Technology and Science Education (JOTSE)*, *7*(3), 347-368.
22. Scaffidi, C. (2018). Employers' needs for computer science, information technology and software engineering skills among new graduates. *International Journal of Computer Science, Engineering and Information Technology*, *8*(1), 1-12. Available from: https://doi.org/10.5121/ijcseit.2018.8101
23. Schulz, B. (2008). The Importance of Soft Skills: education beyond academic knowledge. *Journal of Language and Communication*, *9*, 146-154.
24. Skaife, S., Jones, K., Pentaris, P. (2016). The impact of the Art Therapy Large Group, an educational tool in the training of art therapists, on post-qualification professional practice. *International Journal of Art Therapy*, *21*(1), 23-34. Available from: http://dx.doi.org/10.1080/17454832.2015.1125382
25. Taylor, E. (2016). Investigating the perception of stakeholders on soft skills development of students: Evidence from South Africa. Interdisciplinary Journal of e-Skills and Life Long Learning, 12, 1-18.
26. Vijaya, K. (2013). Teaching soft skills to technical professionals technology versus practical intelligence. *International Journal of English and Education*, *3*(3) 567-573.
27. West, M., Kraft, M., Finn, A., Martin, R., Duckworth, A., Gabrieli, C., et al. (2016). Promise and paradox: Measuring students' non-cognitive skills and the impact of schooling. *Educational Evaluation and Policy Analysis*, *38*(1), 148-170. Available from: https://doi.org/10.3102/0162373715597298
28. Wilkie, D. (2019). Employers say students aren't learning soft skills in college. Available from: http://www.cewd.org/documents/EmployersSayStudentsArentLearningSoftSkillsinCollege.pdf
29. World Bank. (2016). Preparing youth for 21st Century jobs: Entra 21 across Latin America and the Caribbean (English). Washington, DC: World Bank Group. Available from: https://www.worldbank.org/en/news/opinion/2016/03/02/preparing-for-robots-which-skills-for-21st-century-jobs
30. Yan, L., Yinghong, Y., Lui, S.M., Whiteside, M., Tsey, K. (2019). Teaching "soft skills" to university students in China: the feasibility of an Australian approach. *Educational Studies*, *45*(2), 242-258. Available from: https://doi.org/10.1080/03055698.2018.1446328

Primary Paper Section: A

Secondary Paper Section: AM