

## DEVELOPMENT OF SOFT COMPETENCES IN HIGHER EDUCATION EXPECTED IN TODAY'S JOB MARKET – STUDENTS' OPINIONS

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**Purpose:** The purpose of the conducted research was to identify the soft competences that students develop during their studies, relevant from the perspective of the requirements of the modern labor market.

**Design/methodology/approach:** The research, the results of which are presented in the article, was carried out in January 2023 at the Faculty of Management and Command of the War Studies University in Warsaw. The study involved 336 civilian students studying three majors. The research method used was a diagnostic survey carried out using a questionnaire technique.

**Findings:** As a result of the research, a list of soft competences required on the labor market was established and the scope of developing these competences at the university was examined, which allowed to show the competences formed at the university, as well as those on which more attention should be directed.

**Research limitations:** Research on soft competences shaped in the university, and required in today's labor market, was conducted at a single university, which limits the ability to make inferences on the entire population of students in Poland. The research sample was not representative. The study was of a pilot nature.

**Practical implications:** The obtained results of the research allow to infer which soft competences are not developed by students, and are required in the modern labor market. The discrepancies revealed provide a basis for modifying educational programs, with the aim of introducing classes aimed at developing those areas of competence that are considered competence gaps and limit students' ability to enter the labor market efficiently. In addition, the measures indicated in the research that students desire to improve the educational process would also affect the image of the university and the university graduates.

**Originality/value:** The article describes the results of the 2023 survey, thus a new empirical research on the development of soft skills required in the labor market.

**Keywords:** soft skills, university, labor market, students.

**Category of the paper:** research paper.

## 1. Introduction

Efficient performance of tasks on the job requires employees to have the relevant competences. Hence, it is extremely important to identify them in order to shape them both in the process of education in secondary schools and higher education, and in the process of training while already performing professional tasks. This is especially true of the so-called soft competences, which at different levels are necessary for all jobs, conditioning the use of hard (professional) competences. Hence, it is desirable to conduct research on the requirements of the labor market for these competences and to determine the discrepancies between these competences and the competences actually formed. Thus, universities, caring about the quality of education, should monitor the adequacy of soft competences acquired by students, thus affecting their ability to obtain a job and future professional success.

This issue became the subject of research interest for the authors of the article and guided the main objective of the research: to identify the soft competences that students develop during their studies. The main research problem was formulated as a question: *What competences expected in the modern labor market are developed by students at the University?*

The research was conducted in January 2023 at the Faculty of Management and Command at the War Studies University in Warsaw. Civilian students studying three majors: management and command, logistics and aviation were surveyed. The research was anonymous and was carried out through the use of an opinion poll method utilizing the survey technique. The study was of a pilot nature.

Achieving the purpose of the research made it possible to identify those soft competences that should be developed at the university, as they are desirable in the modern labor market.

## 2. Theoretical aspects of competence

The term competence (Latin *competentia* – responsibility, usefulness), can be understood in two contexts – as the scope of someone's knowledge, skills, and as the scope of authority, powers, scope of action of some institution. In the first sense, it is mainly found in the literature of management, pedagogy and psychology. While in the second meaning – in the area of law. In the rest of the article, competence will be understood in the first sense.

According to A. Gick and M. Tarczyńska, competence can be defined as *knowledge, skills, behaviors, qualities and attitudes that distinguish those who achieve the highest efficiency* (Gick, Tarczyńska, 1999, p. 45). A similar definition in content is presented by A. Szczęsna and T. Rostkowski, defining competences as *all qualities of employees (knowledge, skills, experience, abilities, ambitions, professed values, styles of action), the possession, development*

*and use of which by employees enables them to implement the strategy of the company in which they are employed* (Szczęsna, Rostkowski, 2004, p. 41). In narrower terms, competences are understood by G. Filipowicz: *Competencies are dispositions in terms of knowledge, skills and attitudes that make it possible to carry out professional tasks at an appropriate level* (Filipowicz, 2004, p. 17).

From the above definitions, as well as the analysis of other definitions, it is clear that the term competence is an interdisciplinary and multidimensional construct (Schneider, 2019), integrating various behaviors of an employee on the job. The common ground between the various interpretations is the search for and analysis of factors that contribute to the efficient performance of tasks by the employee, the team and the organization. There are still a number of scientific dilemmas regarding issues of definition (Wong, 2020) or measurement of competences, but nevertheless these issues do not restrict organizations from developing competency profiles and basing personnel processes on competences (Springer, 2018).

The aforementioned concepts define competences by distinguishing the components of competences and indicating their effects. An employee's ability to transform his potential into action effects is his ability to behave competently in a given position and under specific organizational conditions.

Hence, professional competence can be defined as the knowledge, skills, experiences, values, motivation and attitudes of employees that ensure the efficient performance of tasks on the job. It should be emphasized that competences are therefore not all the qualities possessed by employees, but only those that correlate with the efficient performance of tasks. Thus, the fundamental issue in the development of competences is their accurate identification for individual positions or groups of positions, and then their intentional formation both in universities and in the process of employee training.

The definitions given above include the individual components of competences. The most commonly mentioned components of competence include knowledge, skills, behaviors, values, attitudes, personality, abilities and motivations. It is debatable to include, for example, personality traits among these components. It is rightly noted by A. Springer that the concept of competence is overly multidimensional and fuzzy, hence the description of competence requires precise definition and indication of the accepted components of competence (Springer, 2018).

In organizational practice, the term competence is used alongside the term qualifications. Competences, however, are a broader concept and pertain to a specific job position, while qualifications express the level of education obtained (Topolewska, 2023), confirmed by a document, or skills acquired during education or training (Sidor-Rządkowska, 2006). It can be assumed that qualifications are the basis of competence, but they usually do not ensure efficiency on the job.

The required level of competence depends on the number and complexity of the tasks performed. This level can be both an indicator of the suitability of employees for a given position and an indicator of the quality of management's efforts in the professional development of subordinates.

The following characteristics of competence can be distinguished (Majewski, 2013):

- they distinguish a proficient employee from unsuccessful professional employees,
- are strictly task-oriented on the job (groups of jobs),
- the level of competence can be inferred from a set of observable behaviors,
- are measurable (Škrinjarić, 2022) and allow distinguishing several levels of behavior,
- are only such dispositions that are subject to development,
- correlating with the efficiency of action, are a prerequisite for performing a task at the required level.

Depending on the qualities possessed by the employee, the process of acquiring and using competences may proceed faster or slower, and the results achieved may indicate different degrees of efficiency (Gorbachenko, 2021).

In the reference books (Walkowiak, 2004; Springer, 2018), there are many typologies of professional competences, which are created for the purpose of theoretical considerations or the need to adapt to the individual needs of the organization. A distinction is made, among others, between hard and soft competences, general and specific, personal and job-related, individual and organizational, or, by content criterion: base, social, professional and conceptual.

Base competences are competences that are fundamental to any activity in a given area and condition the use of other competences. Therefore, they are usually desirable in all employees of a company and often relate to issues of values and norms of behavior, i.e. they belong to soft competences, e.g.: courage, loyalty to superiors, honor, fairness, being results-oriented. The stronger the values, the greater the influence they have on the behavior of members of a given organization – the structure adopted, the strategy and methods of operation, the style of leadership, the way decisions are made, etc.

Social competences relate to efficient, verbal and non-verbal communication with other members of the team or organization, leading others, motivating or resolving conflicts. Thus, they are also soft competences. They can also include conceptual competences relating to devising a plan to carry out the tasks received, determining solutions to problems arising on the job. Hard competences, on the other hand, will include professional competences, resulting from the specifics of the expertise, such as planning activities, operating equipment, knowledge of operating procedures and processes, inventory calculations.

The aforementioned types of competences condition and complement each other, as it is difficult to perform a task requiring professional competence without possessing certain soft competences. These competences are important in all executive and managerial positions, as they condition the use of professional competences.

The greater the number of tasks performed by an employee, the more diverse soft competences are required. However, it is possible to distinguish those that are most often repeated and are key to efficient performance. These competences should be especially developed both in universities, in organizations, as well as taken into account in personnel actions.

### 3. Soft competences required in today's labor market

When considering the issue of soft competences that employees should have in the modern labor market, it is worth considering what the mentioned competences are. Various definitions or views on the subject can be found in the literature, with soft competences being called in different ways by many institutions or organizations over the past years (Figure 1).

Life skills (WHO, 1993)
Transversal skills (ISFOL, 1998)
Generic competences (Tuning project, 2000)
Key competences for a successful life and a well-functioning society (OECD, 2003; 2012)
Key competences for lifelong learning (UE, 2006)
21 <sup>st</sup> century skills (Ananiadou & Claro, 2009)
Transferable skills (RPIC-ViP, 2011)
Future work skills (IFTF, 2010)
Soft Skills for Talent (Manpower Group, 2014)
Skills for Social Progress (OECD, 2015)

**Figure 1.** Different names proposed to define Soft Skills.

Source: Cimatti, 2016, pp. 97-130.

Soft skills are often referred to as *Generic Competences* (Poblete, 2015), *Key Competences*, or, following the Microsoft-Intel definition *21st Century Skills* (Hautamäki, 2015). Several European projects have also been developed to define and study the issue of competences, which include the Tuning project, in which generic competences are divided into three categories: *instrumental* (cognitive, methodological, technological and linguistic competences), *interpersonal* (individual and social competences) (Klinkosz et al., 2021), and *systemic* (organizational, entrepreneurial and leadership competences) (Poblete, 2015).

According to the general division, competences can be divided into professional competences, which are usually identified with hard competences (knowledge, specific skills related to the profession or work experience), and personal competences, which are usually referred to in the reference books as soft competences. These include self-awareness, motivation, innovation or social skills, i.e. leadership, teamwork, communication or conflict management (Szaban, 2012, pp. 87-88).

Soft competences are also defined as *attitudes and behaviors exhibited in interactions between people that affect the outcome of various interpersonal encounters* (Muir, 2004, p. 96). S.P. Robbins and D.A. DeCenzo likens soft competences to specific interpersonal skills, defining them as the *ability to cooperate with other people, understand them, act as a mentor to them, and motivate them both individually and in groups* (Robbins, DeCenzo, 2002, p. 41).

It should also be noted that soft competences can be divided into intrapsychic and interpersonal skills. The former testify to what a person should understand, what to develop independently, what to learn. The interpersonal approach, on the other hand, is about how a person can develop in the context of building relationships with other people (Cimatti, 2016). B. Cimatti also emphasizes that this type of distinction can be used in the context of defining personal skills as well as social skills.

Personal skills include, among others, knowledge and the ability to think, which corresponds to cognitive skills. Examples here include a desire for continuous learning and the ability to plan and achieve goals, but also openness, a sense of social support, high self-esteem and self-acceptance, optimism and a sense of humor. However, when it comes to professional life, the most important skills in this category are considered to be: flexibility of thinking, readiness to learn, creativity, analytical thinking, self-reliance, coping with stress and openness to change (Paszkievicz, Silska-Gembka, 2013). Personal competences contribute to efficient self-management and are seen as the *foundation of personality and treated as human potential* (Kędzierska, Znajmiecka-Sikora, 2011, p. 20).

On the other hand, social skills, i.e. those that relate to relationships with other people, involve such issues as listening skills, negotiating, networking, problem-solving, decision-making skills, and assertiveness (Cimatti, 2016; Engelberg, 2015). From the point of view of professional life, such skills as teamwork, sharing knowledge and experience, personal culture, communication skills, establishing relationships with customers, co-workers and superiors (Paszkievicz, Silska-Gembka, 2013).

The above testifies to the fact that a person's possession of the right soft skills allows hard skills to "develop", making soft skills go beyond the strict requirements of the profession (Grisi, 2014).

Soft skills can also be divided into entrepreneurial skills, which are related to the fact that a person has leadership skills, can take risks, is innovative, as well as can manage change, and technological skills, that is, skills that allow a person to perform specific tasks (Ciappei, 2015).

P. Smółka believes that soft competences – although unquantifiable and difficult to measure – allow for "hard" results (Smółka, 2008).

In general, soft competences are difficult to define in a clear, simple way. However, it is important to try to understand or reflect on which soft competences will be needed in the context of the future labor market.

Yet, there is no denying the fact that the modern labor market faces many difficulties, as it is subject to constant change. This in turn influences the fact that the business environment, both near and far, is increasingly difficult to predict. Therefore, this necessitates the search for new solutions in terms of development opportunities both from the perspective of the employer and the employee, or the implementation of forward-looking employee strategies, which will be the source of the search for new talent or the development of new work models. The Covid-19 pandemic has had a significant impact on the current labor market. However, as specialists from ManpowerGroup point out in the *Human Age 2.0 Future Forces At Work* report, the dynamics of change in today's market are also influenced by:

- individual choice – employees are increasingly opting for careers with multiple employers rather than “lifetime” jobs. The main goal of young people has become to develop and acquire new skills, knowledge and experience, in the future it may lead to a career promotion or a change to a more rewarding job (Figure 2). And this is where the problem arises among employers, among others: *why should I train you if you will leave and work for my competitor?*



**Figure 2.** The Rise of Individual Choice – What Have You Done For Me Lately?

Source: <https://www.manpowergroup.co.uk/wp-content/uploads/2016/01/humanage2-futureforcesatwork.pdf>, March 29, 2023, p. 6.

- demographics/talent management – an aging population and declining birth rate, resulting in a declining workforce and difficulty in attracting talent. Many countries are introducing a number of programs e.g. knowledge transfer to train the next generation, aimed at finding and attracting new talent;

- customer sophistication – companies are starting to think more strategically about where they source talent from. It is worth noting at this point that large organizations are beginning to use large data sets, as well as advanced recruiting. What's more, more and more ways of "retaining" trained employees are being introduced – if only by introducing modern motivational methods. The aim of such measures is primarily to increase employee productivity, but also to change the way companies think about talent. Through the use of behavioral tests, digital scorecards and better information systems on available human resources, companies are becoming better at identifying their employees, and this consequently provides information on where the best talent is in the company or where there may be gaps;
- technological revolutions – there is no denying that technological development has a huge impact on shaping changes in the modern labor market, primarily in the context of competency requirements. Thanks to the development of various mobile devices, as well as applications, employees are able to communicate with each other more quickly, both within their organizational unit and throughout the organization, but also in terms of better communication with customers. A telling example of the above, using a higher education institution as an example, is the use of MS Teams applications – both in communication between employees, but also with students. The use of this type of technology by managers/leaders gives them opportunities to manage their teams more effectively. The development of technology is also related to the increasing use of artificial intelligence in various industries – for example, in the medical industry, where human-AI collaboration allows for the reduction of errors made when diagnosing various diseases. However, it is important to keep in mind that the development of technology using artificial intelligence can be associated with risks for employees. As indicated by research presented in the Global Risk Report 2017, technological advances may lead to up to half of existing jobs undergoing massive transformations in the coming years, and some of them, especially those requiring work with human hands, will disappear altogether (The Global..., 2017). A telling example of such a revolution in terms of replacing or displacing jobs is, for example, the automotive industry from the point of view of the use of robots, which make it easier and faster to do the job (Human Age 2.0..., 2016, pp. 3-9).

As a result of the development of technology, and therefore the digitalization of the work environment, soft competences have become extremely important, by which they are defined as *PowerSkills* or as *company-wide competences* (Workplace Learning Trends Report, 2022). In the context of the discussion at hand, it is useful to briefly define soft competences referred to as *PowerSkills*. According to the Workplace Learning Trends<sup>1</sup> report, these competences

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<sup>1</sup> Workplace Learning Trends 2022 report, is based on data obtained from UdeMy Business participants from around the world, provides a unique look at the desired professional skills that employees and their companies need to be competitive in today's workforce – and the workforce of the future.



include the areas of communication and teamwork, leadership and management, productivity and collaboration, as well as personal development and well-being. In this regard, the relevance of such competences in today's labor market is indicated:

- assertiveness – it's a teamwork competency that allows you to communicate effectively, to express one's own opinion without showing aggression or attacking the other party, in other words, it's a skill by which an employee approaches himself, as well as others, with respect. From 2020 to 2021, the demand for this competency increased by 250% (from 2017 to 2021 by 602%);
- diversity management (D&I) – this is a competency for which demand increased from 2020 to 2021 by 205% (from 2017 to 2021 by 324%), It deals with issues such as fitting in with the organizational culture, amenities for employees such as flexible working hours, a room for breastfeeding mothers, a meditation room and others, hiring 50+ people, or the principle of gender equality and anti-discrimination;
- strategic thinking - this is also a competency in the area of leadership and management, which has grown in popularity by as much as 331% from 2017 to 2021. It is primarily concerned with employees being able to use their knowledge, to see their strengths as well as their weaknesses, to be able to achieve their goals which allows them to act more effectively as a result. It is worth mentioning here that the ability to think strategically is strongly correlated with the possibility of promotion;
- free use of digital tools – in today's era, where employees are increasingly taking advantage of hybrid work opportunities, especially after the experience of the Covid-19 pandemic, the ability to use a computer or other mobile devices has become one of the most important productivity soft skills. Between 2017 and 2021, the demand for computer-related competences increased by 404%, between 2020 and 2021 by 169%;
- speaking English – is a competency in the area of personal development, the demand for which increased by 150% between 2020 and 2021. A Pennsylvania State University study also indicates that speakers of more than one foreign language are better at performing multitasking (Workplace Learning Trends Report, 2022, pp. 7-12).

In contrast, from research published by NTUC LearningHub in its *Emerging Jobs and Skills Report*<sup>2</sup>, the most important PowerSkills from an employer perspective include:

- adaptability – which means the ability of an employee to adapt quickly to changes that occur both in the organization itself and in its environment. A telling example of this was the transition from "overnight" from working in stationary mode to remote mode during the Covid-19 pandemic;

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<sup>2</sup> The survey was conducted among more than 650 working Singaporeans in early December 2021 by NTUC LearningHub. Respondents included 450 full-time employees (with a subordinate manager) and 200 employers (senior, middle managers who make hiring decisions about hiring).

- developing people – understood as expanding/improving competences among employees in order to build or develop their career paths;
- collaboration and communication skills – the ability to communicate efficiently within a team and to convey information is extremely important. Also noteworthy is the fact that, increasingly, meetings, briefings or task completion are conducted remotely or hybridly, hence employees are required to acquire skills in this area (Emerging Jobs and Skills Report, 2022, pp. 37-48).

Summarizing the previous considerations, it should be said that from the point of view of the changes that are taking place in the modern labor market, the importance of employees having the right soft skills will continue to increase. This is because it will affect the professional success of the employee, the management of his career, but will also contribute to the success of the organization, by maintaining a sustainable competitive advantage.

## **4. Soft competences – results of empirical studies**

### **4.1. Research methodology**

The development and quality of functioning of the education system, especially in the context of the need for lifelong learning, resulting from technological progress and changing situational conditions, is an issue that is the subject of discussion and analysis carried out at the national level, as well as at the European Union level within the framework of the programs and initiatives undertaken (Kwiatkowski, 2018). The ways of forming competences, including the choice of the competences themselves to be developed is a special challenge, the implementation of which is not possible without awareness of the situation taking place in the labor market, including the existence of deficit and surplus occupations. Universities, whose main idea of functioning is to educate students in order to prepare them for professional work (Act..., Article 13, point 1, section 1), should constantly monitor the labor market and make the necessary changes in educational programs in order to develop the competences required by the market, keeping in mind that the rate of acquisition of individual competences varies, and that the competences themselves form so-called families of competences. The development of one competence determines the possibility of acquiring another, which shows how important it is to carefully plan the educational process, and this is not possible without thorough knowledge of competences. The importance of competences is emphasized by, among others, S.B. Parry indicating that: competences are a set of interrelated knowledge, skills and attitudes that represents a key component of a person's job role and responsibility, that associates with performance in a job, that can be measured against well-established standards, and that can be reinforced through training and development (Parry, 1996).

Understanding the importance of competence development, the authors of the article conducted a study aimed at finding out the opinions of students on the development of soft skills in a higher education institution. The research was conducted in January 2023 at the Faculty of Management and Command of the War Studies University in Warsaw. Civilian students studying three majors: management and command, logistics and aviation were surveyed. Both full-time and part-time, first- and second-degree students were invited to participate in the research. The research was voluntary and anonymous and was conducted through the use of a diagnostic survey method carried out using a questionnaire technique. Questionnaires in paper form were distributed by the authors of the article among students from each group. A total of 336 students participated in the study.

The main objective of the conducted research was to identify the soft competences that students develop during their studies. The choice of the indicated research area was related with the need to identify at the university the competences that should be developed, without which students might find it difficult to find their way in the labor market (Pang et al., 2019). The university, taking care of the quality of education, should constantly monitor the effects of its activities, which in the case of students have a significant impact on their professional future and quality of professional life. In addition, the importance of soft skills is presented in various reports and analyses. Deloitte Access Economics recognizes that by 2030, 66% of all jobs will be occupations requiring soft competences (Competences..., 2022). The indicated forecast reveals how important it is to form these competences at all stages of education, and especially for those who will cooperate in teams or lead them in their future work.

The main research problem was formulated as a question: *What competences expected in the modern labor market are developed by students at the University?* The research also sought to answer the following specific problems:

- *Will studying in the field of study chosen by students allow them to acquire the competences necessary for efficient functioning in the labor market?*
- *Which competences expected in the modern labor market are not developed at the university, but according to students should be developed?*
- *What actions according to students should be taken at the university in order for students to meet the requirements of the modern labor market?*

The competences analyzed as part of the research were extracted on the basis of reports and industry articles on expected competences in today's labor market. An example of a report is *Gamma Competences of the Future*, in which the authors note the importance of such soft competences as learning, conflict resolution, creativity, teamwork, assertiveness, negotiation skills, stress resilience, ability to use technology, critical thinking, communication, relationship-building and leadership skills (Gamma..., 2020). The importance of soft skills is also presented in *The Future of Jobs Report 2020*. According to the report, in 2025 the most important soft competences will include: analytical thinking and innovation, active learning and learning strategies, complex problem solving, critical thinking and analysis, creativity, originality and

ingenuity, leadership and social influence, use of technology, monitoring and control, technology design and programming, resilience, ability to cope with stress, flexibility, and reasoning, problem solving and idea generation (The Future..., 2020).

The authors of the article are aware that not all soft competences were studied, but only selected competences that most often appeared in domestic as well as foreign reports.

#### 4.2. Sample structure

Diagnosing opportunities for the development of soft competences, in order to adjust educational programs to the needs of the labor market, should be carried out in each university, regardless of its nature or the courses offered. The research analyzed the competences of students of the Faculty of Management and Command at the War Studies University, which was due to the place of work of the authors of the article, as well as was related to the first stage of the research carried out, during which the research tool – a survey questionnaire – was analyzed in detail, which, after validation, will be used in subsequent stages of the research. The study was of a pilot nature. The authors of the article would like to carry out the research of students' competences periodically, which will allow to reveal the impact of changes in educational programs on students' competences.

The structure of the research sample is shown in Table 1. The research sample was characterized by six basic criteria, such as gender, age, level and type of study, field and year of study, and place of residence.

**Table 1.**  
*Sample structure*

Criterion	Responses	N	%
Gender of the respondents	Female	139	41.37
	Male:	197	58.63
Age of respondents	Up to 22 years old	206	61.31
	23-25 years	89	26.49
	More than 25 years	41	12.20
Level and type of study	Full-time undergraduate studies	177	52.68
	Full-time graduate studies	40	11.90
	Part-time bachelor's degree program	73	21.73
	Part-time graduate studies	46	13.69
Field of study*	Command and Management	123	36.72
	Logistics	153	45.67
	Aviation	59	17.61
Year of study*	I	159	47.46
	II	120	35.82
	III	56	16.72
Place of residence	village	73	21.73
	city with up to 19 999 inhabitants	29	8.63
	city with 20,000 to 99 999 inhabitants	79	23.51
	city with 100,000 to 499 999 inhabitants	17	5.06
	city with 100,000 to 499 999 inhabitants	138	41.07

\*For field of study and year of study, 335, and not 336 students, responded to the survey.

Source: Own research results.

A total of 336 students were surveyed, so 59.79% of the total number of students studying at the Faculty of Management and Command participated in the survey. This included 41.37% of women and 58.63% of men. The survey included undergraduate students, with a total of 250, and graduate students, with a total of 86. The survey questionnaire was completed by 159 first-year students, 120 second-year students and 56 third-year students. The largest group was made up of students from the field of logistics (45.67%). The remaining students studied management and command – 36.72% and aviation – 17.61%. Most of the students surveyed were residents of cities with a population of 20 000 to 99 999 (23.51%) and cities with a population of more than 500 000 (41.07%).

### 4.3. Results and discussion

Conducting a study devoted to the issue of the development of soft competences important in the modern labor market, and developed (or not) in higher education, the views of students regarding the conviction that studying in the chosen field of study will allow the acquisition of competences necessary for efficient functioning in the labor market were first analyzed (Table 2).

**Table 2.**

*Studying allows to acquire competences needed in the labor market – opinions of respondents in %.*

Responses	Field of study		
	management and command	logistics	aviation
Strongly yes	10.57	13.91	8.475
Rather yes	46.34	54.97	64.41
It's hard to say	32.52	24.50	16.95
Rather not	8.13	5.30	8.475
Definitely not	2.44	1.32	1.69

Source: Own research results.

In analyzing the results of the survey, it should be noted that the most convinced that studies allow the acquisition of competences needed in the modern labor market are students studying aviation – 72.89%. 68.88% of students majoring in logistics also shared this opinion, while the least number of students majoring in management and command (56.91%) marked an affirmative answer. Thus, one could conclude that the higher the level of specialization of studies, the greater the students' conviction about the possibility of developing, as part of their studies, competences necessary for the labor market.

The conviction that studying in a particular field of study will allow a certain pool of competences to be acquired may not only be due to the field of study a young person has taken (technical majors are more oriented towards the development of hard, rather than soft, competences). An important factor influencing students' views is also their work experience (Table 3), since a student's full conviction about whether or not he or she possesses certain competences can be verified by realizing himself or herself professionally. The very

participation in interviews, and therefore also the feedback received by students from recruiters, increases the self-awareness of young people, which translates into more critical thinking, and therefore also the possibility of more fully verifying the usefulness of the chosen field of study.

**Table 3.**

*Students' work experience*

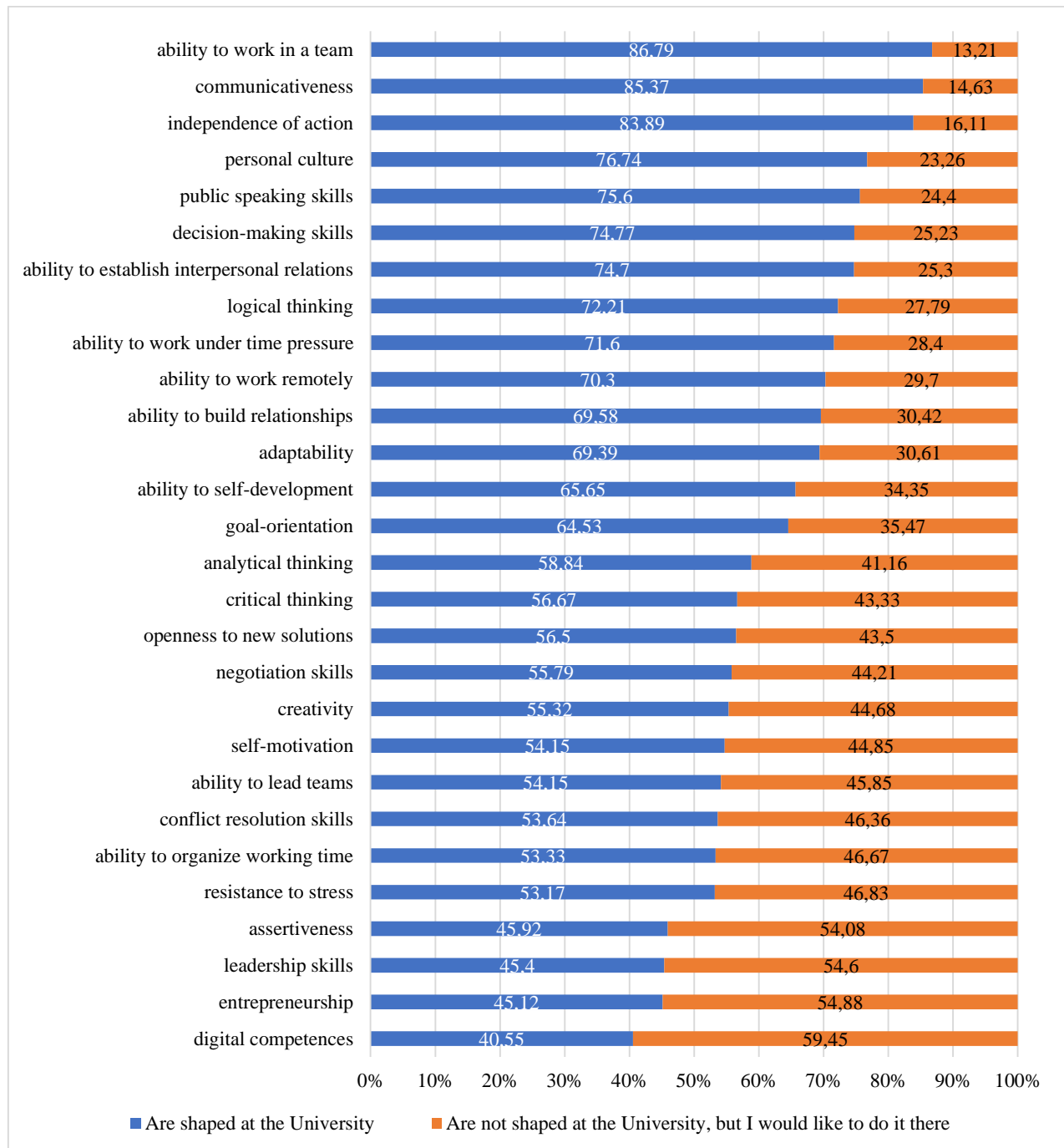
Responses	N	%
Yes, I have worked, but I am not currently working	69	20.54
Yes, I am working professionally	174	51.79
Yes, I was/am running but no longer running my own business	3	0.89
Yes, I am currently running my own business	7	2.08
Yes, only in the form of internships and apprenticeships	27	8.03
I have no professional experience	54	16.67

Source: Own research results.

The surveyed students of the Faculty of Management and Command were mostly those who were working professionally at the time of the survey – 51.79%, those who were not working but had work experience – 20.54%, those who were self-employed – 2.08% or had previous experience in running such a business – 0.89%. The respondents also included people whose work experience is related to with the implementation of internships and apprenticeships – 8.03%. A total of 83.33% of students declared that they had work experience. The fact of having work experience was an important factor that, according to the investigators, influenced the way in which soft competences shaped at the University were assessed, as well as the very need to develop those competences that are not shaped at the University.

Soft competences, as already indicated in the deliberations, are developed not only in educational institutions, but also in courses, training, during interactions with family members, peers, or colleagues at work. Some of the soft competences, such as, for example, communicativeness, resistance to stress or leadership skills are determined by personality (Robescu et al., 2020), which means that people developing the indicated competences in the same environment can achieve different results. In addition, the desire, and therefore the need to develop soft competences is very individual, resulting from the course of the socialization process, the chosen direction of education and the profession that a person would like to pursue in the future. Not all people feel the need to develop particular soft competences, which is due to self-awareness, as well as and knowledge of what competences constitute a competitive advantage for employees in the labor market and determine professional success.

As part of the ongoing research, students were asked to indicate which of the highlighted soft competences they have the opportunity to form at the university, and which competences they do not, but should be developed as part of their studies (Figure 3).



**Figure 3.** Soft competences shaped and not shaped at the University – students' opinions.

Source: Own research results.

Analyzing the results of the survey, it can be indicated that according to the students, all the competences highlighted are shaped at the University, while some of the competences should be given more attention, which shows the need for modification of educational programs. The university primarily enables the formation of such competences as teamwork (86.79%), communication skills (85.37%), self-efficacy (83.89%), personal culture (76.74%), public speaking skills (75.6%), decision-making skills (74.77%), interpersonal relationship skills (74.7%), logical thinking (72.21%), ability to work under time pressure (71.6%) and ability to work remotely (70.3%). More attention, on the other hand, is needed to develop digital

competences in particular - 59.45% of surveyed students indicated that they do not develop these competences. 54.88% indicated the need to develop entrepreneurship, which may also be related to the experience of some students in running their own businesses, or the desire to open such a business after graduation. Interestingly, 54.6% of students see the need to develop leadership skills, which is probably related to their desire to hold leadership positions in the future. Students also indicated the need to develop such competences as assertiveness (54.08%), resistance to stress (46.83%), ability to organize work time (46.67%), ability to resolve conflicts (46.36%), leading teams (45.85%), etc.

The analysis of the survey shows that students recognize the need to develop soft skills, as indicated by their desire to improve the highlighted competences. Development in the indicated areas would allow students to be better prepared to function in the modern labor market, enable them to apply for more prestigious jobs, as well as increase students' sense of professional attractiveness, thereby increasing their self-esteem.

In order to complete the explored issue, the research also analyzed the actions that the students believe the University should take in order to even better prepare young people to meet the demands of the labor market (Table 4).

**Table 4.**

*Actions that universities should take in order to prepare students to meet the demands of the labor market*

Responses	%
provide students with professional career counseling	64.07
increase the scope of cooperation with entrepreneurs in the form of traineeships/internships offered by the university	56.29
develop the offer of the career office – to support students in the process of job search	45.51
pay more attention to language competences	41.14
pay more attention to the formation of soft competences of students	30.84
pay more attention to the formation of hard competences of students	30.84
increase the employment of practitioners as lecturers	27.84
pay more attention to digital competences	26.65
increase the number of hours of practical classes	21.56
increase the competence of the university's teaching staff	18.86
increase the number of hours of mandatory traineeships/internships	7.78
other	2.40

Source: Own research results.

In order to meet the demands of the modern labor market by students, higher education institutions should undertake various activities, the implementation of which in both the modification of educational programs, the development of the competence of teaching staff, increasing the scope of cooperation with employers, or expanding the offer of career offices and career counseling, will allow to enrich the competence and increase the level of self-awareness of students. As part of the survey, 64.07% of students indicated that they perceived the need to receive support in the form of professional career counseling at the University. Offering career counseling would allow students to take part in a professional assessment of their potential, identify directions for development in line with their profile and



competence/personality predispositions, or prepare for professional challenges. The second measure indicated, according to the students surveyed, is to increase the scope of cooperation with companies in the form of traineeships/internships offered by the university – 56.29%. Developing the university's cooperation with companies, and therefore enriching the offer of traineeships and internships supervised by the career office, would make it possible to support students in taking their first steps in the labor market. Currently, the Faculty of Management and Command engages in cooperation with various companies, which results in consulting on the implementation of changes in educational programs, or offering especially the best students internships and graduate traineeships, but this offer cannot be used by all willing students. Cooperation in the modification of educational programs is very important, as the so-called external stakeholders indicate precisely during consultations what areas of competence they think should be developed at the University, which also results from their staffing needs. 45.51% of students also indicated that they perceive the need for support from the career office in the job search process. This support could take the form of courses and training in, for example, self-presentation, how to deal with job interviews, drafting a visually attractive and substantive resume, or using recruitment portals (setting up accounts, updating information about work experience, etc.). It should be noted that as part of the survey, an additional 7.78% of students revealed the need to increase the number of mandatory internship hours. Currently in the Faculty, students are obliged in the second year of study to carry out a student internship of 120 hours. This internship is mostly carried out during the summer vacation period. Increasing the number of hours of mandatory internship, for example, already after the first year of study, would enable students to face the challenges of the labor market more quickly, and thus acquire important professional experience that could form the basis for further professional orientation – the choice of major or additional subjects (faculties).

Meeting the demands of the modern labor market is currently not fully possible without having language competences. The need to develop these competences was indicated by 41.14% of the students surveyed. Students at the Faculty develop foreign language skills as part of curricular activities, they have the opportunity to choose a foreign language faculty, as well as a free choice subject taught in English. However, these classes do not end with the passing of any certificate, which the university should consider as an action worth introducing. Such a change would allow students to acquire an additional qualification and perhaps mobilize them to put more effort into learning languages.

Interestingly, the same percentage of students surveyed – 30.84% – declared the need for the Faculty to pay more attention to the development of both soft and hard competences. Perception of the need to develop both groups of competences shows that students are aware of their competency gaps in this area, which is probably due to both accumulated professional experience and feedback received from teachers in the educational process. The need to develop digital competences was indicated by 26.65% of the respondents, and 21.56% indicated the need to increase the number of hours of practical classes.

The surveyed students also indicated that the development of their competences is determined by increasing the employment of practitioners as lecturers (27.84%) and increasing the competence of the university's teaching staff (18.86%). It should be noted that, especially during the period of remote learning, the need to raise the competence of teaching staff was perceived, while the employment of practitioners is seen by students as an opportunity to develop their competence, which is probably also due to the participation of students in the so-called *Practical Management Workshops*. As part of these meetings, eager students participate once a month in classes conducted by representatives of various companies, who present real problems they face in their organizations and ways to overcome them.

## 5. Summary

Shaping soft skills, required in the modern labor market, and therefore constituting students' professional opportunities, is an important task facing universities. Activities aimed at identifying development needs, including those resulting from changes in the labor market and the requirements of organizations (Midhat Ali et al., 2021), allow for intentional shaping of educational programs, which translates into the level of competence of university graduates.

As part of their research, the authors aimed to reveal the competences expected in the modern labor market and developed by students at the University. The research shows that students develop all the highlighted soft competences important from the perspective of the modern labor market at the University. The respondents' answers regarding competences developed and not developed at the University varied. This leads to the conclusion that there is a need to modify the educational programs in order to pay more attention to the development of those competences that were indicated by the majority of respondents as needing development. Digital competences, leadership skills, assertiveness, resistance to stress (Kim, Jung, 2022), ability to organize work time, ability to resolve conflicts, or ability to lead teams are key competency areas in need of improvement. The need to improve competences can also be confirmed by referring to the students' responses in terms of their conviction that studies allow them to acquire competences necessary in the modern labor market. Such an opinion was expressed by 72.89% of the surveyed students studying aviation, 68.88% of students from the logistics faculty and 56.91% of students from the management and command faculty. The need to develop the highlighted competences stems both from the students' professional experiences (83.33% of students declared such experiences) and their understanding of the labor market situation.

Above all, students need support from the University in the form of career counseling, offering internships and apprenticeships in cooperation with various organizations, increasing the offer of the career office, or paying more attention to the development of language

competences. The indicated activities would help better equip students with the competences required in today's labor market, thereby making it easier for students to enter the labor market.

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## References

1. Ciappei, C. (November 2015). *Soft Skills to govern action. Speech at "Soft Skills and their role in employability – New perspectives in teaching, assessment and certification"*, workshop in International Workshop University Residential Center Bertinoro (FC), Italy.
2. Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for Quality Research*, 10(1), pp. 97-130.
3. Engelberg, S. (November 2015). *A developmental Perspective on Soft Skills. Speech at "Soft Skills and their role in employability – New perspectives in teaching, assessment and certification"*, workshop in International Workshop University Residential Center Bertinoro (FC), Italy.
4. Filipowicz, G. (2004). *Zarządzanie kompetencjami zawodowymi*. Warszawa: PWE.
5. Gick, A., Tarczyńska, M. (1999). *Motywowanie pracowników*. Warszawa: PWE.
6. Gorbachenko, I. (2021). Assessment Of The Process Of Acquiring Professional Competencies By Students. *European Proceedings of Social and Behavioural Sciences*, pp. 2348-2356.
7. Grisi, C.G.A. (November 2014). *Soft Skills: a close link between enterprises and ethics. Speech at "Soft Skills and their role in employability – New perspectives in teaching, assessment and certification"*, workshop in International Workshop University Residential Center Bertinoro (FC), Italy.
8. Hautamäki, J. (November 2015). *The search for Non-Hard Skills – Learning to Learn as a Key Competence – Finnish Framework and Empirical Data. Speech at "Soft Skills and their role in employability – New perspectives in teaching, assessment and certification"*, workshop in International Workshop University Residential Center Bertinoro (FC), Italy.

9. Kędzierska B., Znajmiecka-Sikora M. (2011), Kompetencje jednostki a efektywność zawodowa. In: M. Znajmiecka-Sikora, B. Kędzierska (ed.), *Podstawy kształcenia ustawicznego od A do Z. Psychologiczne metody wspierania rozwoju osobistego i społecznego osób dorosłych*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
10. Kim, J., Jung, H.-S. (2022). The Effect of Employee Competency and Organizational Culture on Employees' Perceived Stress for Better Workplace. *International Journal of Environmental Research and Public Health*, 19(4428).
11. Klinkosz, W., Iskra, J., Artymiak, M. (2021). Interpersonal competences of students, their interpersonal relations, and emotional intelligence. *Current issues in personality psychology*, 9(2), pp. 125-134.
12. *Kompetencje miękkie deficytowe na rynku pracy, a będą coraz bardziej pożądane*. Retrieved from: <https://www.bankier.pl/wiadomosc/Kompetencje-miekkie-deficytowe-na-ryнку-pracy-a-beda-coraz-bardziej-pozadane-8294401.html>, 27.02.2023.
13. Kwiatkowski, S.M. (ed.) (2018). *Kompetencje przyszłości*. Warszawa: FRSE.
14. Majewski, T. (2013). *Rozwój zawodowy kadr dowódczych*. Warszawa: Wydawnictwo Menedżerskie PTM.
15. Midhat, Ali, M., Qureshi, S.M., Memon, M.S., Mari, S.I., Ramzan, M.B. (2021). Competency Framework Development for Effective Human Resource Management. *SAGE Open*, 11(2).
16. Muir, C. (2004). Learning Soft Skill at Work. *Business Communication Quarterly*, 67(1).
17. Pang, E., Wong, M., Leung, C.H., Coombes, J. (2019). Competencies for fresh graduates' success at work: Perspectives of employers. *Industry and Higher Education*, 33(1), pp. 55–65.
18. Parry, S.B. (1996), The quest for competencies. *Training*, 33(7), pp. 48-54.
19. Paszkiewicz, A., Silska-Gembka, S. (2013). Rola kompetencji miękkich w pracy księgowego – wyniki badań Empirycznych. *Studia i Prace Kolegium Zarządzania i Finansów, No. 130*, pp. 89-112.
20. Poblete, R.M. (November 2015). *How to teach and develop Soft Skills. Evolution of generic skills (Soft Skills) following the declaration of Bologna 1999. Speech at "Soft Skills and their role in employability – New perspectives in teaching, assessment and certification"*, workshop in International Workshop University Residential Center Bertinoro (FC), Italy.
21. *Raport Gamma Kompetencje przyszłości*. Retrieved from: <https://www.projektgamma.pl/strefa-wiedzy/wiki/raport-hr-2020-kompetencje-przyszlosci/>, 25.02.2023.
22. *Report Human Age 2.0 Future Forces At Work*. Retrieved from: <https://www.manpowergroup.co.uk/wp-content/uploads/2016/01/humanage2-futureforcesatwork.pdf>, 29.03.2023.
23. Robbins, S.P., DeCenzo, D.A. (2002). *Podstawy zarządzania*. Warszawa: PWE.
24. Robescu, D., Fatol, D., Pascu, D. (2020). A study on leadership competencies. *11th International Conference on Information Science and Information Literacy*, pp. 218-229.

25. Schneider, K. (2019). What Does Competence Mean? *Psychology*, 10(14), pp. 1938-1958.
26. Sidor-Rządkowska, M. (2006). Kompetencje – pożyteczna moda. *Personel i zarządzanie*, no. 2.
27. Škrinjarić, B. (2022). Competence-based approaches in organizational and individual context. *Humanities and Social Sciences Communications*, 9(28).
28. Smółka, P. (2008). *Kompetencje społeczne. Metody pomiaru i doskonalenia umiejętności interpersonalnych*. Warszawa: Wolters Kluwer Polska.
29. Springer, A. (2018). *Kompetencje i satysfakcja*. Warszawa: Difin.
30. Szaban, J.M. (2012). *Zachowania organizacyjne. Aspekt międzykulturowy*. Toruń: Adam Marszałek.
31. Szczęsna, A., Rostkowski, T. (2004). Zarządzanie kompetencjami. In: T. Rostkowski (ed.), *Nowoczesne metody zarządzania zasobami ludzkimi*. Warszawa: Difin.
32. *The Global Risks Report 2017. 12th Edition*. Retrieved from: [https://reliefweb.int/report/world/global-risks-report-2017-12th-edition?gclid=EAIaIQobChMIorPC-7zq\\_gIVAvKyCh1GTwymEAAYASAAEgIvufD\\_BwE](https://reliefweb.int/report/world/global-risks-report-2017-12th-edition?gclid=EAIaIQobChMIorPC-7zq_gIVAvKyCh1GTwymEAAYASAAEgIvufD_BwE), 8.05.2023.
33. Topolewska, K. (2023). The impact of competencies on employability in Poland. *Ekonomia i Prawo. Economics and Law*, 23, 27 June 2023.
34. Ustawa z dnia 27 lipca 2005 r. *Prawo o szkolnictwie wyższym* (Dz.U. 2005 nr 164, poz. 1365, tj.).
35. Walkowiak, R. (2004). *Model kompetencji menedżerów organizacji samorządowych*. Olsztyn: Wydawnictwo UW-M.
36. Wong, S.-C. (2020). Competency Definitions, Development and Assessment: A Brief Review. *International Journal of Academic Research in Progressive Education and Development*, 9(3), pp. 95–114.
37. *Workplace Learning Trends Report (2022)*. Retrieved from: <https://business.udemy.com/2022-workplace-learning-trends-report/>, 28.04.2023.
38. World Economic Forum (October 2020). *The Future of Jobs Report 2020*. Retrieved from: [https://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2020.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf), 10.02.2023.