

# Soft Skills and Competence Education in Promoting the Twenty-First Century Philosophy of Life

Ilda Kashami & Arjan Curi

Mediterranean University of Albania, Tirana, ALBANIA Faculty of Law and Humanities

Received: 6 June 2023 • Revised: 10 July 2023 • Accepted: 20 July 2023

#### Abstract

The present paper aims to explore the construct and effects of soft and transversal skills to developing efficiently competent students. The methodological construct of the present study is a mixed one. The study design is probabilistic and the method used in it is of the transversal typology. The final answers were collected in a sample cohort of 500 valid responses in three years of undergraduate studies at the Mediterranean University of Albania with a gender distribution of 335 girls (67%) and 165 boys (33%). The results revealed that the sub-tests with the major significant indices were positive attitude and spirit of initiative (r=.567; p<0.05), teamwork and collaboration (r=.601; p<0.05), and communication channels (r=.81; p<0.05). Pearson inter-correlations indices for the 1st and 2nd factor of the soft-skills sub-skills found that the most significant index is related to the sense of motivation axis (optimism and control of the future, legitimate anger, self-esteem, and self-efficacy) (Sig2. p=0.01<0.05, r=.7054) over the communication resources (persuasion, adversity management, and creativity) (Sig2. p=0.01<0.05, r=.504). ANOVA test indices showed a strong difference in females (F=1.874; MS=3.2003; df=1.5) and an inverse but the stable difference between the male gender and optimism for the future (F=1.3085; MS=-1.111; df=1.5). In conclusion, indices of the current work revealed the impact that a healthy and optimistic motivation cause on the willingness of learning new skills and competencies and developing an efficient student for the working world. The authors recommend drawing attention to conducting more training programs within the academic curricula for fostering and providing students with basic and advanced skills and competencies to be fully adjusted to the European Union philosophy of life and employability world.

*Keywords*: soft skills, competencies, motivation, communication, employability.

#### 1. Introduction

In recent decades, the term competence has been given numerous meanings (Leon et al., 2017; Quendler et al., 2013; Cazden, 2011; Mewton et al., 2009; Bubas, 2001). In addition to the semantic disquisition, it is necessary to clarify the meaning of competence unambiguously, as in the last two decades it often also appears in legislative documents and ministerial procedures intended for schools and universities. Etymologically speaking, *competing* means "tending to meet at one point is in a figurative sense" and, figuratively, it can refer to the Latin *Cum* (with) and *Petere* (to head towards but also to seek). It is in the twentieth century that the word competence appears repeatedly and in two specific contexts, sometimes assuming different meanings: (1)

© **Authors**. Terms and conditions of Creative Commons Attribution 4.0 International (CC BY 4.0) apply. **Correspondence**: Ilda Kashami, Mediterranean University of Albania, Faculty of Law and Humanities, Tirana, ALBANIA.

competent in the workplace is someone who acts as an expert in a specific field, and (2) competent in the educational field which describes the person who solves a problem by adopting the best solution or performs a task by mobilizing different skills. The educational field uses the term "knowledge" to mean the abstract representation of facts, procedures, principles, and theories in a particular domain or sector, information drawn from observations, experiences, beliefs, and prejudices in any sector of life (Cresswell, 2021). But knowledge is not to be confused with "understanding". Reproducing information does not necessarily imply understanding it. Knowledge refers to entities that can be stored and recalled from memory, skills, or cognitive abilities and are associated with mental processes that manage it. Cognitive skills are the mental activities that occur in the brain as we use, transform, or increase available knowledge. These skills are often associated with high-level cognitive activities such as problem-solving, reasoning, thinking, and the ability to draw conclusions and include the ability to analyze, synthesize and evaluate aimed at reproducing or extending existing cognitive structures (Marziano & Kendall, 2007). As Noam Chomsky argued in 1965, competence consists of a set of rules governing behavior, or, more specifically, of a set of observable acts grouped into useful actions (Chomsky, 1965). Behavior is not just the response to a stimulus, but an action functional to a result. The activation of competence includes knowledge, know-how, and attitudes. In the same line are considered the observable behaviors that must be easily describable by an external observer, who, in turn, should be able to express them with an infinitive verb (e.g., calculate, add, break down, summarize, etc.). By comparing the performances related to the individual observable behaviors, the "best performance" among the many possible ones is sought. It is considered "competent" in this sense, the one who, given a performance that corresponds to an observable behavior set as a goal, performs it in the shortest possible time, with the least number of errors. While performance is the same for everyone, competence depends on the speed and precision with which it is performed. Constructivist and philosophical scholars open the path to a new form of education based on competencies (Competency-based Education) that conceived competence as expertise and experience, or rather "mastery of the concrete" in which the subject mobilizes all his resources (motivations, knowledge, skills) to face and solve continuously emerging problems in a versatile and flexible way by using "authentic tasks" and real-life learning environments (Anderson, 2018; Rivers et al., 2019; Henrich, 2016; Rainwater, 2016; Gruppen et al., 2016. Constructivist authors believed that knowledge does not exist independently of the subject in training, but results from the relationship between an active subject and reality. Knowledge is therefore a subjective construction starting from a personal reworking of sensations, knowledge, beliefs, and emotions. Perception, thought, learning, reasoning, problem-solving, attention, language, and emotions are structures that process input data by providing output information (Nordin, 2011; Bakracevic et al., 2010). As stated in the purpose of the present work, we will try to highlight the significance of mapping the diversity of soft skills and competencies with which students can achieve goals in the working world.

## 2. Competences and soft skills

Skills are generally macro-categories into, basic, transversal, and professional technical skills.

The basic skills, as commonly known today, are the "key competencies" that the citizen and the worker need to be employed. Nowadays these skills have a much stronger and more decisive impact on life and social and professional integration projects than a few decades ago (Robles, 2012). The European Commission has given the following definition of key competencies: "The key competencies constitute transferable and multipurpose baggage of knowledge, knowhow, and dispositions, which are necessary for completeness and personal development, for inclusion in social and civil life and everyone's employment. They are assumed to be acquired at

\_\_\_\_\_

the end of the compulsory training period and to form the foundation of lifelong education and training" (Council recommendation ..., 2018).

Not only did the EC define these skills, but it expressly felt the need to update them in 2021, considering technological developments and the labor market. This update, although not substantial, after only 12 years after the first definition, made the Commission reflect on the fast change in the current thinking and work context of people's life.

The second macro-category concerns transversal skills or soft skills. OECD defines this kind of skill as: a set of broad-based skills which are involved in numerous types of tasks, from the most elementary to the most complex, and which are carried out in situations that are different from each other and therefore broadly generalizable (2015).

In general, it can be said that transversal skills refer to fundamental operations and activities of any subject, placed in front of a task that is not necessarily working. One of the peculiarities of soft skills is their presence in all the life experiences of the subject. Another peculiarity is the transferability in different tasks and contexts, therefore usable on a wide range. Yet, they cannot be "taught", but are developed by the subject, mostly in an experiential context.

A definitive list of soft skills has not yet been compiled, and will probably never see the light of day, but some European studies and projects have identified a certainly interesting number.

In the European Strategy for Employment 2021-2030 (Rodriguez Contreras &Sanz,2022), the Commission is placing skills at the heart of the EU policy agenda, steering investment in people and their skills for a sustainable recovery. Businesses need workers with the appropriate skills to master the green and digital transitions, and people need to get the right education and training to be adjusted to the new life work.

The aim of the Strategy is to ensure that the right to training and lifelong learning, as stated in the European Pillar of Social Rights (<a href="https://ec.europa.eu/social/main.jsp?catId=1226">https://ec.europa.eu/social/main.jsp?catId=1226</a>), becomes a reality all across Europe, from cities to remote and rural areas to the benefit of everyone.

Thus, the European Skills Agenda was built on 12 actions to improve the importance of skills in the EU to strengthen sustainable competitiveness:

- (1) Pact for Skills The Pact will mobilize a concerted effort for quality investment in skills for all working-age people across the Union. The Pact for Skills will bring together all stakeholders, private and public, which share the objective of up and reskilling Europe's workforce to enable people to participate in the twin transitions. All these stakeholders will sign a *Charter*, which will define the key principles that are essential to up and reskill the workforce, within their organizations but also across their value chain or ecosystem (anti-discrimination and gender considerations). The Pact will facilitate public-private cooperation. It will set up large-scale partnerships, including at the regional level, in strategic industrial ecosystems and priority areas identified in the European Green Deal to achieve ambitious commitments. These partnerships will involve all stakeholders, notably SMEs who struggle with access to skills. Stakeholders will be encouraged to pool expertise, resources (EU Industrial Strategy, 2020), and funding towards concrete up- and reskilling actions with clear commitments that will allow people to keep, change, or find new jobs. The Pact will also facilitate access to information on EU funding instruments for skills by offering a single-entry point at the EU level.
- (2) Strengthening skills intelligence using big data analysis of job vacancies and making it widely available so it will be possible to acquire online information "in real time" on the demand for skills. To strengthen and disseminate skills Intelligence, the Commission will support the development of new and deepened skills intelligence, including at regional and sectoral levels. The Commission will also promote the

participation of social partners in labor market projections and the identification of training needs to develop skills intelligence. The Commission will Encourage the use of skills intelligence by the public and private employment services and, encourage the public employment services (PES) network to promote the early identification of skills shortages and trends linked to growing job opportunities, including to better draw on the potential of intra-EU mobility and migration from third countries. It will also present skills intelligence information tailored to individuals' needs in Europass, the EU platform for people to manage their learning and careers. This will assist individuals in their study, training, and work choices, and help counselors and mentors, inter alia in Public Employment Services.

- (3) EU support for strategic national upskilling action working with Member States on modern and comprehensive national skills strategies and joining forces with national public employment agencies to achieve this. The Commission will support all Member States to prepare holistic, whole-of-government national skills strategies. This will build on the work already done with the OECD in 11 Member States as well as on other existing skills strategies at the Member State level. The Commission will support the establishment or review of strategies where needed and help monitor progress in implementing them. The Commission will encourage the breaking of gender and other discriminatory stereotypes. It will put a particular focus on the importance of transversal and entrepreneurial skills as well as skills to accompany the digital and green transitions such as those delivered through Science, Technology, engineering, and Mathematics (STEM) studies.
- (4) *Future-proof vocational education and training (VET)* taking a fresh approach to making vocational education and training more modern, attractive for all learners, and flexible and fit for the digital age and green transition.
- (5) Rolling out the European Universities Initiative and up-skilling scientists building long-term transnational alliances between higher education institutions throughout Europe and developing a core set of skills for researchers.
- (6) Skills to support the green and digital transitions developing a set of core green skills, statistical monitoring of the greening of our workplaces, and boosting digital skills through a Digital Education Action Plan and ICT jump-start training courses.
- (7) Increasing STEM graduates, fostering entrepreneurial and transversal skills encouraging young people, especially women, into Science, Technology, Engineering, and Mathematics. The EU's Skills Agenda also aims to strengthen support for entrepreneurs and the acquisition of transversal skills such as cooperation and critical thinking.
- (8) *Skills for life* supporting young people and adult learning on issues such as media literacy, civic competencies, and financial, environmental, and health literacy.
- (9) *Initiative on individual learning accounts* it will explore if and how portable and quality-checked training entitlements could help stimulate lifelong learning for all.
- (10) A European approach to micro-credentials training courses are becoming shorter and more targeted and are often online. European standards that should help recognize the results of such training will be created.
- (11) **New Europass platform** the Europass platform was completely renewed and today it offers online tools and guidance on CV writing, suggests tailored jobs and learning opportunities, provides information for job seekers, available in 29 languages.

(12) *Improving the enabling framework to unlock investment* – a key element of the skills Agenda is the much-boosted EU budget to catalyze Member States and private actors to invest in skills.

The EU will work on improving transparency around skills investment and explore novel financing mechanisms, placing a particular emphasis on the need to invest in skills as a key priority to foster the EU's recovery and prepare European workers and citizens for the green transition and digital transformation.

| Social         | Methodological             | Personal             |  |
|----------------|----------------------------|----------------------|--|
| Communication  | Creativity/Innovation      | Learning             |  |
| Orientation of | Decision-making            | Engagement           |  |
| customer/user  |                            |                      |  |
| Teamworking    | Analysis                   | Professional ethics  |  |
| Leadership     | Management                 | Tolerance to stress  |  |
| Negotiation    | Adaptability               | Self-awareness       |  |
| Mediation      | Object-oriented            | Personal equilibrium |  |
| Networking     | Continuous improvement     | Cultural adaption    |  |
|                | Research and management of |                      |  |
|                | information                |                      |  |

Table 1. Soft-skills classification according to the EU Strategy of Employment

3. Factors that influence the development of skills and competences

Scholars deduced some considerations regarding the impact and value that lifelong learning in general, and schools and universities *in primis*, can provide to the employability of human capital (Ahmad & Ahmad, 2020; Succi & Canovi, 2019; Fernandez & Liu, 2019; Kotzab, 2018).

Three phenomena interpenetrate and influence each other:

- Uncertain and rapidly changing future: in the last decade, the world of work and business has profoundly changed, with both destabilizing and rapidly evolving factors having entered heavily. The acronym VUCA has even been coined to define these times: Volatility Uncertainty Complexity Ambiguity (Taskan et al., 2022).
- Centrality of human capital: the growing digitization of production and sales processes, from Industry 4.0 to digital marketing has indeed marked the importance of technology, but also the centrality of the human resource that must govern these processes (Kert et al., 2020).
- Training & Updating: workers are constantly updated in making use of technologies, quickly and continuously, to the world of work so they can be trained in detail in the necessary technologies, basing specific training on solid cultural foundations, i.e., both knowledge and skills (Viviers et al., 2016).

The effectiveness of the training, therefore, becomes an essential factor in quickly achieving the result. In this area, however, it is necessary to note a clear separation between company training and institutional training. While corporate training, mostly provided by specialized companies and consultants, must deal with both the effectiveness required by the client (the client company) and with foreign competitors, institutional training has rarely set up its activities focusing on the immediate effects of the result (moreover not easily measurable).

If universities and higher education institutions were also committed to enhancing the emotional and social skills of students, companies, and society would derive a huge economic advantage (Krishnaveni & Monica, 2018; Nordin, 2011; Cherniss & Goleman, 1998). It should be noted here that learning a transversal skill is different from learning a cognitive skill. Two

different areas of the brain are involved in each of them: the *libidinal system* and amygdala for the former and the *neocortex* for the latter. While hard skills are based in the rational area of the brain, where learning takes place through listening or reading and therefore in extremely rapid times new knowledge is added to the already existing memory; soft skills also require the involvement of emotional centers located deep in the center of the brain, where social and emotional habits are located. These skills require time and constant exercise to be transformed and improved (Goleman et al., 2013). Training related to the technical part of a job is easy to learn, just add new data to the old, but much more difficult is to change behavior habits and learn to be flexible, work in a team, be conscientious, and skilled in interpersonal relationships (Goleman, 2006). Emotional learning requires a deeper change at a neurological level, through the weakening of the pre-existing habit and subsequently its replacement with a better one. This process requires considerable effort and greater timing, but the increase in knowledge obtained occurs within the individual (ibidem). Students must be supported in the implementation of a process of intentional change that allows them to achieve their professional future and develop their own identity (Viviers et al., 2016). Understanding the distinction of the brain areas involved in the learning processes of the two types of skills is essential for understanding the most effective method to use in teaching Transversal skills and Emotional Intelligence. Scholars distinguish three teaching methods through which the development of skills can take place: (1) Learning by absorbing: learning takes place passively, through frontal lessons where a set of theoretical concepts are presented to the students, (2) Learning by doing is based on the same idea where experiential methods are used such as laboratory activities, field research, and simulations often carried out individually, where there is greater involvement of the student, and (3) Learning by interacting with others: participants learn and acquire knowledge through interaction and sharing experiences with others (Chowdhury & Miah, 2016). Based on these three ways of learning, various tools are used to increase the possession of skills, but for the focus of the present work, we will describe only the main ones. Classroom lessons are the quintessential tool used for the transmission of knowledge, but they can be effective in developing competence only if the professor manages to get the students to participate actively through debate and comparison. This favors the recognition of one's abilities which is one of the fundamental elements of the process of change and development of competencies, it is itself a competence (Goleman, 2006). The exercises are a method used to develop problem-solving instead, where, for example, it is proposed to solve a working problem, using specific skills (Rigio & Saggi, 2015). Like exercises, there are simulations, which have the purpose of making people reproduce certain behaviors, in a precise work situation, used both for measuring and developing emotional stability, they favor the learning of decision-making skills in critical situations, resistance to stress, organization and planning, delegation and control. Coaching, mentoring, and counseling are tools that can be used directly in the workplace, both at an individual and group level, to improve performance in terms of effectiveness and efficiency, increase company well-being, increase motivation, and encourage communication. Learning within a group allows the student to develop numerous social and relational skills such as empathy, self-control, conflict management, and especially leadership (Charoensap-Kelly et al., 2015).

## 4. Life skills education

The term Life Skills is used to denote skills that allow individuals to challenge the needs and changes of daily life. The World Health Organization (WHO, 1993) suggested that social skills and critical thinking that may be considered essential for promoting healthy habits and competencies in the youth include:

(a) *Decision-making*, the ability to actively decide and evaluate the possible alternatives and the consequences of each of them;

- (b) *Problem-solving*, the ability to face and constructively solve the problems of everyday life;
- (c) *Encouraging critical thinking*, through the ability to objectively analyze information and situations by critically evaluating various influencing factors;
- (d) *Encouraging creative thinking* through the ability to find original solutions and respond appropriately and flexibly to everyday life situations;
- (e) *Promoting effective communication* through the ability to express oneself well towards situations and interlocutors both verbally and non-verbally;
- (f) Encouraging the *development of interpersonal relationships* through the ability to create and maintain positive relationships in the family environment and beyond and to receive emotional support;
- (g) *Self-awareness* through the ability to know oneself, one's personality, and one's strengths and weaknesses;
- (h) *Empathy* through the ability to feel and understand someone else's life, needs, and feelings;
- (i) *Emotional management* through the ability to recognize the emotions of oneself and others and to respond to them appropriately;
- (j) **Stress management** through the ability to identify tension mood and understand the effects it creates to consistently adjust.
- 5. The present research. Method. Purpose

The purpose of the current study is to explore the role and manifestations of soft skills and competencies in the overall development of undergraduate students in Albania.

#### Research administration

To evaluate the development of transversal skills following participation in activities falling within the university-work alternation (in short ASL and now "paths for transversal skills and orientation" - PCTO), it was decided to propose a questionnaire highlighting some soft skills, delivered to students in two steps: before and after participation in the ASL experience.

As far as the reference target is concerned, students in the 3rd year undergraduate have been opted for who usually begin the ASL course in the 2nd quarter or the five months with simulation activities or visits, eventually concluding it with an external experience between May and the end of lessons.

The transversal skills considered to be assessed in the present work include:

- Positive attitude and spirit of initiative;
- Communication;
- Teamwork and collaboration,
- Problem-solving and critical thinking;
- Creativity and innovation.

### **Objectives**

To meet the main purpose of the study, two main objectives were set:

**Objective 1**: To explore the role that soft skills play in the improvement of competencies of undergraduate students.

**Objective 2**: To identify statistically and clinically significant differences of representative profiles between sexes and the role of gender in competencies diversity.

# Research hypotheses

For analyzing the data of the current study, two hypotheses have been raised as follows:

 $H_1$  = Soft-skills development plays a specific role in raising awareness and empowerment of undergraduate students for their future work.

 $H_2$  = Gender differences have a clinically significant impact on establishing the profile of an efficient and competent student.

## 6. Materials and procedures

This is a transversal type of research that uses non-random sampling within random to research the social and epistemological experiences and interactions of the target population. The research method is mixed, with quantitative data collected from the questionnaire conducted with the preliminary data and the pilot stage of testing as well as with qualitative data of the study stage that are based on the micro-analysis of quantitative data. Quantitative data processing was performed with SPPS v.27 software while correlative and interpretive analysis in MAXQDA. The content analysis described in the present study was analyzed through SPSS v.27 statistical programs and functional analysis of MAXQDA models.

## 7. Research design

The study was divided into two stages: the pilot and the research stage. To create the validity and reliability of the questionnaire in the context of the university, we applied a pilot test with 120 students aged 19 years in the first-year undergraduate program of the Mediterranean University of Albania. The participants of the pilot stage were selected according to access and ease of physical contact, a selection in line with the technique according to which the sample can be selected from the nearest population or easy to access. 70% of the participants in the pilot stage were female (70) and 30% were male (30).

## 8. Sample

In the research stage, the sample consisted of 500 student participants to reach a more representative distribution. Participants had equal distribution between undergraduate programs. 335 girls (67%) and 165 boys (33%). The selection of subjects was random (random) in all the undergraduate programs of the Mediterranean University of Albania. The aim was to collect the most representative data to analyze reliable results and interpret an overall picture within the accepted time and subjective approaches The questionnaire was submitted for the first time between the end of November 2022 and February 2023 and subsequently between March and April 2023. The administration mode was online and varied from 1 to 2 weeks.

## 9. Instruments

In the second phase, we created a *Guide to research activities* based on the data from the pilot phase.

(1) *Demographic data questionnaire*. This questionnaire, created by the authors, was intended to collect data related to gender, age, level of education, marital status, place of residence, familiarity with the concepts of "soft skills" and "competencies", the perception of a successful person in his or her community, the perception, and attitude of people towards competencies that university provide to students. Demographic data did not include personal data such as Name and Surname; they were coded according to the procedures approved by the EU Personal Rights Protection Law of 2018 and the subsequent quantitative and qualitative analyzes were carried out based on these codifications.

(2) Questionnaire of assessment of skills for employability. This box was developed by the authors with a questionnaire with a mix of evaluation of soft skills and sub-skills suitable for self-assessment as referred by the EU Employment Strategy.

**Sub-test of Communication skills**. Communication skills refer to the ability to convey effective messages to external audiences, both orally and in written form. As amply demonstrated, communication skills are fundamental in the employability of young and old because effective communication is the basis for persuasion, negotiation, and leadership (Kaburise, 2016).

**Persuasion skills.** The negotiation and persuasion sub-competence is a fundamental component of the communication skill and refers to the ability to convince others of one's point of view. The questions relating to persuasiveness for the present questionnaire box were taken from the evaluation scale proposed by Kyndt and Baert (2015). The scale ranges from 1 (low presence of competence) to 6 (high presence of competence.

Ability to interact with others. The sub-competence suitable for a self-assessment relates to interaction, tested according to the scale of Rubin and Martin (1994). The scale goes from 1 (low presence of competence) to 5 (high presence of competence).

Sub-test for assessing creativity and innovation. Creativity and innovation have been highlighted as extremely relevant areas of entrepreneurial and social engagement (Moberg et al., 2013). Creativity includes developing new ideas to create value, including better solutions to existing challenges; innovation concerns those processes concerning the introduction and application of new or improved ideas, processes, products, or procedures (West, 2002). Creativity and lateral thinking competency refer to solving problems through an indirect and creative approach, using reasoning that is not immediately obvious and involving ideas that may not be achievable using traditional step-by-step or linear logic alone (Malinin, 2018). The subcompetence is suitable for a self-assessment is related to the resolution of creative problems, tested according to the scale of Morris et al. (2013). The scale goes from 1 (low presence of competence) to 5 (high presence of competence).

#### 10. Ethical issues

For conducting the current study with human subjects, the working group took care to respect the research criteria of the Declaration of Helsinki and the following observance of ethical aspects such as:

- Approved consent and allowance of subjects. Through the platform in which the questionnaires were completed, a detailed description was presented regarding the purpose, conditions, and method of the study that would be used, as well as what their assistance consisted of. Participants were made aware of the voluntary nature of participating in the study and the possibility of withdrawing from the study if they did not wish to participate.
- Maintaining the confidentiality and anonymity of participants under which the authors, the student's coordinator, and the Research Office informed about the treatment of personal data of juveniles and that the data collected would be used only

for research purposes respecting the principle of anonymity and confidentiality under the Data Privacy Protection Rule.

#### 11. Results

Statistical and correlational data, not presented in this article, revealed that the subtests with the major significant indices were positive attitude and spirit of initiative (r=.567; p<0.05), teamwork and collaboration (r=.601; p<0.05) and communication channels (r=.81; p<0.05). A significant but inverse correlation was revealed for the sense of power (r=-.76; p<0.05) and adversity management (r=-.74; p<0.05). These indices reveal that under a task demand, students are more likely to perform with a positive attitude, use good communication modes, and are prone to collaboration. Nevertheless, when the demands increase, students tend to show their sense of power and have issues in managing adversity, thus, decreasing their subtle communication form and soft skills. For the factorial analysis, all components that were not below the limit 0,4 that we have decided as significant were submitted for further analysis in the second stage. Pearson inter-correlations indices, not presented in the present paper, for the 1st and 2nd factor of the soft-skills sub-skills found that the most significant index is related to the sense of motivation axis (optimism and control of the future, legitimate anger, self-esteem, and selfefficacy) (Sig2. p=0.01<0.05, r=.7054) over the communication resources (persuasion, adversity management, and creativity) (Sig2. p=0.01<0.05, r=.504). Both the Kaiser criterion and the Screetest highlighted the presence of two main dimensions which, in the initial solution, reproduced altogether almost 70% of the total variability. It was therefore decided to extract two dimensions and to use the Oblimin rotation. After the rotation, the variance reproduced overall by the two components amounted to almost 70%; the first dimension (motivation axis) explained 52%, and the second (communication resources) accounted for 48% of the overall weight.

Table 2. Descriptive statistics of soft-skills sub-scales before and after the rotation

|   |        |                           |     |      |        | Before |                   |
|---|--------|---------------------------|-----|------|--------|--------|-------------------|
|   | Soft s | kills by sub-categories   | Low | High | Median |        | Difference/median |
| 1 | -      | optimism and control of   | 4   | 1    | 2.5    | 2.08   | 14%               |
|   |        | the future                | 4   | 1    | 2.5    | 2.20   | 14.5%             |
|   | -      | legitimate anger          | 4   | 1    | 2.5    | 1.99   | 25%               |
|   | -      | self-esteem and self-     |     |      |        |        |                   |
|   |        | efficacy                  |     |      |        |        |                   |
| 2 | -      | sense of power or         | 4   | 1    | 2.5    | 3      | -2.5%             |
|   |        | helplessness              | 1   | 6    | 3.4    | 4      | 22%               |
|   | -      | perseverance              |     |      |        |        |                   |
| 3 | -      | adversity management      | 1   | 6    | 3.4    | 4.1    | 19%               |
| 4 | -      | persuasion                | 1   | 6    | 3.4    | 4.1    | 18%               |
| 5 | -      | interaction               | 1   | 5    | 4      | 3.7    | 21%               |
| 6 | -      | creativity                | 1   | 5    | 3      | 3.8    | 19%               |
|   |        | Recognizing opportunities |     |      |        |        |                   |

To understand whether there is a difference in distinguishing students in their involvement in soft-skills usage, we performed the multivariate analysis of MANOVA and discriminant function analysis. Results showed that female students have a significant potential for social interaction, optimism for the future, and a sense of power ( $\alpha$  =, 0413;  $\eta$ 2 p =, 701) compared to males.

| T 0 D                |          |              | CI I      | 1 1 1   |            |
|----------------------|----------|--------------|-----------|---------|------------|
| Table 3 Deceription  | ı∩ analı | NICIC OF TH  | na tiret  | rotatod | dimoncion  |
| Table 3. Descriptive | יכ מוומו | 1 N 212 UL H | 12 111 21 | TUTALEU | MILICISION |
|                      |          |              |           |         |            |

|                | Gender | <b>Motivation Axis</b> |
|----------------|--------|------------------------|
| Valid          | 500    | 500                    |
| Missing        | 0      | О                      |
| Mean           | 1.500  | 1.050                  |
| Std. Deviation | 0.503  | 0.750                  |
| Minimum        | 1.000  | 1.000                  |
| Maximum        | 3.000  | 3.000                  |

Of the descriptive indices of the Motivation axis, the mean ranges are in line with the general gender distribution (M=1.500) while the standard deviation indices show a discrete but sufficient cohort distribution for further processing (SD=0.750). The chi-square test showed a positive and stable value in the calculation  $X^2=11.367$  for p<.001. To understand the influence of gender and displaying competencies, we performed the ANOVA test. The indices showed a strong difference in females (F=1.874; MS=3.2003; df=1.5) and an inverse but the stable difference between the male gender and optimism for the future (F=1.3085; MS=-1.111; df=1.5). This means that women have shown a stronger tendency to use efficiently soft skills under task performance than men.

#### 12. Discussion

The theoretical framework of the present paper relates to the development of soft skills and their impact on empowering students' life skills in the world outside the university. These concepts also include the exploration of factors, mutual influences, and dynamics that are based on skills and competencies. The studies cited in the paper have explored some of these models and tried to give a comprehensive review of different views of the connection between soft skills and human capital (Succi & Canova, 2019; Krishnaveni & Monica, 2018; Malinin, 2018; Leon et al., 2017; Viviers et al., 2016; Hsin & Xie, 2016; Riggio & Saggi, 2015). Results of the current study revealed that the sub-tests with the major significant indices were positive attitude and spirit of initiative (r=.567; p<0.05), teamwork and collaboration (r=.601; p<0.05), and communication channels (r=.81; p<0.05). Of the descriptive indices of the Motivation axis, the mean ranges are in line with the general gender distribution (M=1.500) while the standard deviation indices show a discrete but sufficient cohort distribution for further processing (SD=0.750). A significant but inverse correlation was revealed for the sense of power (r=-.76; p<0.05) and adversity management (r=-.74; p<0.05). Pearson inter-correlations indices, for the 1st and 2nd factor of the soft-skills sub-skills found that the most significant index is related to the sense of motivation axis (optimism and control of the future, legitimate anger, self-esteem, and self-efficacy) (Sig2. p=0.01<0.05, r=.7054) over the communication resources (persuasion, adversity management, and creativity) (Sig2. p=0.01<0.05, r=.504). The chi-square test showed a positive and stable value in the calculation  $X^2 = 11.367$  for p<.001. Results of MANOVA and discriminant function analysis showed that female students have a significant potential for social interaction, optimism for the future, and a sense of power ( $\alpha$ =.0413;  $\eta$ 2 p=.701) compared to males. ANOVA test indices showed a strong difference in females (F=1.874; MS=3.2003; df=1.5) and an inverse but the stable difference between the male gender and optimism for the future (F=1.3085; MS=-1.111; df=1.5). All supportive studies in line with this work results have shown that people who have a high degree of transversal skills and competencies development are more satisfied with life, motivated to be engaged in the future, and exhibit fewer behavioral issues (Ahmad et al., 2020; Krishnaveni & Monica, 2018; Viviers et al., 2016; Charoensap-Kelly et al., 2015; Morris et al., 2013).

13. Conclusion

The current work has generally contributed to the exploration and deepening of knowledge on educating soft and life skills students, as a prelude to their future employability.

The results of the present work revealed a statistically significant social impact on motivation and future perception in highlighting the way students get engaged in interactions and involve in social dynamics. What was pointed out by the present work is the significance of identifying employability motives and social capital resources to develop the right soft skills and competencies. It is also of significant influence on the usage of the mixed sub-scales that can provide interesting data either on the site when the data are collected or in orienting students toward the world of work.

Acknowledgements

This research did not receive any specific grant from funding agencies in the public commercial, or not-for-profit sectors.

The authors declare no competing interests.

References

- Ahmad, S., Ahmad, S., & Ameen, K. (2020). A qualitative study of soft skills development opportunities: perceptions of university information professionals. *Global Knowledge, Memory, and Communication* (ahead-of-print). https://doi.org/10.1108/gkmc-o6-2020-0073
- Anderson, L. (2018). Competency-based education: Recent policy trends. *The Journal of Competency-Based Education*, 3(1), e01057. <a href="https://doi.org/10.1002/cbe2.1057">https://doi.org/10.1002/cbe2.1057</a>
- Bakracevic Vukman, K., & Licardo, M. (2010). How cognitive, metacognitive, motivational, and emotional self-regulation influence school performance in adolescence and early adulthood. *Educational Studies*, *36*(3), 259-268. <a href="https://doi.org/10.1080/03055690903180376">https://doi.org/10.1080/03055690903180376</a>
- Bubas, G. (2001). Toward competence in interpersonal communication: Constitutive traits, skills and dimensions. *World Futures*, *57*(6), 557-581. <a href="https://doi.org/10.1080/02604027.2001.9972849">https://doi.org/10.1080/02604027.2001.9972849</a>
- Cazden, C. B. (2011). Dell Hymes's construct of "communicative competence." *Anthropology & Education Quarterly*, 42(4), 364-369. <a href="https://doi.org/10.1111/j.1548-1492.2011.01144.x">https://doi.org/10.1111/j.1548-1492.2011.01144.x</a>
- Charoensap-Kelly, P., Broussard, L., Lindsly, M., & Troy, M. (2015). Evaluation of a soft skills training program. *Business and Professional Communication Quarterly*, 79(2), 154-179. https://doi.org/10.1177/2329490615602090
- Chiu, L. K., Mahat, N. I., Rashid, B., Razak, N. A., & Omar, H. (2016). Assessing students' knowledge and soft skills competency in the industrial training programme: The employers' perspective. *Review of European Studies*, 8(1), 123. https://doi.org/10.5539/res.v8n1p123
- Chomsky, N. (1965). Aspects of the theory of syntax. The Mit Press.
- Chowdhury, T. A., & Miah, M. K. (2016). Employability skills for entry-level human resources management positions: Perceptions of students and employers. *Australian Journal of Career Development*, 25(2), 55-68. <a href="https://doi.org/10.1177/1038416216658774">https://doi.org/10.1177/1038416216658774</a>
- Cresswell, J. (2021). Oxford dictionary of word origins. Oxford University Press.

.....

- European Commission (2018). Council recommendation on key competencies for lifelong learning. In <a href="https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32018H0604(01)">https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32018H0604(01)</a>.
- Fernandez, F., & Liu, H. (2019). Examining relationships between soft skills and occupational outcomes among U.S. adults with—and without—university degrees. *Journal of Education and Work*, 32(8), 650-664. <a href="https://doi.org/10.1080/13639080.2019.1697802">https://doi.org/10.1080/13639080.2019.1697802</a>
- Goleman, D. (2006). Working with emotional intelligence. Bantam Books.
- Goleman, D., Boyatzis, R. E., & Mckee, A. (2013). *Primal leadership: Learning to lead with emotional intelligence*. Harvard Business School Press.
- Gruppen, L. D., Burkhardt, J. C., Fitzgerald, J. T., Funnell, M., Haftel, H. M., Lypson, M. L., Mullan, P. B., Santen, S. A., Sheets, K. J., Stalburg, C. M., & Vasquez, J. A. (2016). Competency-based education: program design and challenges to implementation. *Medical Education*, 50(5), 532-539. <a href="https://doi.org/10.1111/medu.12977">https://doi.org/10.1111/medu.12977</a>
- Henrich, J. (2016). Competency-based education: The employers' perspective of higher education. *The Journal of Competency-Based Education*, 1(3), 122-129. <a href="https://doi.org/10.1002/cbe2.1023">https://doi.org/10.1002/cbe2.1023</a>
- Hsin, A., & Xie, Y. (2016). Hard skills, soft skills: The determinants and consequences of cognitive and socio-behavioral skills. *Social Science Research*, 10. <a href="https://doi.org/10.1016/j.ssresearch.2016.09.012">https://doi.org/10.1016/j.ssresearch.2016.09.012</a>
- Leon, L. A., Seal, K. C., Przasnyski, Z. H., & Wiedenman, I. (2017). Skills and Competencies Required for Jobs in Business Analytics. *International Journal of Business Intelligence Research*, 8(1), 1-25. https://doi.org/10.4018/ijbir.2017010101
- Kert, S. B., Erkoç, M. F., & Yeni, S. (2020). The effect of robotics on six graders' academic achievement, computational thinking skills, and conceptual knowledge levels. *Thinking Skills and Creativity*, 38, 100714. <a href="https://doi.org/10.1016/j.tsc.2020.100714">https://doi.org/10.1016/j.tsc.2020.100714</a>
- Kotzab, H., Teller, C., Bourlakis, M., & Wünsche, S. (2018). Key competences of logistics and SCM professionals the lifelong learning perspective. *Supply Chain Management: An International Journal*, 23(1), 50-64. https://doi.org/10.1108/scm-02-2017-0079
- Krishnaveni, R., & Monica, R. (2018). Factors influencing employee performance: the role of human resource management practices and work engagement. *International Journal of Business Performance Management*, 19(4), 450. https://doi.org/10.1504/ijbpm.2018.10013739
- Kaburise, P. (2016). Improving soft skills and communication in response to youth unemployment. *International Journal of African Renaissance Studies Multi-, Inter- and Transdisciplinarity*, 11(2), 87-101. https://doi.org/10.1080/18186874.2016.1248061
- Kyndt, E., & Baert, H. (2015). Entrepreneurial competencies: Assessment and predictive value for entrepreneurship. *Journal of Vocational Behavior*, 90, 13-25. https://doi.org/10.1016/j.jvb.2015.07.002
- Malinin, L. H. (2018). Soft skill development in service-learning: towards creative resilience in design practice. *Proceedings of the Institution of Civil Engineers Urban Design and Planning*, 171(1), 43-50. https://doi.org/10.1680/jurdp.17.00012
- Marzano, R. J., & Kendall, J. S. (2007). *The new taxonomy of educational objectives*. Hawker Brownlow Education.
- Mewton, L., Ware, J., & Grantham, C. (2009). A question of leadership: Which skills and competencies will be most critical for leaders as the workplace continues to evolve? *Leadership in Action*, 29(5), 12-13. <a href="https://doi.org/10.1002/lia.1305">https://doi.org/10.1002/lia.1305</a>
- Moberg, K. S., Vestergaard, L., Jørgensen, C., Markussen, E., & Hakverdyan, S. (2013). How to assess the development of entrepreneurship education at university level The case of Denmark. *SSRN Electronic Journal*. <a href="https://doi.org/10.2139/ssrn.2220727">https://doi.org/10.2139/ssrn.2220727</a>

- Morris, M. H., Webb, J. W., Fu, J., & Singhal, S. (2013). A competency-based perspective on
- entrepreneurship education: Conceptual and empirical insights. *Journal of Small Business Management*, 51(3), 352-369. <a href="https://doi.org/10.1111/jsbm.12023">https://doi.org/10.1111/jsbm.12023</a>
- Nordin, N. (2011). The influence of emotional intelligence, leadership behaviour and organizational commitment on organizational readiness for change in higher learning institutions. *Procedia Social and Behavioral Sciences*, 29, 129-138. <a href="https://doi.org/10.1016/j.sbspro.2011.11.217">https://doi.org/10.1016/j.sbspro.2011.11.217</a>
- Publishing, O. (2014). OECD Skills Outlook 2015 Youth, Skills, and Employability. OECD Publishing.
- Quendler, E., Van Der Luit, J., Monteleone, M., Aguado, P., Pfeiffenschneider, M., Wagner, K., Valente, F., & Cunha-Queda, C. (2013). Employers' needs on competences, knowledge and skills for sustainable development as a reference framework for higher education in life sciences. *Procedia Social and Behavioral Sciences*, 106, 1063-1085. <a href="https://doi.org/10.1016/j.sbspro.2013.12.121">https://doi.org/10.1016/j.sbspro.2013.12.121</a>
- Rainwater, T. S. M. (2016). Teaching and learning in competency-based education courses and programs: faculty and student perspectives. *The Journal of Competency-Based Education*, 1(1), 42-47. <a href="https://doi.org/10.1002/cbe2.1008">https://doi.org/10.1002/cbe2.1008</a>
- Riggio, R. E., & Saggi, K. (2015). Incorporating "soft skills" into the collaborative problem-solving equation. *Industrial and Organizational Psychology*, 8(2), 281-284. <a href="https://doi.org/10.1017/iop.2015.34">https://doi.org/10.1017/iop.2015.34</a>
- Rivers, C., Gibson, S., Contreras, E., Livingston, T., & Hanson, P. (2019). Competency-based education: An evolutionary higher education business model. *The Journal of Competency-Based Education*, 4(1), e01179. https://doi.org/10.1002/cbe2.1179
- Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today's workplace. *Business Communication Quarterly*, 75(4), 453-465. <a href="https://doi.org/10.1177/1080569912460400">https://doi.org/10.1177/1080569912460400</a>
- Rodriguez Contreras, R., & Sanz, P. (2022). *Involvement of social partners in the national recovery and resilience plans*. Publications Office of the European Union.
- Rubin, R. B., & Martin, M. M. (1994). Development of a measure of interpersonal communication competence. *Communication Research Reports*, 11(1), 33-44. <a href="https://doi.org/10.1080/08824099409359938">https://doi.org/10.1080/08824099409359938</a>
- Succi, C., & Canovi, M. (2019). Soft skills to enhance graduate employability: comparing students and employers' perceptions. *Studies in Higher Education*, *45*(9), 1-14.
- Taskan, B., Junça-Silva, A., & Caetano, A. (2022). Clarifying the conceptual map of VUCA: a systematic review. *International Journal of Organizational Analysis*. <a href="https://doi.org/10.1108/ijoa-02-2022-3136">https://doi.org/10.1108/ijoa-02-2022-3136</a>
- World Health Organization (1993) Life skills education in schools (WHO/MNH/PSF/93. A Rev. 1). WHO, Geneva.
- Viviers, H. A., Fouché, J. P., & Reitsma, G. M. (2016). Developing soft skills (also known as pervasive skills). *Meditari Accountancy Research*, *24*(3), 368-389. <a href="https://doi.org/10.1108/medar-07-2015-0045">https://doi.org/10.1108/medar-07-2015-0045</a>

