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# Transversal Competences and Employability of University Students: Converging towards Service-Learning

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Abstract: We are living in times of great transformations within the field of education and the labor market. These changes are connected and have to do with an expanded knowledge society, whose implications reach the levels of employability in times of uncertainty. Within this framework, the main purpose of our study is to perform a theoretical analysis and an empirical approach to the influence that transversal competences (soft skills) may have on the degree of employability of university students. We have identified some of those competences and we have tested them with a sample of 83 employers and 1249 students using a Likert scale. Our results show the interest of employers in the mastery of transversal competences and inequalities in terms of students' perception thereof. We did not find any significant differences between students starting their degree and those who were about to complete it. However, we did find differences between the students who participated in experiential activities and those who did not, in favor of the former. Due to the importance of experiential learning in our results, we dedicate our discussion to theoretically exploring whether the pedagogical approach of Service-Learning (SL) might contribute to a better connection between transversal competences and employability.

Keywords: Higher Education; employability; Service-Learning; EHEA; transversal competences



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# 1. Introduction

In the field of Pedagogy, few notions have acquired the level of notoriety enjoyed today by 'employability' when referring to the links between academic performance and the labor market with regard to the training of students. This is particularly true if we focus our analysis on Higher Education, which has the mission of making the would-be graduates useful for the world of work.

In the midst of this dialectic, often simple and formalistic, there is an intellectual or even philosophical debate about the changes which need to be envisaged in the university as an institution capable of channeling humanity's big questions, turning them into pathways to knowledge likely to satisfy our motivations and the most diverse interests and sensitivities. This is a matter of perspective and how these views bifurcate into right and left ideologies when it comes to outlining what a university is or has to be, faced as it is with the domination of globalization that goes hand in hand with high degrees of uncertainty.

Be that as it may, the political controversy generated between the more instrumentalist approaches and those of a more critical orientation has been widespread and, at times, intense. It has been focusing, overtly or surreptitiously, on the influence that the market should have on the mission of Higher Education and, of course, on its development agenda for a certain social and economic context [1]. It goes without saying that the result of such a controversy in a post-industrial era and a growing knowledge economy would end up reinforcing a radical question about the association between Higher Education and the employability of graduates, a question undoubtedly triggered by concerns originating from

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the system and its powerful organizations in the public sphere (OECD, World Economic Forum, etc.) or at various levels of its corporate structure.

It should come as no surprise that the European Union, by means of the Bologna process, has prioritized the challenge of employability in its policies aimed at Higher Education, supporting a line of research whose basic premise is precisely to provide the theoretical basis and, wherever possible, to empirically validate the employability skills of university graduates.

In this regard, it is important to appreciate the relevance of certain studies at a delicate social juncture in the passage of time. One such study was the REFLEX project in Europe, whose influence would extend to Latin America (PROFLEX) as well, which examined the situation of young graduates and provided a large amount of information on the entry of university graduates into the labor market, also making comparisons between countries—[2,3].

Another undisputable contributor to the debate was the famous Tuning Project (whose leitmotif was "the harmonization of educational programs and structures while respecting their diversity and autonomy") with results that supported major changes in the learning process. This enabled students to improve the acquisition of generic and/or transversal competences, totally overlooked in a traditional educational model, considered more so by the employers than by the students themselves as inadequate to their demands. These are very clearly expressed by leading companies, in which differences started to be made by an appropriate combinations of the classical and prevalent technical competences and those now labeled transversal, understood as intangible personal qualities required in order to achieve or increase effectiveness in the workplace. Within the framework of EHEA, Cano and Fernández [3] recognized the need for greater development of transversal competences in Higher Education (pointed out by both employers and graduates), which could be worked through experiential and practical methodologies in the learning process.

It was precisely the historical imbalance in the attention given to these aspects, which, together with the increase of focus on human and social capital, led to more consideration being given and to more careful study being devoted to the influence that transversal competences (also called 'soft skills') could have on students and their degree of adaptation to the requirements of many jobs in the knowledge society. Laguna-Sánchez et al. [4] also stated that without a determined policy to stimulate transversal competences, it will be more difficult to develop education for sustainability in Higher Education institutions.

The European Commission, in various documents [5,6], together with an array of human resources experts, emphasized their conviction that these are the skills more closely linked to the employability of young graduates entering the labor market.

Speaking of opportunities, what matters is the credibility that Higher Education can offer and its capacity to produce knowledge that would be useful to society at large [7]. Furthermore, we should not forget that many students consider a university degree from two perspectives: as a platform rich in meaningful experiences, and as an investment in future employment [8]. It is, therefore, interesting to look into the students' expectations, as they associate employability with their own life projects.

The suggestion, therefore, is that in view of many memoranda by medium and large companies, what Higher Education should do is promote opportunities for students to develop skills in the framework of transversal competencies, that is, learn how to learn, solve problems creatively, learn transparent communication, teamwork, conflict management, how to adapt to various cultural contexts, and how to persevere when faced with complicated or stressful situations.

Considering that there is founded doubt that Higher Education is consistently fulfilling this mission in current times [3], the University is requested to reflect in depth on the functionality of curricula and methodology. It could be too rigid or too academically oriented, not to mention the use of lectures without taking on board, to the least extent possible, an active pedagogy that would act as a driving force of innovative methods, privileging the quality (depth) of learning over mere professorial teaching.

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It is no longer just a matter of assuming a shift in the theory and practice of Higher Education, in the light of pedagogical research, but also of giving an adequate response to the criticism coming from social and economic interest groups (led by the employers), complaining about the lack of skills transferable to real-life situations, often translated into increasingly complex professional development and work environments.

At the end of the day, the message was a statement of strategic value for the university as a key instance for the advancement and progress of society, insofar as it is expected to prepare individuals capable of generating added value to products and services [9].

However, if we speak of the university's value and social responsibility, it is not convenient to separate the dimensions likely to favor employability from the contents necessary for the construction of community projects, given their connection with real needs, which are also close to the contexts of Higher Education. Hanesová [10] has recently insisted on not artificially separating students' work and life projects, so we cannot allow ourselves to be constrained by the limitations of the market in the discourse on students' employability and future employment. This is a concern shared by Lasen et al. [11] when they state that transversal competences are aimed at employability, while also articulating the ability of getting involved in transformative projects.

To put it briefly, it would be unwise and even naïve to aspire to understand the civic mission of the university without taking into account the implication of transversal competences in this objective both in teaching staff and students. We need these competences to promote higher quality learning, to structure the ideological framework of our work, and to provide more opportunities for graduates to enter the labor market.

We, therefore, start from the premise of the importance of transversal competences in Higher Education, both for their civic mission and responsibility of promoting student employability, and the problem is that this might not happen. Our purpose is, then, to take an institution of Higher Education as an example to explore whether it shoulders this responsibility, to compare it with the importance that employers place on transversal competences in the same context, and to see whether experiential education is making any difference. The study is driven by the following research questions:

- RQ1: Are the competences being assessed and consistently developed throughout Higher Education?
- RQ2: How important are transversal competences for employers in our environment and which ones are more important?
- RQ3: Are there any differences in the development of these competences between students who participate in experiential activities and those who do not?

To answer these questions, we perform a quantitative study in which we use a survey to compare the importance provided by employers to several competences and the students' perception of acquiring them. With these results, we carry out two comparisons to help us answer our questions: we compare the perception of students at the beginning of their study programs and that of students finishing their studies to check whether these competences are consistently promoted at the university. At the same time, we compare students who performed different types of experiential activity throughout their Higher Education path and those who did not, in order to understand whether the performance of experiential activities is relevant or not for the acquisition of competences.

Finally, we extend the discussion on experiential learning [12] toward Service-Learning, as a popular experiential pedagogical approach in Higher Education, to theoretically examine whether and how it can contribute to a better connection between transversal competences and employability of university students. The discussion on Service-Learning and transversal competences will allow us to formulate proposals for future practice and research.

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### 2. Literature Review and Theoretical Background

2.1. Transversal Competences as the Keystone of Employability, a Review

Without deviating from the essential point of this article, we should pay due attention to the concept of 'competence' in our set of arguments, since this is where a core component of recent educational reforms lies, and not only at the compulsory levels of the system. Inevitably, Higher Education has been affected by this mainstream.

It would be unrealistic to overlook the persistent national and regional differences in the analysis and interpretation of these key concepts, which condition the dialectic relationship between education and vocational qualification. This is further demonstrated by the European Qualification Framework (EQF) which reveals notorious tensions in terms of skills training within the global economy and the way in which this matter is tackled in the very countries belonging to the European alliance [13]. This translates into ways of understanding the terms 'competence', 'skill' and 'knowledge' that do not always coincide, urging the European Commission to act with more firmness and determination in outlining a path to convergence within the Union.

However, for the purpose of this paper, Vazirani's brief definition of 'competence' [14] as "the quality of being able and fit" may be appropriate, suggesting that it should be taken into account in Higher Education as if it were a reliable predictor of employability.

Likewise, we take Suleman's [15] reference to Van der Velden [16], who defined 'competence' as a set of individual attributes related to performance in a specific work context. The author also pointed out its holistic representation, supposing a deliberate orchestration of such attributes within this context, beyond the inclusion of the cognitive and non-cognitive skills of a subject.

In this regard, it is very useful to bring up, in our times, Hager and Gonczi's [17] already classic reflection on the concept of competence as a relational construct (which is certainly its essential component), giving substance to the aforementioned holistic understanding of the term, in line with the methods of obtaining a high quality action (work).

It is also true, as Cano and Fernández [3] reminded us, that a competence involves carrying out actions, learning constantly and acting in a contextual and autonomous manner. In other words, a competence is something eminently practical, whose learning must go beyond any form of stimulation, so as to be integrated into a real and shared practice, which would give it meaning.

There are reasons, therefore, to see employability skills and competence as two sides of the same coin. In this line of thinking, while the former (skills) are focused on acquiring the appropriate abilities, competence refers to the mobilization or use of the resources possessed in a specific workplace. An important nuance is eventually added by Van der Velden [16] by separating the meaning and scope of the words, stating that the skills are an element of the competence, suggesting that a good number of works in the field assess skills rather than competences.

In any case, research has shown that the achievement of 'positional advantages' in terms of employability of graduates requires a more complete combination of skills, leaving behind the exclusive focus on 'hard skills' as a successful predictor in the job search.

In fact, Archer and Davidson [18], supported by an international employment barometer, confirmed the importance that employers nowadays attach to 'soft skills' for the employability of graduates, and some have even stated that these were, precisely, the skills of the 21st century [19], in addition to their stronger link with the emotional dimension side of human beings.

Even so, whether or not the previous assertion is accepted, the terminological distribution that has explored patterns of employability in this way cannot be described as very consistent. We usually find ambiguities, since 'soft skills', or transversal 'competences', are not always used to denote this correspondence with traits, motivations and preferences valued in the labor market (the use of 'social skills', 'interpersonal skills', 'social competences', or even 'metacompetences' is a live issue). The difficulty lies, moreover, in the

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mix of dispositions, knowledge, attributes and practices, or in the forms they may take in different contexts.

What is doubtful, we think, is that we are dealing with skills and/or competences that would not admit a distinction according to types of activity or to levels of experience and responsibility in an organization. We also do not think that it would be realistic to separate their significance from the wide range of interpersonal qualities (transferability) which can be displayed in an economic or employment sector [20]. The above-mentioned point makes the following definition of work that Succi and Canovi [21] take from Haselberger et al. [22] a reasonable one: transversal competences are those that represent a dynamic combination of cognitive and metacognitive skills, along with interpersonal, intellectual and practical skills; they help people adapt and behave positively in order to meet the challenges of their daily and professional lives.

Given the scope of such a definition, one could argue that transversal competences are a matter of skills, but not only, because one would have to add personal attributes, values, or qualities likely to be acquired by all graduates, regardless of their subject or field of study. Putting it this way, they would represent a sort of central aspiration in the area of Higher Education, praiseworthy from a moral point of view. This is very difficult to achieve given the logical and other (contextual) problems that would entail placing on universities all responsibility for the attitudes or behaviors of those who study in their classrooms, in addition to all the knowledge which must indeed be certified [23].

However, the ethical issue that this reflection brings to the surface should not be an obstacle, but quite the opposite, it should encourage a statement of the university's vision and civic mission, in whose framework of analysis it is necessary to reincorporate a conception of learning that is not limited to the cognitive components that the future graduate or, if preferred, the future professional will have to demonstrate. Hence the pragmatics of transversality for a Higher Education in which the quality of learning must come first requires a faculty capable of acting on common axes of influence in the formative development of students.

Therefore, we define transversal competences as those that entail a holistic combination of skills together with attitude and volitional factors. For the purpose of this study, we take the approach of Regueiro et al. [24] and consider four central transversal competences that apply these criteria: entrepreneurial, interpersonal, networking, intercultural, and analysis and synthesis. All of them start from a transversal notion of learning bound to employability.

It is our understanding that these pragmatics of transversality in Higher Education of this century entails selecting certain competences, associated with research with a stronger probability of success and of adequate social functioning of citizenship [25]. We are dealing with a type of employment that has changed both in terms of the functions that employees perform and also in terms of job stability, and this explains why organizations, such as the OECD stress that 'generic skills' are becoming increasingly important in the future of labor [26,27].

But the good auspices for the sustained rise of transversality in Higher Education should not make us lose sight of the fact that there is still much to be conducted in a very important area, namely that of increasing the amount of evidence on the methods or procedures to be used in the process of acquiring and/or improving these transversal skills or competences in university students.

With pedagogy being the science of education, it has the opportunity to continue contributing ideas and data to this path of optimization through methodological and evaluative proposals. It is important to note that this theoretical work happens within a learning process that, though individual, becomes social in the contexts of community and professional life.

In the search for factors that would explain the learning of transversal competences, Virtanen and Tynjälä [28] examined the particular case of Finnish university students and their findings showed that, for graduates, the situations that are clearly linked to the

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development of these competences are those that require collaboration and interaction. This, logically, encourages one to make a subtle connection with other studies which show that it is cooperative learning, rather than individualistic learning, which promotes this type of skill among university students [29]. In the same sense, it is not of trivial importance that, in many strategic plans of universities around the world, cooperative learning programs have been designed and activated, thinking about the training and/or updating of teaching staff that are rather lacking in critical reflection about how they structure and/or provide support to their students' learning process.

It can be stated, therefore, that the development of transversal competences for the post-graduation work reality would be better provided for if these competences were to have more visibility and be more effectively taken into account in the learning objectives programmed in and for university degrees.

Some time ago, Crebert et al. [30] became aware that this perception existed among students at Australian universities with regard to their future opportunities as 'workers of knowledge' within intelligent and interdependent organizations. The authors concluded that the strong emphasis on teamwork in their responses was clearly suggesting the importance of implementing well-structured processes in the learning of undergraduate students, especially if this is conducted in a cooperative manner, in order to ensure better expectations for the explicit advancement of these competences in Higher Education and, therefore, in sustainable work and employment situations.

On the other hand, Virtanen and Tynjalä [28] set out to identify the pedagogical practices that could lie behind a marked strengthening of generic skills in Higher Education. Their findings showed that it did not depend as much on a single method or specific pedagogical practice, but rather on a methodological combination involving collaborative interaction among students, particularly in terms of decision making and problem solving, focal processes which, alongside 'reflection', are linked to constructivist learning theories, which could fit into an integrative pedagogy model, based on the fusion between conceptual and practical components linked to the 'expertise' in a field of knowledge.

Virtanen and Tynjalä [28] concluded their study by stating that the combination of pedagogical practices that was carried out had served as a good predictor of the learning of skills, such as problem solving, the ability to overcome occupational difficulties, and the ability to cope or function in new situations.

Some contributions agree with Hanesová [10], Hortigüela et al. [31], Millican et al. [8], and Cano and Fernández [3], among others, when focusing on two enabling elements of pedagogical experiences: the relational component and the active role of the students themselves as central axes we will see this further on for the psychosocial development associated with holistic learning, without which the transversal competences would be in a more complicate position.

Given this review of the literature, we have sufficient reason to ask the following question, which we will address further on: "Does Higher Education consistently promote transversal competences?" But we are also aware of the importance of experiential and social forms of learning related to those competences, which we need to explore more theoretically before addressing the next question.

To put it briefly let us insist on the inquisitive attention that the management of transversal competences in Higher Education deserves. Without going any further, helping students acquire conceptual clarity will also lead to the creation of additional links with the subjects or areas which make up the core of their specific professional training.

This leads us to search for the theoretical basis of our study in learning theories that place special emphasis on those characteristics of human relationships and active learning, such as experiential learning [12], and social learning theories [32].

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# 2.2. Experiential Learning and Social Learning in Higher Education Bound to Transversal Competences

We have reached this point through a literature review that suggests the relevance of pedagogical approaches in the development of transversal competences, but this suggestion needs more theoretical foundation, which we can find in experiential learning and [12,32] and social learning theory [33].

Two complementary points of view that share an interest in two key elements are highlighted in the literature: agency and interpersonal relationships.

Let us note, however, that when we refer to the learning of competences, one must go beyond the notions of 'transmission' and 'acquisition', since we are talking about a process that is, above all, from a social and holistic viewpoint, never alien to shared social practices and following the social learning theory and other cultural-historical perspectives, their development is linked to a group, where these competences gain meaning and significance and where the necessary know-how is found [33].

If learning is focused on developing competences, what equally has to change is the teaching process, because social demands and needs could not be understood then as an accessory but as a central element of the academic task [34]. Thus, the benefit of experiential activities in learning will be none other than the possibility for students to take collective actions [35], but with specific and immediate goals, as well as to interactively and collaboratively participate with people who already have a certain level of competence [36].

Following the social learning theory [33], the way how experiential learning activities become relevant in the development of competences takes into account three of its characteristics:

- The relevance or significance of learning. A person who learns does that in order to achieve a goal that is real and meaningful [37], in addition to placing the student as a type of professional in training, facilitating the feeling of competence and commitment, that is, of responsibility so that the activity undertaken reaches a successful conclusion [38].
- Resources for the learning of competences. The subject is integrated into a collective activity that recommends cooperation. In fact, the sought competences are integrated, procedurally speaking, into shared cultural practices and into multidirectional learning environments. According to McMillan et al. [39], in such an organization of learning, the orientation towards the goal helps to mobilize resources, which are shared and exchanged by the participants, making explicit the value of cooperation, while channeling critical reflection, autonomous learning, and teamwork dynamics.
- The recognition of learning, both in a teleological and relational sense of the word. It means that the person involved should know what he or she has actually learned, given the motivational consequences of such information. At the relational level, what matters is the recognition of other agents who have already participated in the same action and/or project. One could state that we need legitimation by the community as learners or competent subjects [33].

By reaffirming the relational component, we support a vision of experiential learning methodologies as those that favor a more valuable and authentic learning process, of greater quality and depth, provided that it has succeeded in the optimization of the involved students' skills. Furthermore, they also enable competence empowerment through the processes of agency and interaction with others.

Agency is precisely the possibility of making decisions and positioning oneself, socially and morally, in context and action, which is why its relevance in the development of transversal competences has been highlighted, as it serves to enable the individual to judge what he or she needs to learn in general and, of course, in a specific work environment [40], driving his/her learning and acting as an independent agent in complex jobs.

As explained above, the development of competences is linked to central psychosocial elements that also underpin participation in social collective activities. Work usually occurs among human groups that need competences oriented towards social interaction

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and support. We are, therefore, talking about an authentic learning process [34], a holistic process of e-learning that occurs through participation in emotionally relevant and intellectually meaningful collective activities. It is, then, understandable why there is no dilemma between employability and civic-social competences, as these civic competences have been assessed by employers [3]. As pointed out by García Gutiérrez et al. [41], Service-Learning as an example of experiential learning stands out as one of the few reliable ways of assessing these competences. This idea is shared by Monllau et al. [42], whose results showed that employers valued these civic competences and placed them at the same level as other transversal competences, marking a clear connection between them.

Regarding the interaction and relational skills, there can be little doubt as to their focus on the identification of transversal competences, since it expresses nothing other than the collaborative will and the creation of shared objectives in the performance of work [40].

Beyond their current instrumentality, agency and positive interaction skills enable the possibility of adapting to emerging needs that we are barely aware of but that we will inevitably encounter in the future. An example is all matters relating to the know-how linked to sustainability [43], or a series of aspects linked to the same basic question, such as how to address resilience, uncertainty and complexity, or even interculturality in an open society [11,44].

At this point, and derived from the foundations of social learning theory and experiential learning [37], we have shared the psychoeducational reasons that motivate us to focus on experiential activities. Therefore, the question we allow ourselves to ask in this paper is: Are there any differences in the development of the identified transversal competences between the students who participate in experiential activities and those who do not?

For this particular study, we considered three types of experiential activities, in which part of the students in the sample were involved: work experience, participation in youth organizations, and community service in the university setting. All of them are considered experiential and social learning experiences in the empirical data that we will discuss as follows.

# 3. Materials and Methods

### 3.1. Participants

The sample consisted of 1249 university students and 83 employers or human resources managers from the Spanish region of Galicia, selected by means of intentional non-probability sampling.

The students' age ranged from 18 to 60 years, although 90.6% were within the 18–24 year range. Among these, 28.1% were men, 70.8% were women, and 1.1% identified with another gender; 32.3% were enrolled in the 1st year, 20.8% in the 2nd, 30.4% in the 3rd, and 15.8% in the 4th. The majority were enrolled in Social and Legal Sciences (75.1%), followed by Health Sciences (16.9%), Engineering and Architecture (4.4%), and Arts and Humanities (3.3%). In total, students were evaluated in 27 subjects taught at the University of Santiago de Compostela, and two subjects taught at the University of A Coruña.

Regarding the employers or human resources managers in the sample, 43.4% were men and 56.6% were women, with ages evenly distributed between 20 and 57 years; 66.3% of the companies to which they belonged were in the tertiary sector, 24.1% in the secondary sector, and 9.6% in the primary sector; 44.6% of them operated locally or at an autonomous level, 27.7% nationally, and 27.7% internationally.

# 3.2. Instruments

The study used the questionnaire on generic competences of university students (COMGAU) [24]. This instrument includes a validated scale on transversal competences, considered directly related to employability. This scale has a high internal consistency ( $\alpha = 0.87$ ) and is made up of 17 5-point Likert-type questions that classify the proposed competences into 5 dimensions or factors which explain 59.85% of the total variance:

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entrepreneurial skills (5 items,  $\alpha$  = 0.76), interpersonal skills (3 items,  $\alpha$  = 0.74), intercultural skills (4 items,  $\alpha$  = 0.72), networking skills (3 items,  $\alpha$  = 0.57), and analysis and synthesis skills (2 items,  $\alpha$  = 0.51).

To obtain the socio-demographic profile of the students, the questionnaire included questions related to their academic and personal biography: age, gender, degree, campus, faculty, participation in youth organizations/voluntary entities, participation in projects promoted by the university that included community service, and work experience.

On the other hand, employers and human resources managers from different companies completed the questionnaire on generic competences of university graduates (COM-GAE), which uses the same scale on transversal competences of university students, in order to understand the importance attributed to them by the business sector when hiring a university graduate. It also included questions about the characteristics of the company and about the profile of the individual who filled out the instrument.

#### 3.3. Procedure

The questionnaire was administered to students during the 2019–2020 and 2020–2021 academic years when each subject began to be taught. On the other hand, the questionnaire to companies was administered in 2019, thanks to the collaboration of entities, such as business confederations and chambers of commerce. Both instruments were mainly completed online, using the SurveyMonkey platform.

The study followed the recommendations of the Bioethics Committee of the University of Santiago de Compostela, strictly complying with the provisions of the Spanish Organic Law 3/2018, of 5 December, on Data Protection and Guarantee of Digital Rights [45].

## 3.4. Data Analysis

In order to analyze the data, mean comparison tests (Student's t-test and ANOVA with a Tukey–Kramer post-hoc test) were used, using the factors that make up the scale as dependent variables. The effect size (Cohen's d) was calculated for all tests and interpreted according to Cohen's classification: 0.2, small; 0.5, medium; and 0.8, large. The significance level chosen for all the tests was  $\alpha = 0.05$ , and all the analyses were carried out with the IBM-SPSS v24 statistical software package.

The analysis was structured in three phases to answer our three research questions:

- Examine whether there is a difference between the perception of the degree of development of transversal competences of students who are beginning their university studies (1st and 2nd year) and those who are finishing them (3rd and 4th year). (RQ1).
- Compare the perception that 3rd and 4th year students have of their transversal competences with the importance attributed to them by companies when looking for new personnel among university graduates. (RQ2).
- Contrast the perception of the degree of development of these competences in 3rd and 4th year students, taking into account gender and the performance of different experiential activities developed during their academic training, such as professional experience, participation in youth organizations, or community service projects promoted by the university. (RQ3).

#### 4. Results

4.1. Perception of Competences among Students of Different Years

The results shown in Table 1 reflect how the perception that students believe they have of their competences does not differ significantly when comparing 1st and 2nd year students and 3rd and 4th year students.

Factor	Group	п	Mean	Sd	t	Df	Sig	d
Entrepreneurial skills	1 2	665 580	3.74 3.77	0.592 0.681	-0.945	1156.95	0.345	-0.05
Interpersonal skills	1 2	666 579	3.51 3.43	0.734 0.811	1.667	1175.85	0.096	0.10
Intercultural skills	1 2	664 579	3.32 3.27	0.615 0.681	1.553	1241	0.121	0.08
Networking skills	1 2	667 578	3.90 3.92	0.498 0.622	-0.641	1101.58	0.522	-0.04
Analysis and synthesis skills	1 2	668 581	3.57 3.62	0.568 0.620	-1.326	1247	0.185	-0.08

Table 1. Comparison between 1st and 2nd year students and 3rd and 4th year students.

1st Group: 1st and 2nd year students; 2nd Group: 3rd and 4th year students.

The highest scoring factor is networking skills, followed by leadership skills, and analysis and synthesis skills. On the other hand, the ones they perceive as less developed are interpersonal and intercultural skills.

4.2. Differences between the Development of Transversal Competences Perceived by Students and the Importance Attributed by Employers

Table 2 shows the comparison between the perception of the degree of development of transversal competences of students in their final years of studies (3rd and 4th year) and the importance given to them by employers and human resources managers when hiring university graduates.

**Table 2.** Comparison of students' perception of competences vs. the importance attributed by employers and HR managers.

Factor	Group	п	Mean	Sd	t	Df	Sig	d
Entrepreneurial skills	1 2	580 83	3.77 4.27	0.68 0.737	-6.160	661	<0.001	-0.72
Interpersonal skills	1 2	579 83	3.43 3.96	0.812 0.859	-5.532	660	<0.001	-0.65
Intercultural skills	1 2	579 83	3.27 3.36	0.681 0.908	-0.926	95.701	0.357	-0.13
Networking skills	1 2	578 83	3.92 4.2	0.622 0.791	-3.024	97.088	0.003	-0.42
Analysis and synthesis skills	1 2	581 83	3.62 4.07	0.62 0.952	-4.165	92.168	<0.001	-0.67

1st Group: Students; 2nd Group: Employers and HR managers.

The level required by employers was significantly higher than how students perceived themselves in all the factors of the scale, except for intercultural skills, a competence whose importance attributed by companies was notably lower than in the rest of the factors considered, and did not differ from the score obtained by the students.

4.3. Differences between the Competences Perceived by Students According to Gender and the Performance of Previous Activities

Table 3 shows how gender does not seem to be a relevant factor related to the development of transversal competences in those students that are finishing their university studies.

Factor	Group	n	Mean	Sd	t	Df	Sig	d
Entrepreneurial	1	177	3.74	0.666	0.752	E74	0.453	0.06
skills	2	399	3.78	0.673	-0.752	574	0.452	0.06
Interpersonal skills	1	177	3.5	0.838	1 207	F.770	0.100	0.10
	2	399	3.4	0.789	1.287	573	0.199	0.12
Intercultural skills	1	177	3.34	0.695	1.707	F.770	0.075	0.16
	2	399	3.23	0.662	1.786	573	0.075	0.16
Networking skills	1	177	3.86	0.706	1,700	270.70	0.001	0.16
	2	399	3.96	0.56	-1.699	278.79	0.091	0.16
Analysis and	1	177	3.63	0.626	0.270		0.705	0.00
synthesis skills	2	399	3.61	0.602	0.379	575	0.705	0.03

**Table 3.** Comparison of the perception of competences according to gender.

1st Group: Male students; 2nd Group: Female students.

The 3rd and 4th year students who claimed to have participated, during their academic studies, in a project promoted by the university involving community service perceived themselves to have a higher level in all the competences than those who did not participate in such activities (Table 4).

**Table 4.** Comparison of the perception of competences according to the participation in a project which included community service promoted by the university.

Factor	Group	п	Mean	Sd	t	Df	Sig	d
Entrepreneurial skills	1 2	422 158	3.7 3.95	0.712 0.554	-3.839	360.026	< 0.001	-0.37
Interpersonal skills	1 2	421 158	3.36 3.62	0.832 0.725	-3.434	577	0.001	-0.32
Intercultural skills	1 2	421 158	3.22 3.39	0.692 0.636	-2.795	577	0.005	-0.25
Networking skills	1 2	420 158	3.89 4	0.65 0.533	-2.007	341.703	0.046	-0.17
Analysis and synthesis skills	1 2	423 158	3.57 3.76	0.621 0.594	-30.397	579	0.001	-0.31

1st Group: Students who did not participate in a project; 2nd Group: Students who participated in a project.

On the other hand, those who had participated over the past 12 months in a youth organization or voluntary action entity perceived themselves to have more entrepreneurial skills, interpersonal skills, as well as analysis and synthesis skills compared to their non-participating peers (Table 5). Although not significant, the values were also higher in intercultural and networking skills in these students.

Students with more than one year of work experience significantly perceived themselves to have greater entrepreneurial and interpersonal skills than students without work experience (Table 6). No significant differences were observed in the rest of the competences.

<b>Table 5.</b> Comparison of the perception of competences according to participation in a youth organi-
zation/voluntary action entity.

Factor	Group	п	Mean	Sd	t	Df	Sig.	d
Entrepreneurial skills	1 2	476 91	3.73 4.02	0.671 0.628	-3.898	565	<0.001	-0.44
Interpersonal skills	1 2	475 91	3.37 3.76	0.795 0.797	-4.255	564	<0.001	-0.49
Intercultural skills	1 2	475 91	3.26 3.36	0.68 0.634	-1.302	564	0.193	-0.15
Networking skills	1 2	475 90	3.91 4.02	0.615 0.569	-1.552	563	0.121	-0.18
Analysis and synthesis skills	1 2	477 91	3.57 3.89	0.608 0.552	-4.649	566	<0.001	-0.5338

1st Group: Students who did not participate; 2nd Group: Students who participated.

Table 6. Comparison of the perception of competences according to work experience.

Factor	Group	n	Mean	Sd	F	Df	Sig.	Differences *	d *
F ( ) 1	1	331	3.71	0.664					
Entrepreneurial	2	138	3.77	0.713	5.07	2	0.007	1 < 3	-0.36
skills	3	111	3.95	664					
To to	1	330	3.32	0.808				1 < 3	0.50
Interpersonal	2	138	3.47	0.813	10.575	2	< 0.001		-0.50
skills	3	111	3.72	0.75				2 < 3	-0.31
T . 1. 1	1	331	3.24	0.675					
Intercultural	2	137	3.35	0.705	1.456	2	0.234	-	-
skills	3	111	3.23	0.669					
NT . 1:	1	331	3.91	0.617					
Networking	2	138	3.94	0.622	0.074	2	0.929	-	-
skills	3	109	3.93	0.643					
A 1	1	332	3.59	0.625					
Analysis and	2	138	3.62	0.609	1.124	2	0.326	-	-
synthesis skills	3	111	3.69	0.615					

1st Group: Without work experience; 2nd Group: Work experience of less than one year; 3rd Group: Work experience of more than one year; \* for significant cases only.

# 5. Discussion

Bearing in mind the evidence found in a significant part of the literature on the positive relationship with employability indicators, it is arguable that the university is committed to the development of transversal competences for its students and graduates. However, with respect to RQ1, the data does not indicate that this is consistently happening, since no significant differences between those who have recently entered the university and those who are finishing their studies were found. This is in accordance with the extensive work carried out by Cano and Fernández [3], for whom these types of competences are not acquired in the university setting.

Regarding RQ2, this lack of attention seems more pronounced in Higher Education institutions than among employers. This is exactly what we found in a series of studies [8,12,21], which agreed on the high importance they attached to transversal competences in the recruitment of personnel. The contrast with the situation reported by the students is indeed stark. According to Sáez-López et al. [46], a plausible explanation for this is not so much the fact that the students have less consideration for them, but rather the absence of a pedagogical plan that includes their curricular development.

Concerning RQ3, our results indicate a positive relationship between experiential activities that connect students to work or social practices and transversal competences. At this point, it is important to check whether these results are consistent across the variable of gender since there were no meaningful differences between male and female students, which makes us think there is no gender bias in the development of transversal competences. It is logical to assume (but nevertheless not always planned beforehand) that those methodologies identified with an experiential dimension, as in the case of Service-Learning, are configured as an alternative to be incorporated in the university context. Theory also tells us, regarding concepts, such as the hidden curriculum, which also applies to the Higher Education level [47], that even when transversal competences are not the focus of the activity, the experience is always broader and more socially dependent than expected.

In this regard, we found there were significant differences in favor of students who had carried out a work-related activity in the case of entrepreneurial skills and interpersonal skills (especially when they had more than one year of experience); volunteering, in all dimensions except for intercultural and networking skills; or community service within the framework of the university in all of them. Reviewing the theoretical framework, we are interested in the possibility of translating this wealth of experience into more authentic learning [35]. The collaborative relationship with others in goal-directed actions may facilitate decision making and accountability that we can call agency [48].

In our study, such elements are related to the entrepreneurial skills (agency) and interpersonal skills, although they go beyond them within other transversal competences, given the difficulty to differentiate between the intercultural skills and empathy, or the analysis and synthesis skills of agency, which provides the constructive basis for one's own criteria.

With these results in mind, we, therefore, argue that much of what has been said could be linked to a substantially holistic view of competence [35]. Transversal competences should not be seen in the dilemma of choosing between employability and civic engagement [41] since there is evidence that community engagement adds value to employability [49], and, therefore, we should not perceive employers as outsiders to ethically informed decisions and consider them entirely as parties to work with [21]. In this sense, some studies have found that even students perceived an increased awareness of the need for civic engagement and, in this case, soft skills [50].

Méhaut and Winch [12] pointed out that the notion of competence in the European Higher Education Area (EHEA) should encompass a psychosocial dimension, similarly to Blanco-Cano and García-Martin [51] when they bring transversal competences closer to certain psychosocial competences. These authors also take to the scene a methodological approach that will be useful for further reflection, since they noted the opportunity that Service-Learning could provide in this regard.

At this point of the discussion, we think Service-Learning should be taken as a utilitarian reference for two reasons: (a) First, it entails a framework of activities with community projection, such as volunteering, and it is also linked to professional activities that prepare students for employment. In this sense, it is clearly an experiential methodology that entails processes of social learning, stressing the importance of agency and relationships [36]. (b) Second, one should consider its potential to be institutionalized in Higher Education since this is an academic pedagogy with clear connections to the curriculum and under university coordination. An example of this potential is the fact that it drew great attention in Higher Education, especially in the case of the Spanish context, where the study was performed [31].

These two reasons (institutional suitability for Higher Education and educational coherence with the elements we have found important), turn Service-Learning into an interesting future candidate for promoting employability through transversal competences. So far, it is more than appropriate to ratify its potential based on the evidence extracted from the competences that employers consider relevant, and which are likely to promote

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employment by means of this methodology. Halberstadt et al. [52] not only determined that there were more entrepreneurial skills through Service-Learning, but they also used an explanatory framework at the time of reporting the assertion.

In a parallel effort, Fuertes et al. [48] studied how Service-Learning influenced the interpersonal skills requested by the community. This is, coincidentally, the case of Pazos et al. [53] in an empirical incursion, which explored the potential of this methodology to develop interdisciplinary teamwork skills, which they included within the networking skills.

The authors pointed out that collaborative work promoted such skills without significant differences between knowledge areas. With respect to intercultural skills (or competence), another type of transversal competences that we have included, although less valued by employers, Chen et al. [54] associated them with Service-Learning, albeit influenced by the current changes in the demographics of the planet.

Finally, Lorenzo Moledo et al. [55], focusing on the importance that Service-Learning attached to the reflection on experience, showed how it contributed to the development of the analysis and synthesis skills among university students in an era of great complexity and uncertainty.

At this point in the present work, certain limitations of our study should be taken into consideration. Although our work is based on a broad and diverse sample of disciplines, there is an imbalance between the different areas of study that limits our ability to generalize the results to all areas of knowledge. This limitation in generalizability can also apply to the territory since our sample corresponds specifically to universities in the same region. Furthermore, we acknowledge the limitations of the self-reported data and remind readers that the data we are working on correspond to students' perception of their competences and not to a direct measurement of these competences.

These limitations lead us to the first implications for future research, as we recognize the need for future studies with an appropriate balance between areas of study that may be used for comparative analyses. In addition, we point towards further research working with direct measurements of students' competences. It is important to consider that this work is the start of a broader research project that will address the relationship between employability and transversal competences, considering more agents, such as educators and faculty. In this endeavor, particular factors involved in learning will be specifically explored to understand learning processes and elements in a more concrete level. In this way, future research will involve drawing on the effects of systemic barriers and opportunities, putting the scope on structure and pedagogy as suggested by Finch and collaborators [56]. Therefore, future studies will also analyze the differences in the outcomes, considering the type of experiential learning programs and higher education institution types.

Regarding our findings, we share two main implications for forthcoming actions. First, future research may be conducted within the scope of social learning theory and indicate some dimensions of competence learning that could be taken into account to analyze how collective participation and different forms of community engagement may affect the teaching-learning process and, more specifically, transversal competences and Service-Learning. Since it has been proven a good candidate according to theory [35,36] and literature [55], there is a need for empirical measurement of the effect of this concrete methodology in transversal competences.

Secondly, our results can promote and improve the attitude and actions of educational field professionals who are concerned about a holistic approach to their students' learning. In this sense, we understand that we have enough empirical evidence to support the demand for more involvement in favor of transversal competences from policymakers and academics in Higher Education. They make up a formative link that could pave the way for better employability and their development can be enhanced through work methodologies that, as in Service-Learning, place students in a professionalizing direction, based on action and reflection on needs and problems whose solution is correlated to the levels of self-efficacy achieved in the intrinsic motivation of individuals.

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Our analysis, as a whole, shows that the training of these and other transversal competences in tertiary education could be useful for life and work projection among university post-graduates. This projection could help Service-Learning, which is a didactic methodology that "has proven to be a natural, attractive, effective method of mutual students' learning, enabling their transversal competences to flourish" [10] (p. 450). In short, it is a matter of continuing to promote, on the basis of epistemic solidity, the opportunities that the university should always offer to young people, but above all in these uncertain times.

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