



Article Transversal Competencies for Employability: From Higher Education to the Labour Market

Helena Belchior-Rocha^{1,*}, Inês Casquilho-Martins¹ and Eduardo Simões²

- ¹ Centro de Investigação e Estudos de Sociologia (CIES-Iscte), Iscte—Instituto Universitário de Lisboa, 1649-026 Lisboa, Portugal; ines.casquilho.martins@iscte-iul.pt
- ² DINÂMIA'CET-IUL—Centro de Estudos sobre a Mudança Socioeconómica e o Território, Iscte—Instituto Universitário de Lisboa, 1649-026 Lisboa, Portugal; eduardo.simoes@iscte-iul.pt
- * Correspondence: helena_rocha@iscte-iul.pt

Abstract: Aligning learning goals with the needs of the labour market is a difficult task for universities, especially in the present day. Although organisations seek professionals with flexible and varied skills, universities often underestimate the importance of cross-curricular skills. Thus, this article aims to identify the perception of recent graduates as to the importance of the transversal skills that they acquired and developed at university and the ways in which they are now applied in the work environment. In this exploratory study, we sent a questionnaire to recent graduates that allowed us to analyse the development and applicability of these competencies in organisations. The results are further discussed within the broader framework of how universities adapt to the strong socio-economic challenges that characterise current times and the integration of recent graduates into the labour market.

Keywords: transversal skills; labour market; higher education; training; soft skills

1. Introduction

The labour market occupies a key position in the economic and social development of societies, bringing together a set of social, economic and cultural determinants in each society [1]. According to Eurostat [2], Portugal has improved its employability indicators over the last few years, with values now being above the European Union average. Additionally, Eurostat [3] data show that the higher the educational attainment level, the better the employability indicator. Training and qualifications can contribute to a reduction in social inequalities and promote better life opportunities [4]. Currently, with the Next Generation EU fund, Portugal has an opportunity to invest in training and skills for the better qualification and labour market participation of adults and young people [5].

European focus on qualifications and skills could promote the development of skills for a knowledgeable society, as well as language learning, entrepreneurship and other competencies that improve the education dimension [6]. These objectives address the need to respond and adapt flexibility to the changes and challenges of globalisation. The topics of education and transversals skills reinforce the importance of competencies that we traditionally associate with the concept of soft skills and seek to correspond to the demands of the labour market and globalisation, as well as to adaptation, autonomy and proactivity in other dimensions of lifelong learning [7].

With the implementation of the Bologna Process in higher education, competences are the central axis of the teaching and learning process, both in the technical–professional dimension and in the perspective of transversality. In 2009, the Soft Skills Lab was created in a public university that was created in 1972, which specialised in the areas of business sciences, social sciences, technology and architecture, and is located on the campus of the University of Lisbon. The lab provides a set of curricular units to promote languages and transversal skills. The main purpose of this laboratory is to ensure the regular functioning



Citation: Belchior-Rocha, H.; Casquilho-Martins, I.; Simões, E. Transversal Competencies for Employability: From Higher Education to the Labour Market. *Educ. Sci.* 2022, *12*, 255. https:// doi.org/10.3390/educsci12040255

Academic Editors: Miguel A. Santos Rego, Sofia Castanheira Pais and Concepción Naval

Received: 15 February 2022 Accepted: 31 March 2022 Published: 3 April 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). of the transversal skills courses, which are framed within the scientific area of transversal skills. One of the main purposes of the current education and learning efforts is to equip students with competences that are transferable across contexts and that lie beyond the standard approaches to the areas of knowledge. To improve the capacity of higher education institutions to narrow the gap between universities and the labour market, the intentional promotion of the development of transversal competences is determinant [8].

In the Portuguese context, some studies have identified several competencies that are valued by organisations and employers [9,10]. However, it is also important to know what recent graduates perceive about this topic after their integration into the labour market. The integration of graduates into organisations includes the need for the development of personal skills that enable them to adapt to labour market demands, both in the present and in the future. The aim is to increase employability, which is understood as not only the increase in the probability of adapting to the explicit needs of employers, but also as the potential for creating value in future jobs. In the process of teaching and training, aligning learning goals, content and methods with the needs of the labour market is a difficult task for higher education institutions. Although work organisations seek professionals with flexible and varied competencies, universities often underestimate the importance of cross-curricular knowledge and the need to promote and develop generic competencies that provide competitive advantages for students entering the job market. Enhancing students' ability to adapt to the complexity of the work environment implies the redesign of curricula to focus on building skills that could improve flexibility in thinking and acting within organisational contexts.

Transversal competencies firstly cover what are traditionally referred to as "soft skills", which refer to a personal ability to interact with others, including effectively working in teams, communicating efficiently and solving problems [11]. Empirical research results have indicated that soft skills, which may support flexibility and positive attitude, particularly in project teamwork [12,13] for instance, are one of the most important sets of competencies that employers are looking for in prospective employees. For example, listening and interpersonal competencies are often at the top of the list of priority factors on which employers place increasing attention, indicating that "new graduates who demonstrate soft-skills (...) will be more competitive in the market place than those who do not" [14] (p. 695). Even in fields in which the technical knowledge of rules and procedures has been traditionally valued almost exclusively, such as accountant education, there is a strong acknowledgement that "students need to develop not only sound interpersonal competencies, but, more importantly, the skills to manage themselves and their careers, and they need to be prepared for a lifetime career of which lifelong learning is a part" [15] (p. 17). In the now essential field of information technology (IT), research has also indicated that "human interaction skills" are highly demanded by recruiting professionals [16], reflecting the requirements of a service-driven economy in which, along with problem solving and critical thinking, communication-related competencies are crucial for creating value in project teams, which is the prevailing IT work structure.

In the transition from the university to the job market, in addition to technical and professional skills, it is also important to have personal and social competencies, such as communication, organisation, time management, teamwork and conflict management. These are essential in this highly competitive context, which is corroborated by Santos et al. [17] when they said that "social and emotional competences as having the second highest growth, behind only technological ones" and that "it would be advisable for higher education institutions to consider such dimensions in an effective way" [17] (p. 218).

Organisations today tend to approach work globally and organically and it is increasingly important that all activities are framed within a global understanding of work processes and are backed by up-to-date and specialised knowledge. These competencies are a prerequisite for adapting to change and promoting lifelong learning and, consequently, it is intended that universities mange to promote student personal development through their academic, personal, social and professional adjustment. There is a consensus among

employers that those transversal competences are sometimes even more valued than specific competences when entering the labour market, namely in the recruitment and selection processes, which reinforces the idea that soft skills are an element that facilitates the entry of new graduates into the labour market [18–21]. However, there is a relative growing agreement on the needs and processes that are required to achieve this curricula transformation and research on the outcomes that have already been attained by these programmes is scarce. Yet, the only way to assess the efficiency of these curricula redesigns is to assess their degree of applicability and the actual impact of these transversal competencies in the field in which they make sense: in the world of work and in the social life of the students who are taught by these programmes. The present study aimed to respond to the following question: how do ex-students who are now active in the labour market perceive the transversal competencies that they acquired and developed in the academic environment as drivers of competitive advantages in work environment challenges? Specifically, the goals of this study were twofold. Firstly, it intended to contribute to the understanding of how the curricular units on transversal competencies are perceived by recent graduates in terms of their utility for their integration into the world of work. Secondly, we investigated the possible contextual influences on this perception by considering the type of employment relationship and work sector and how they are applied in the organisational environment. Additionally, we explored the domains of professional activity in which the recent graduates considered the transversal competencies to be most useful and any possible gaps that they had found in practice.

Thus, the aim of this exploratory study lay in the perception of recent graduates as to the importance of the transversal competences that were acquired and developed in the academic environment and the ways in which they were then applied in the work environment. The study also had the specific goal of analysing the impact of the transversal skills training that occurred during the first cycle programme on the promotion of competences in the workplace, as well as its potential for creating value in future jobs.

2. Materials and Methods

2.1. Sample

The target population comprised former students who had successfully completed university curricular units on transversal competencies and who were currently newly employed. A non-probability convenience sample was used and data were collected by means of an online questionnaire. Of the 189 responses collected, 121 were fully completed and met the employment criteria. Respondents had a mean age of 23.98 years (standard deviation (SD) = 4.8; minimum = 20 years; maximum = 29 years), 62.7% of the respondents were women and 15.7% were self-employed.

2.2. Procedure

Concerning the structure and contents of the questionnaire, participants were first asked about the perceived utility of their learning experience of the transversal competencies. Specifically, when referring to their current work context, they then classified the utility of 21 competencies, which directly corresponded to the learning goals of the curricular units, using a 7-point Likert-type scale (1 = not useful at all; 7 = extremely useful). Items included three categories of transversal competencies [22]. Table 1 lists the content of the three categories of competencies.

The first category, instrumental competencies, referred to the fundamental supports (instruments) of outputs that are considered essential by most employers, such as planning, time management and oral and written communication. This indicator included 10 items (e.g., "make oral presentations") and presented high consistency, as measured by Cronbach's alpha ($\alpha = 0.92$). It worth noting that in spite of the apparent narrowness of its design, this category also included items that were related to complex problem solving, which is a good predictor of career advancement [23]. Taken as an essential category for the full socio-professional integration of graduates into the workplace, interpersonal competencies,

which presented high consistency ($\alpha = 0.92$), referred to the skills that involve interaction with others, such as effectively communicating and participating in teamwork. It was measured through five items (e. g., "achieve positive interpersonal relationships"). Systemic competencies encompassed the global and integrated view of work, including effectively identifying and processing information about its broader context, and were measured by a set of six items (e.g., "identifying ethical issues at work") and it also presented a high consistency ($\alpha = 0.95$). Two single items encompassed the need for continuous learning in the work environment and adaption to the work environment. An indicator that was also composed of two items (r = 0.85) assessed the propensity to self-reflect on personal strengths and weaknesses in social interaction.

Table 1. The categories of competencies.

Instrumental Competencies		Interpersonal Competencies		Systemic Competencies	
1.	Planning and time management				
2.	Writing professional texts			1.	Identifying ethical
3.	Project management tools				issues at work
4.	Problem solving and	1.	Internersenal	2.	Critical thinking
	decision-making tools	1.	Interpersonal relationships	3.	Dealing with diversity
5.	Using standard software	2.	Conflict management		in the workplace
	(Excel, Word)	2. 3.	Leading meetings	4.	Adapting to
6.	Using foreign language	3. 4.	Teamwork		multicultural
	(English, Spanish)	ч. 5.	Communication and		environments
7.	Obtaining and analysing	5.	personal development	5.	Understanding
	information		personal development		corporate social
8.	Using social media				responsibility
9.	Using advanced new			6.	Entrepreneurship
	information technology				
10.	Personal image				
	management				

In the last part of the questionnaire, participants were invited to answer two open questions concerning (1) the identification of professional domains in which transversal competencies are judged to be most useful and (2) signalling possible gaps in the training on transversal competencies that was received at the university according to their current professional experience.

3. Results

A paired sample *t*-test was performed to compare the utility degrees that participants assigned to the three sets of competencies as a whole. There was a significant difference between systemic competencies utility (M = 3.88, SD = 1.73) and instrumental competencies utility (M = 4.40, SD = 1.37, t (120) = -6.904, p = 0.000). Systemic competencies also differed significantly from interpersonal competencies (M = 4.38, SD = 1.51, t (120) = -6.605, p = 0.000). No differences were observed between the utility that was assigned to interpersonal competencies and instrumental competencies (t (120) = -0.369, p = 0.71, ns).

Concerning the impact of contextual factors on the perceived utility of the transversal competencies, we explored the possible associations between the job sectors of the participants and the perceived utility. The results of one-way ANOVA indicated that the job sector affected how the participants judged the utility of the three skill categories (Wilks's lambda = 0.816, F (12, 301.91) = 2.0085, *p* = 0.02). As Table 2 indicates, participants employed in the commercial sector assigned the lowest utility value to the three sets of competencies, contrasting with the public administration sector, which assigned the highest values.

	Systemic Skills			mental tills	Interpersonal Skills		
Sector Activity	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.	Ν
IT	3.59	0.40	4.39	0.31	4.49	0.35	19
Public Administration	4.44	0.38	4.71	0.30	4.60	0.33	21
Commercial	3.60	0.38	3.85	0.30	3.78	0.33	21
Industry	3.84	0.38	4.32	0.30	4.54	0.33	21
Consulting and Finance	3.91	0.28	4.61	0.22	4.46	0.24	39

Table 2. The employment sectors of the participants.

A second contextual factor, employment status (employed versus self-employed), did not affect the judgment of the perceived utility of transversal competencies (Wilks's lambda = 0.949, F (9, 280.03) = 0.673, p = 0.73, ns). However, the results from a two-way ANOVA showed a significant interaction effect between job sector and employment status regarding the degree of utility assigned to instrumental competencies (F (4, 111) = 2578, p = 0.04). Specifically, the results indicated that self-employed participants in the commercial sector assigned a higher utility value to the instrumental competencies (M = 4.70, SE = 0.76) than those who were employed in the same sector (M = 3.28, SE = 0.32). No effects were found between job sector and interpersonal competencies (F (4, 111) = 1899, p < 0.11, ns.) or systemic skills (F (4, 111) = 1209, p = 0.31, ns).

A multiple regression analysis was used to test whether the perceived utility of instrumental, interpersonal and systemic competencies significantly predicted each of the indicators of a graduate's integration into work (i.e., adaptation to the work environment, the need for continuous learning, self-reflection, etc.). Beyond the generic perception of the adaptation to work, these variables intended to capture some fundamental basis for organisational newcomers to acquire knowledge and a functional understanding of their new job [24]. Continuous learning, i.e., the process of deepening employee knowledge and world views, increasingly has the utmost importance in complementing formal training in organisations [25]. For instance, continuous learning may be an important support for the development of individual planning abilities and strengthening self-efficacy, with positive effects on innovative behaviour [26] and predicting job performance [27]. Self-reflection refers to the introspective analysis of information that is fed back from external sources [28]. Although self-knowledge processes can be biased [29,30], self-reflection is proposed to be critical for self-regulation performance processes [31]; hence, it is an important individual variable of socio-professional integration into organisational processes and strategies.

As for adaptation to the work environment, the results indicated that the three predictors explained 57% of the variance (R²adj = 0.55, F (3117) = 50.9, p < 0.001). It was found that the perceived utility of instrumental competencies significantly predicted adaptation ($\beta = 0.62$, p < 0.001), as did interpersonal competencies ($\beta = 0.40$, p < 0.01), but systemic competencies did not and seemed to be negatively associated ($\beta = -0.29$, p < 0.05).

The perceived utility of the three sets of competencies predicted 65% of the variance regarding the need for continuous learning in a work context (R²adj = 0.61, F (3117) = 75.3, p < 0.001), but only systemic competencies were positively associated ($\beta = 0.74$, p < 0.01) since no effects were detected with instrumental competencies ($\beta = 0.21$, p < 0.11, ns) or interpersonal competencies ($\beta = -0.15$, p < 0.26, ns).

The results of a similar analysis concerning self-reflection explained 84% of the variance (R2adj = 0.82, F (3117) =199.9, p < 0.001). The perceived utility of interpersonal competencies predicted self-reflection ($\beta = 0.53$, p < 0.001), as did systemic competencies ($\beta = 0.40$, p < 0.01), but instrumental competencies did not ($\beta = 0.12$, p < 0.17, ns). Collinearity was examined using the variance inflation factor (VIF). In all regression models, the VIF values ranged from 4.2 to 5.4, indicating some multicollinearity that was not problematic since the results were lower than the threshold of 10.

Answers to the two open questions were subject to content analysis, which was based on the frequency of words and phrases that described recurring content, using inductive coding. Codes were then arranged by categories. As indicated in Table 3, five categories were proposed. The first category, "public presentations", encompassed work situations that require capturing the attention of groups and/or individuals, which is important for the work objectives of new graduates. Many of the quotes in this category explicitly referred to and evoked the curricular units of transversal competencies that the participants attended (e.g., "professional presentations"). The category of "information processing" included all situations in which participants would have to deal with complex information and organise written documents, such as technical reports, proposals or memos to important individuals. "General adaptation to work environments" included all mentions of generic processes related to adapting to new and/or special work situations involving complex decisions and critical approaches.

Categories	Representative Quotes	% (N = 121) 11.57	
Interpersonal communication and team behaviour	In situations of conflict within teams. When interacting with different people in meetings.		
Information processing	Preparing technical documents. Structuring project documentation. Whenever there is data/information processing.	23.14	
Foreign language contexts	Learning Spanish, which is a highly valued skill in my company, motivated me to become fluent. Communicating with clients and colleagues abroad.	9.09	
Public communication	When presenting projects to a collective and needing to communicate more clearly with others. When it is necessary to hold the attention of a group and make presentations effective.	33.05	
General adaptation to work environments	When needing to better adaptation to different work situations. When it is necessary to respond to demanding situations that require reflection.	10.74	

Table 3. The professional domains in which transversal competencies are more useful.

As for the answers to the second open question ("Did you feel the need for other competencies that were not available at the university? If so, please indicate them"), most participants (56.20%) felt that there was no need for other transversal competencies in their current job. Some participants (15.70%) signalled the need for instrumental competencies other than those in the curricular units that they completed at the university (e.g., advanced network software and multimedia). There were some mentions of interpersonal competencies (14.88%) (e.g., teamwork, job search techniques, etc.) and systemic competencies (5.78%) (e.g., entrepreneurship, multiculturalism, ethics, etc.) that could not be completed at the university, although they were available. In total, 4.96% of participants did not answer the question and some others (2.48%) pointed to no transversal competencies (e.g., leadership).

4. Discussion

The study provided us with the perceptions of the impact of the first cycle of higher education training on transversal competencies and the promotion of competencies in the work environment. More specifically, it focused on the importance of transversal competencies in the integration of young people into the labour market and on the possible contextual factors that may influence this process. The results of our study suggested that contextual factors at work are "positively associated to the perception of relative importance of different categories of soft skills". Apparently, job sector could exacerbate or attenuate the way in which young graduates judged the usefulness of those skills. Observing the comparative results of the different analysed sectors, the IT sector was an example of this influence, with the well-known "adhocratic" informality in work relationships that are typical of this sector generating an awareness of the importance of interpersonal relationships. The employment condition (self-employed versus employed) did not seem to affect the utility value that was attributed to different skills and the only result that pointed in this direction was inseparable from the employment sector.

As for the new graduates' integration into work settings, the results indicated that the perceived utility of the three categories of transversal competencies that were considered in this study could affect some important variables for the adaptation of young graduates to the world of work in diverse ways. The curricular units that dealt with systemic competencies, e.g., those that promoted and reinforced the ability to deal critically with issues such as multiculturalism, organisational ethics and social responsibility, seemed to foster an individual orientation towards self-reflection, which in turn favours self-critical vigilance and leads to a continuous improvement in performance. Surprisingly, young graduates seemed to view systemic competencies as obstacles to adapting to the work environment. It is possible that the magnitude of the challenges that were posed by the use of systemic competencies could have seemed to young graduates to be of little use for immediate adaptation, even when they ascribed a high importance to them in general.

The possible influence of the curricular units that dealt with interpersonal competencies on the development of the capacity for self-reflection, as suggested by the results, could be considered as one of the salient points of the present study since it was a category that positively affected self-confidence [32] and enhanced metacognitive efficacy and selfregulation, which in turn benefited not only work-based performances and processes, but also supported the graduate's own learning as a support for individual empowerment [33].

The analysis of the answers about the situations in which the curricular units of transversal competencies were useful within the work context suggested that the exstudents ascribed a strong relevance to the instrumental competencies. However, some mentions signalled that that the "mere" instruments were used differently in contexts of variable complexity, which, in fact, could call for the use of broader skills (e.g., the critical analysis of information) of which they were not aware during the initial stage of the world of work. The contents of the most represented category ("public presentations") also seemed to indicate an instrumental approach, thereby ignoring the relational dimension of communication in and for groups, which perhaps reflects the normative and prescriptive way in which certain curricular units on transversal competencies related to the topic were structured (e.g., "conducting meetings"). In other words, these results could draw attention to the way in which the learning of instrumental skills takes place, which should not be isolated from the social context of their use under the penalty of being perceived as "hard skills", i.e., based solely on techniques, instruments and scripts. The relatively weak mentions of interpersonal skills might, therefore, have been biased by this operational salience of work situations that, in fact, inevitably involve social interaction, such as presentations in work meetings, for example. Furthermore, in the case of young people who had recently entered the world of work, it is possible that the apparent low importance that was attributed to these skills was the result of a perceptual asymmetry, which previously found that "soft skills in which college graduates feel competent are the same that employers feel the graduates fall short of possessing" [34].

A final remark of this study concerns the role of higher education institutions in defining the scope of the transfer of transversal competency learning outcomes to the real word. The prevailing economic discourse and focus on the importance of integrating transversal competencies into curricula may lead to a short-viewed perspective and hinder the major goal for student transversal competencies learning due to the need to respond primarily to rapid changes in work organisations because of deep economic transformations [35]. In fact, a crucial challenge for higher education institutions is to extend the process of learning transversal competencies to daily activities, thereby encompassing the enhancement of the new graduates' life capabilities, contributing to their socially responsible citizenship and effectively preparing them to deal actively with the current societal and environmental challenges.

This study had limitations, primarily the small sample compared to the total population of students. We would have also liked to conduct some focus groups, but this was not possible due to the restrictions that were in place because of COVID-19. Another limitation of this study was the use of convenience sampling, which facilitates data collection but limits the usefulness of the results in other contexts. Future research should use more representative samples of newly graduated participants to ensure greater generalisability and validity. Nevertheless, this is an ongoing project and this exploratory study allowed us to analyse the development and applicability of these competencies within organisations.

5. Conclusions

The perceived importance of transversal competences in the integration of recent graduates into the labour market from their perspective leads us to believe that the acquisition of transversal competences, especially in a labour market that is affected by social, economic, technological and political changes, is increasingly essential. In this sense, we could answer our research question by concluding that recent graduates are satisfied with transversal competencies that were acquired as drivers of competitive advantages in work environment challenges and find them useful in their daily lives, although there were differences in the way in which they are applied in the work environment.

This analysis underlined the importance of transversal skills in the integration of recently graduated students into the labour market and also highlighted the importance of higher education institutions for their acquisition and development, as well as how universities could adapt to the strong socio-economic changes that characterise current times.

So, in terms of future research directions, we will also consider the need to clarify how participants perceive the application of transversal skills when they judge its utility. These skills are a prerequisite for adapting to change and promoting lifelong learning in order to provide competitive advantages for students entering the job market.

Over time, particularly in the last two years, reality has altered and new conceptions must be incorporated into our way of living, learning, acting, interacting and thinking [36]. "Educational policies should have an intrinsic and perfective objective, permitting the overall improvement of the capacities of people in themselves" [37], (p. 521). The new resources that need to be constantly added to the existing literature have, or should have, the purpose of better serving individuals and society in general [36]. OCDE mentions that "taken together, cognitive and social and emotional skills make up a broader category which this report will refer to as 'transversal skills'" [38] (p. 27). These go beyond the confines of specific fields of study and specific occupational applications. They are skills that graduates can readily transfer from one employment context to another.

Dealing with the new and complex situations of the contemporary world requires more expertise in ways of thinking, acting and relating to others. In this sense, preparing students in addition to the specific knowledge of each area by associating transversal and soft skills can promote their adaptation, resilience and social responsibility awareness and recover the fundamental values of a participatory citizenship.

Author Contributions: Conceptualisation, H.B.-R. and I.C.-M.; methodology, E.S. and I.C.-M.; validation, H.B.-R., I.C.-M. and E.S.; formal analysis, E.S.; investigation, H.B.-R.; writing—original draft preparation, H.B.-R.; writing—review and editing, H.B.-R., I.C.-M. and E.S. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and was approved by the Institutional Review Board (or Ethics Committee) of Iscte-

Instituto Universitário de Lisboa According to the ethics regulations of the Iscte Despacho, n.° 7095/2011; D.R., 2^a série—N° 90.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available upon request. The data are not publicly available due to privacy restrictions.

Acknowledgments: We would like to thank all of the participants in this study for being available.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Cantante, F. O Mercado de Trabalho em Portugal e nos Países Europeus: Estatísticas; Observatório das Desigualdades Sociais Lisboa: Lisboa, Portugal, 2018.
- 2. Eurostat. Employment and Activity by Sex and Age—Annual Data. 2022. Available online: https://ec.europa.eu/eurostat/ databrowser/view/lfsi_emp_a/default/table?lang=en (accessed on 20 March 2022).
- Eurostat. Employment by Educational Attainment Level—Annual Data. 2022. Available online: https://ec.europa.eu/eurostat/ databrowser/view/LFSI_EDUC_A_custom_2354929/default/table?lang=en (accessed on 20 March 2022).
- 4. Costa, A.F. Desigualdades Sociais Contemporâneas; Mundos Sociais: Lisboa, Portugal, 2012.
- Casquilho-Martins, I.; Belchior-Rocha, H. Responses to COVID-19 Social and Economic Impacts: A Comparative Analysis in Southern European Countries. Soc. Sci. 2022, 11, 36. [CrossRef]
- 6. European Union. Recommendation 2006/962/EC on Key Competences for Life-Long Learning. 2006. Available online: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&from=EN (accessed on 20 March 2022).
- Almeida, F.; Casquilho-Martins, I.; Belchior-Rocha, H.; Rocha, A. Habilidades emocionais: Competências para o sucesso. In Resiliência e Inteligência Emocional; Machado, C., Davim, J.P., Eds.; Actual Editora: Lisboa, Portugal, 2019; pp. 15–41.
- Rocha, H.; Almeida, F.; Casquilho-Martins, I.; Ferreira, J. Preparing students to apply transversal skills—A case study in higher education. In *Edulearn17 Proceedings*; Gomez Chova, L., Lopez Martinez, A., Candel Torres, I., Eds.; IATED2017: Barcelona, Spain, 2017; pp. 4156–4163. [CrossRef]
- 9. Orlando, P. Metacompetences: How important for organizations? Analysis of a Survey in Portugal, Regional and Sectoral Economic Studies. *Euro-Am. Assoc. Econ. Dev.* **2013**, *13*, 73–88.
- 10. Swiatkiewicz, O. Competências transversais, técnicas ou morais: Um estudo exploratório sobre as competências dos trabalhadores que as organizações em Portugal mais valorizam. *Cadernos EBAPE Br.* **2014**, *12*, 633–687. [CrossRef]
- 11. Ritter, B.A.; Small, E.E.; Mortimer, J.W.; Doll, J.L. Designing management curriculum for workplace readiness: Developing students' soft skills. *J. Manag. Educ.* **2018**, *42*, 80–103. [CrossRef]
- 12. Robles, M.M. Executive perceptions of the top 10 soft skills needed in today's workplace. *Bus. Commun. Q.* 2012, 75, 453–465. [CrossRef]
- 13. Ravindranath, S. Soft Skills in Project Management: A Review. IUP J. Soft Ski. 2016, 10, 16.
- 14. Finch, D.J.; Hamilton, L.K.; Baldwin, R.; Zehner, M. An exploratory study of factors affecting undergraduate employability. *Educ.* + *Train.* **2013**, *55*, 681–704. [CrossRef]
- 15. de Villiers, R. The incorporation of soft skills into accounting curricula: Preparing accounting graduates for their unpredictable futures. *Meditari Account. Res.* 2010, *18*, 1–22. [CrossRef]
- 16. Lavy, I.; Yadin, A. Soft skills—An important key for employability in the "Shift to a service driven economy" era. *Int. J. e-Educ. e-Bus. e-Manag. e-Learn.* **2013**, *3*, 416. [CrossRef]
- 17. Santos Rego, M.A.; Ferraces, M.J.; Mella, I.; Vázquez Rodríguez, A. University, civic-social competences and the Labor market. *Rev. Española Pedagog.* 2020, *78*, 213–232. [CrossRef]
- 18. Andrews, J.; Highson, H. Graduate Employability, 'Soft Skills' versus 'Hard Business Knowledge': A European Study. *High. Educ. Eur.* **2008**, 33, 411–422. [CrossRef]
- 19. European Parliament. Council Recommendation of the European Par-liament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning. *Official Journal C* 111, 23 April 2008.
- 20. Mourshed, M.; Patel, J.; Suder, K. *Education to Employment: Getting Europe's Youth into Work*; McKinsey Centre for Government: New York, NY, USA, 2014.
- 21. Owen, E. What key skills do employers need? J. Geogr. High. Educ. 2001, 25, 121–126. [CrossRef]
- González, J.; Wagenaar, R. Tuning: Educational Structures in Europe. Final Report—Phase One. University of Deusto and University of Groningen. 2003. Available online: http://www.deusto-publicaciones.es/deusto/pdfs/tuning/tuning01.pdf (accessed on 14 January 2022).
- 23. Mainert, J.; Kretzschmar, A.; Neubert, J.C.; Greiff, S. Linking complex problem solving and general mental ability to career advancement: Does a transversal skill reveal incremental predictive validity? *Int. J. Lifelong Educ.* **2015**, *34*, 393–411. [CrossRef]
- 24. Bauer, T.; Erdogan, B. Organizational socialization: The effective onboarding of new employees. In *APA Handbook of Industrial and Organizational Psychology*; APA Publishing: Washington, DC, USA, 2011; Volume 3, pp. 51–64. [CrossRef]

- Noe, R.A.; Clarke, A.D.M.; Klein, H.J. Learning in the Twenty-First-Century Workplace. *Annu. Rev. Organ. Psychol. Organ. Behav.* 2014, 1, 245–275. [CrossRef]
- Liu, J.; Zhao, X.; Zhao, C. Stimulating and Educating Engineers to Innovate through Individual Continuous Learning. *Sustainability* 2020, 12, 843. [CrossRef]
- Rowold, J.; Hochholdinger, S.; Schilling, J. Effects of Career-Related Continuous Learning: A Case Study. *Learn. Organ.* 2008, 15, 45–57. [CrossRef]
- 28. Moon, J.A. A Handbook of Reflective and Experiential Learning: Theory and Practice; Routledge: London, UK, 2004.
- 29. Donovan, S.J.; Güss, C.D.; Naslund, D. Improving dynamic decision making through training and self-reflection. *Judgm. Decis. Mak.* **2015**, *10*, 284–295.
- Wilson, T.D.; Dunn, E.W. Self-Knowledge: Its Limits, Value, and Potential for Improvement. Annu. Rev. Psychol. 2004, 55, 493–518.
 [CrossRef]
- Nesbit, P.L. The Role of self-reflection, emotional management of feedback, and self-regulation processes in self-directed leadership development. *Hum. Resour. Dev. Rev.* 2012, 11, 203–226. [CrossRef]
- Chikhalsouk, M.; Hajjar, H.A.; El-Okda, Y.; Adref, K. The effect of self-reflection as an assessment tool for improving universities' students performance: Case study. In Proceedings of the 2019 Advances in Science and Engineering Technology International Conferences (ASET), Dubai, United Arab Emirates, 26 March–10 April 2019; pp. 1–6. [CrossRef]
- Siebert, S.; Walsh, A. Reflection in work-based learning: Self-regulation or self-liberation? *Teach. High. Educ.* 2013, 18, 167–178. [CrossRef]
- 34. Stewart, C.; Wall, A.; Marciniec, S. Mixed signals: Do college graduates have the soft skills that employers want? *Compet. Forum* **2016**, *14*, 276–281.
- Tam, A.; Trzmiel, B. Transversal skills as a missing link between school and work: Experiences from the Asia-Pacific Region. In *Transitions to Post-School Life-Responsiveness to Individual, Social and Economic Needs*; Pavlova, M., Chi-Kin, J., Maclean, L.R., Eds.; Springer: Berlin/Heidelberg, Germany, 2018; pp. 35–49. [CrossRef]
- Azqueta, A.; Naval, C. Entrepreneurship education: A proposal for human development. *Rev. Española Pedagog.* 2019, 77, 517–533. [CrossRef]
- 37. Belchior-Rocha, H.; Casquilho-Martins, I. Critical Thinking in Social Work Training. In *Empathy Study*; Kondo, M., Nikku, B., Eds.; Intechopen Limited: London, UK, 2019. [CrossRef]
- 38. OECD. In-Depth Analysis of the Labour Market Relevance and Outcomes of Higher Education Systems: Analytical Framework and Country Practices Report, Enhancing Higher Education System Performance; OECD: Paris, France, 2017.