

A Conceptual Exploration and Determinants of Graduates' Work Readiness in the Digital Age

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Abstract

The purpose of this study is to reconstruct the conceptual framework of work readiness and uncover the key dimensions of graduate work readiness so they can transition effectively in the digital era. Furthermore, this study also aims to formulate the determinants that contribute to improving graduate work readiness. This research was conducted using a qualitative approach using a systematic literature review (SLR) method. Using PRISMA guidelines, we conducted a systematic search from May to June 2025 to retrieve English-language data from the Science Direct and Francis & Taylor databases using the keywords "graduate work readiness", "graduate job readiness", and "graduate employability". A total of 24 articles met our predetermined inclusion criteria, and were analyzed descriptively and qualitatively using thematic and semantic analysis. We found that graduate work readiness is a crucial issue in higher education to ensure graduates successfully transition from academic life to the world of work. We define graduate work readiness as a multidimensional construct that focuses on the combination of skills, knowledge, attitudes, personal qualities, workplace awareness, and digital competencies needed by graduates to participate effectively in the world of work. This study also identified and analyzed the determinants of graduates' work readiness, including: job-specific technical skills, employability skills, digital skills, self-efficacy, and agency capital. Further research is needed to support institutions in developing policies to strengthen graduates' work readiness.

Keywords: Graduate Work Readiness, Graduate Job Readiness, Graduate Employability, Determinan Factors, Digital Age

Introduction

Significant global changes in the labour market have occurred in recent decades. These changes are driven by the development of a knowledge-based economy, globalization, and digitalization (Hetmańczyk, 2024; Popelo, et al., 2021). Digital transformation has changed the business process scheme (Baiyere, et al., 2020; Ekman, et al., 2020), created new opportunities and challenges in the workplace and changed the employment landscape (Faina & Almeida, 2020; Fonseca & Picoto, 2020). This shift has increased the demand for a high-

quality workforce (Kalleberg, 2020), requiring higher education graduates to not only have specialized knowledge and skills in their fields but also master a diverse set of skills in line with the requirements of the digital workplace (Dou, et al., 2023; Qin, et al., 2024). The dynamics occurring in the labour market need to be of concern to all parties to smooth the transition of graduates from the academic world to the digital world of work.

Digital transformation brings implications for increasing uncertainty in getting a first job for higher education graduates. The job market increasingly demands graduates with the skills and abilities to undertake innovative actions and adapt to new technologies (García-Pérez, et al., 2021; Li, 2022), thus providing a competitive advantage in the workplace. Employability skills are important for students after completing their studies (Pereira, et al., 2019; Scott, et al., 2019; Succi & Canovi, 2020), as they play a role in securing opportunities to get a first job and maintain or become more successful in the workplace. Graduate employability is a critical aspect of higher education (Monteiro, et al., 2021; Tight, 2023), where institutions must ensure that they produce graduates who are ready to enter the competitive job market (Lauder & Mayhew, 2020). The concept of graduate employability has emerged as a major focus of policy research in the context of preparing graduates to enter the workforce.

Graduate employability refers to the ability of graduates to successfully transition from academic life to the world of work. It encompasses a combination of knowledge, skills, and attitudes that enable graduates to engage actively in the workplace and contribute meaningfully to the achievement of corporate goals (Herbert, et al., 2020; Pandya, et al., 2021; Prikshat, et al., 2020). The dimensions of graduate work readiness include intellectual resources, personality resources, meta-skill resources, and job-specific resources, career management, and workplace awareness (Prikshat, et al., 2019; Winterton & Turner, 2019). These dimensions are used to measure the level of graduate readiness to move from academic life to professional work.

In order to transition effectively, graduates need to be equipped with various skills, both technical in a particular field of work and non-technical skills. In addition to having specific job skills, the job market also needs graduates with generic skills and personal qualities that are transferable to all fields and levels of employment, and necessary for career success in the workplace (Hossain, et al., 2020; Römgens, et al., 2020). Non-technical skills or also called generic skills are abilities that are not specific to any one job, or occupation, but are broadly applicable across a wide range of roles and life contexts. Communication skills, self-management, problem solving, teamwork, creativity and innovation, organizational skills, technological skills, adaptability and understanding of workplace dynamics are some of the generic skills desired by employers (Mwita, et al., 2023; Phan, et al., 2020; Suarta, et al., 2024). These skills are important instruments in measuring the readiness of graduates to enter the world of work.

Literature and empirical studies on graduate work readiness reveal several persistent gaps. Skills gaps occur when there is a mismatch between the competencies required for a particular job and the abilities that graduates possess (Chinn, et al., 2020; Noor, et al., 2024). The dynamics of the skills gap are always evolving in line with economic and technological advances (Galera, et al., 2022). The skills gap is also triggered by digital transformation which has implications for the emergence of various new skills needed by the world of work (van

Laar, et al., 2020). The existing skills gap coupled with emerging skills in the digital era can exacerbate the skills gap, ultimately resulting in a decline in the level of graduates' readiness to enter the workforce.

Recent research on graduate employability highlights aspects such as skills for entering the workforce (Behle, 2020), demand for skills by the labour market (Schneider & Pilz, 2024), perceptions of graduate employability and industry assessments (García-Aracil, et al., 2021; Succi & Canovi, 2020), and work-based learning (Björck, 2021; Herbert, et al., 2020). These studies show that although graduates have strong theoretical knowledge, they often lack practical skills and employability that are critical to success in the digital labour market (Benati, et al., 2021; Ng, et al., 2021). In the eyes of employers, communication, problem-solving and self-management skills are important to improve. In addition, several studies also highlight the importance of digital skills to support graduates' work readiness (Aničić, et al., 2023; Polakova, et al., 2023). These various skills need to be studied further to obtain a more comprehensive graduate work readiness framework.

Although there has been a lot of research on graduates' work readiness, systematic studies are still needed to develop a conceptual framework for work readiness in the digital era. Digital era work readiness must be understood as a multidimensional construct that includes technical knowledge and skills in a particular field, as well as non-technical skills such as communication skills, teamwork, adaptability, and problem solving, in addition to an understanding of digital technology (Giang, et al., 2021; Peersia, et al., 2024; Potgieter, et al., 2023). The integration of digital skills into the work readiness framework is the main issue of this study. This study synthesizes various aspects of digital era work readiness and expands the determinants for measuring graduates' work readiness.

Based on the existing gaps, this study focuses on reconstructing the conceptual framework of graduate work readiness in the digital era and formulating the determining factors that contribute to its improvement. In this regard, the research questions are as follows:

RQ1: What is the conceptual framework of graduate work readiness in the digital era?

RQ2: What are the determining factors that contribute to improving graduate work readiness in the digital era?

This study aims to reconstruct the conceptual framework of work readiness and uncover the key dimensions of graduate work readiness to enable them to transition effectively in the digital era. Furthermore, this study also aims to formulate the determining factors that contribute to improving graduate work readiness. This study offers a novel conceptual framework of work readiness from the perspective of the digital world of work, including the determining factors, as well as the practical implications of graduate work readiness in the digital era. This research provides a comprehensive framework for further empirical investigation and policy development. This conceptual framework can be used as a reference by policymakers to align educational outcomes with employer expectations.

Methodology

The research was conducted using a qualitative approach using the systematic literature review (SLR) method. SLR is a systematic and structured research method for compiling, evaluating, and synthesizing relevant literature within a specific knowledge domain or research topic (Newman & Gough, 2020; Snyder, 2019; Xiao & Watson, 2019). SLR provides a comprehensive overview of existing knowledge in a particular research area so that it can be used as a basis for decision making and further research (Brunelli, et al., 2023; Christensen, et al., 2021; Jaramillo, et al., 2019), can answer questions that cannot be answered through individual studies, can identify problems in primary research that must be addressed in further research, and can generate or evaluate theories about how or why phenomena occur (Page, et al., 2021).

The SLR design in this study adapted the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page, et al., 2021) and several SLR methods in other studies (Fisch & Block, 2018; Han, et al., 2023; Tushar & Sooraksa, 2023). PRISMA has been widely accepted by researchers because it provides a standard protocol for conducting academic manuscript reviews through several rigorous stages. Figure 1 illustrates the application of SLR in this study, which is divided into three main stages: identification, screening, and inclusion.

This study focuses on examining the concepts and determinants of graduate work readiness in the digital era. Therefore, during the manuscript identification stage, search keywords were determined, including: graduate work readiness, graduate job readiness, and graduate employability. This study utilized open access publications from the Science Direct and Taylor & Francis databases, considering the publication's reputation and coverage of social science subject areas such as Business, Management, Accounting, and Education. To ensure research novelty, this study reviewed literature published between 2020 and 2025. The advanced search function was used to focus the search according to the criteria used. Search parameters, including inclusion criteria and the rationale for their use, are presented in Table 1. Although papers were limited to English-language publications, we did not exclude studies based on their geographic location.

Table 1

Systematic literature review inclusion criteria

Criteria	Identified parameters for inclusion	Rationale
Database	Science Direct and Taylor&Francis	Selected based on journal reputation and covering a wide range of subject areas in the relevant literature.
Year of publication	2020 –2025	This study focuses on the synthesis of graduates' work readiness in the digital age - a relatively new era - and illustrates the novelty of the research.
Publication type	Research article	Inclusion of all research articles relevant to the focus of the study.
Publication titles	Social Science and Education in field Business, Management, and Accounting	So that the manuscript search does not extend to other fields, the scope of publication is limited to journals that are relevant to the study topic.

Language	English	One of the official languages of the UN commonly used in scientific publications.
Relevance	The article should focus on graduate work readiness, graduate job readiness, and graduate employability, as well as provide clear definitions of the terms.	Graduate work readiness, graduate job readiness, and graduate employability should be the main focus of the article, with clear definitions of the concepts.

Based on the criteria in Table 1, 79 manuscripts were obtained from the Science Direct database and 85 manuscripts from the Taylor & Francis database. From these two databases, 25 manuscripts were identical, leaving 139 manuscripts ready to be screened through review of titles, abstracts, keywords, and relevance to the research question. To avoid subjectivity, the manuscript screening activity was assisted by two other researchers. The screening results from each researcher were then compared and selected manuscripts that were truly relevant to the research question. At this stage, only 20 manuscripts remained. Because the number of remaining manuscripts was insufficient, the author added four manuscripts with high relevance taken from the Google Scholar database. This resulted in 24 manuscripts for further analysis.

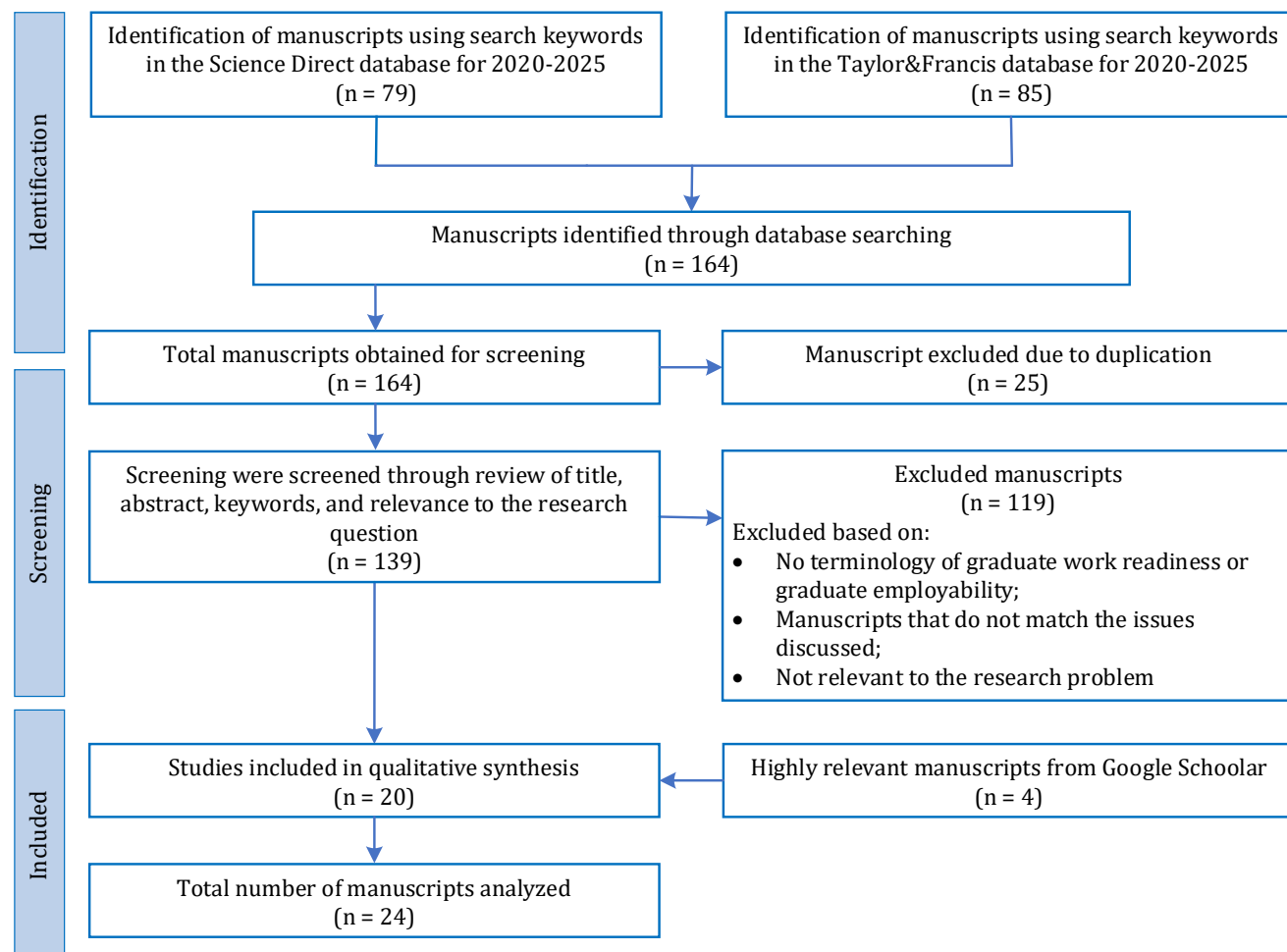


Fig 1. Systematic literature review flowchart (adapted from PRISMA 2020)

Results and Analysis

Characteristics of Manuscripts

Table 2 shows a summary of selected research reviewed from the journal name, reputation, and year of publication. Based on the selection criteria, the selected journals are included in the fields of Social Science and Education in the field of Business, Management, and Accounting, with a reputation mostly indexed by Scopus Q1 and Q2.

Table 2

Journal name, reputation, and year of publication

Publication Description		Frequenc y	Percentag e
Name of Journal	Accounting Education	3	13%
	European Management Journal	1	4%
	HCMCOUJS-Social Sciences	1	4%
	Higher Education Research & Development	1	4%
	Journal of Education Policy	1	4%
	Journal of Further and Higher Education	2	8%
	Journal of Higher Education Policy and Management	1	4%
	Journal of Learning Development in Higher Education	1	4%
	Project Leadership and Society	1	4%
	Social Sciences & Humanities Open	3	13%
	Studies in Higher Education	4	17%
	Cogent Business & Management	1	4%
	Higher Education, Skills and Work-Based Learning	2	8%
	Journal of Education and Work	1	4%
	Research in Post-Compulsory Education	1	4%
Total Selected Manuscript		24	100%
Year of Issued	2020	1	4%
	2021	1	4%
	2022	3	13%
	2023	4	17%
	2024	10	42%
	2025	5	21%
Total Selected Manuscript		24	100%
Journal Rankings	Scopus - Q1	17	71%
	Scopus - Q2	5	21%
	Scopus - Q3	0	0%
	Scopus - Q4	0	0%
	Non-Scopus	2	8%
Total Selected Manuscript		24	100%

The three journals with the most manuscripts, namely Accounting Education, Social Sciences & Humanities Open, and Studies in Higher Education are journals with high reputation indexed in the SCOPUS Q1 database with SJR 2024 above 0.6. The scope of the three journals includes aspects of management and performance of higher education institutions, aspects of education and training policies, curriculum issues, teaching and learning in the fields of social sciences, economics, and humanities as well as the contribution

of higher education to society and the economy. The aims and scope of the selected journals have very high relevance to the issues discussed in this manuscript.

Terminology Findings in Keywords and Abstracts

Of the 24 manuscripts, 125 keywords were identified. These keywords were then selected based on their relevance to the study focus. Fifty-eight (46%) keywords were relevant to the study focus, with the remainder being general keywords related to the titles of each manuscript. These relevant keywords were then clustered based on their proximity to meaning (Figure 2). These findings indicate that the concept of graduate work readiness is related to employability, technical skills mastery, digital skills, soft skills, and confidence in one's ability to work.

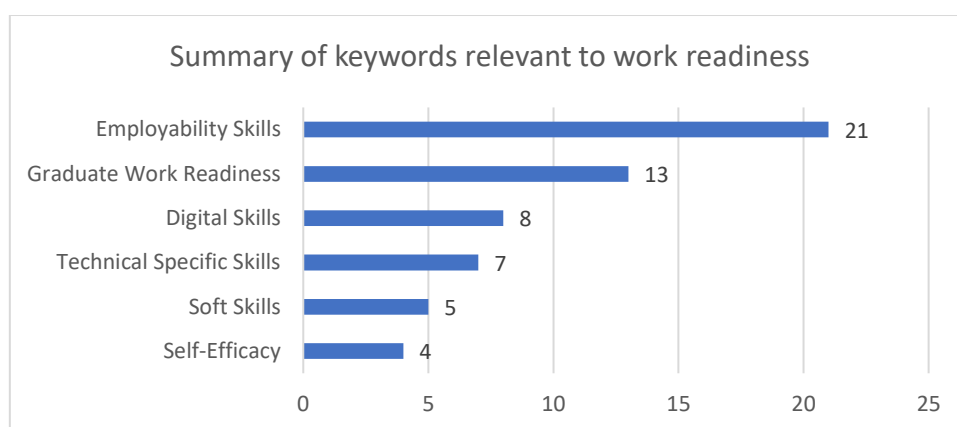


Fig 2. Summary of findings in keywords relevant to work readiness

The next step was to extract words from the abstract that were relevant to the study's focus. A total of 192 words or word combinations were successfully extracted. Each relevant word was then tabulated and grouped into key terms based on similarities in meaning and significance (Figure 3). These findings indicate that the concept of graduate work readiness is built on the construction of work capabilities identified from various technical and non-technical skills, attitudes, behaviours, and self-confidence. The digital era also requires graduates to possess digital literacy and skills consistent with their work focus.

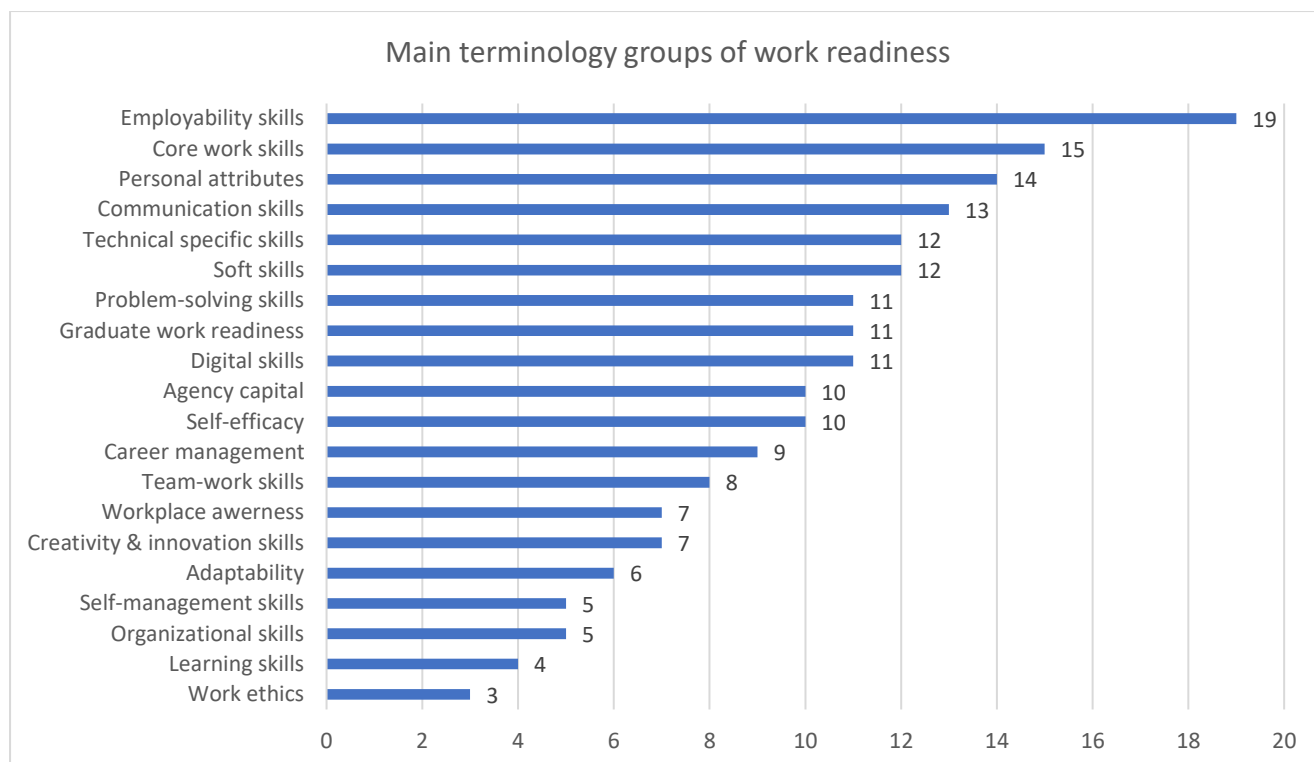


Fig 3. Key terminology groups of words in the abstract relevant to work readiness

Discussion

A Conceptual Exploration of Graduates' Work Readiness

Graduate work readiness is a major challenge for educational institutions in the digital era. Digital transformation has brought about various changes in the world of work, thus impacting graduate job readiness. Graduate job readiness is about preparing to enter the workforce immediately after graduation, with a focus on the skills and attitudes needed for a smooth transition. The results of the literature review indicate that job readiness is defined as graduates' confidence in finding jobs that match their study interests, characterized by a set of competencies, knowledge, and attitudes to facilitate their active participation in the job market and contribute to the overall goals of the organization (Pham, 2024; Potgieter, et al., 2023). In some literature, graduate work readiness is also called work preparedness or workforce readiness or graduate employability, referring to the level at which graduates have certain knowledge, skills, attitudes and attributes that contribute to increasing productivity and efficiency in the workplace, and enable them to succeed in the work environment (Kholifah, et al., 2025; Smaldone, et al., 2022). Based on these concepts, graduate work readiness has a fairly broad and complex meaning, and is increasingly needed in developing the abilities of higher education graduates.

The complexity of the concept of graduate work readiness is reflected in the many variations in dimensions used to measure graduate work readiness. Research conducted by Adegbite (2024), graduate employability was assessed with 23-item four-proxy variables, including complex problem-solving skills, people management skills, analytical and critical thinking skills, and adaptability skills. In his research, Gilbert, et al. (2022) measured graduate employability using 20 questions divided into six dimensions: lifelong learning, integration of theory and practice, commencement readiness, informed decision making, collaboration, and professional practice and standards. Other literature also states that the conceptual model of

graduate attributes for employability describes the combination of discipline-specific skills, generic skills, self-management skills and career building skills (Wimer & Bohndick, 2023). Meanwhile Prikshat, et al. (2019) proposed that graduates' work readiness be measured using four main factors which include: intellectual resources, personality, meta-skills and job-specific. Each of these main factors is broken down into ten sub-dimensions encompassing various skills such as: basic and cognitive skills, innovation and creativity skills, leadership, and self-management. Information technology skills, teamwork, communication, and systems-thinking skills serve as proxies for meta-skills. Meanwhile, job-specific skills describe core skills in a particular field of work. Based on these studies, graduate work readiness is a multi-dimensional concept that reflects the knowledge, skills, attitudes, and other personal attributes needed for success in the workplace.

From an academic perspective, graduate work readiness is a crucial indicator for measuring the success of an education system in equipping students with the skills, attitudes, and other attributes that enable them to transition successfully into the workforce. The review of 24 manuscripts in this study illustrates the importance of preparing graduates with technical skills in specific occupations (Twyford & Dean, 2024), generic skills (Zahn, et al., 2025), professional attitude (Zhao & Cox, 2022). The digital era also requires graduates to have digital knowledge and literacy (Tsiligiris & Bowyer, 2021). Higher education institutions face much criticism for producing graduates with competencies that are less relevant to the needs of today's workforce.

Employers view work readiness as an indicator of a graduate's potential to consistently perform at required levels with minimal supervision, contribute to the company's progress, and have the potential for further development. In this context, employers see the importance of graduates possessing self-management, communication, teamwork, cognitive skills, systems thinking, and innovation and creativity (Prikshat, et al., 2020). Other studies also show that employers want graduates to possess communication skills, teamwork and collaboration, problem-solving, digital skills, and traits such as honesty and integrity, hard work and willingness to go the extra mile, achievement orientation, adaptability, and so on. Based on these various studies, this study synthesizes graduates' work readiness measured using the following dimensions: core work skills, personal work characteristics, career self-management, workplace awareness, adaptability, and digital literacy. Knowledge of future careers and workplace awareness are important indicators in measuring graduates' work readiness.

Determinants Factor of Graduates' Work Readiness

Based on the findings of the literature review, the determining factors of graduates' work readiness are grouped into: technical specific skills, employability skills, digital skills, self-efficacy, and identity capital (Figure 4).

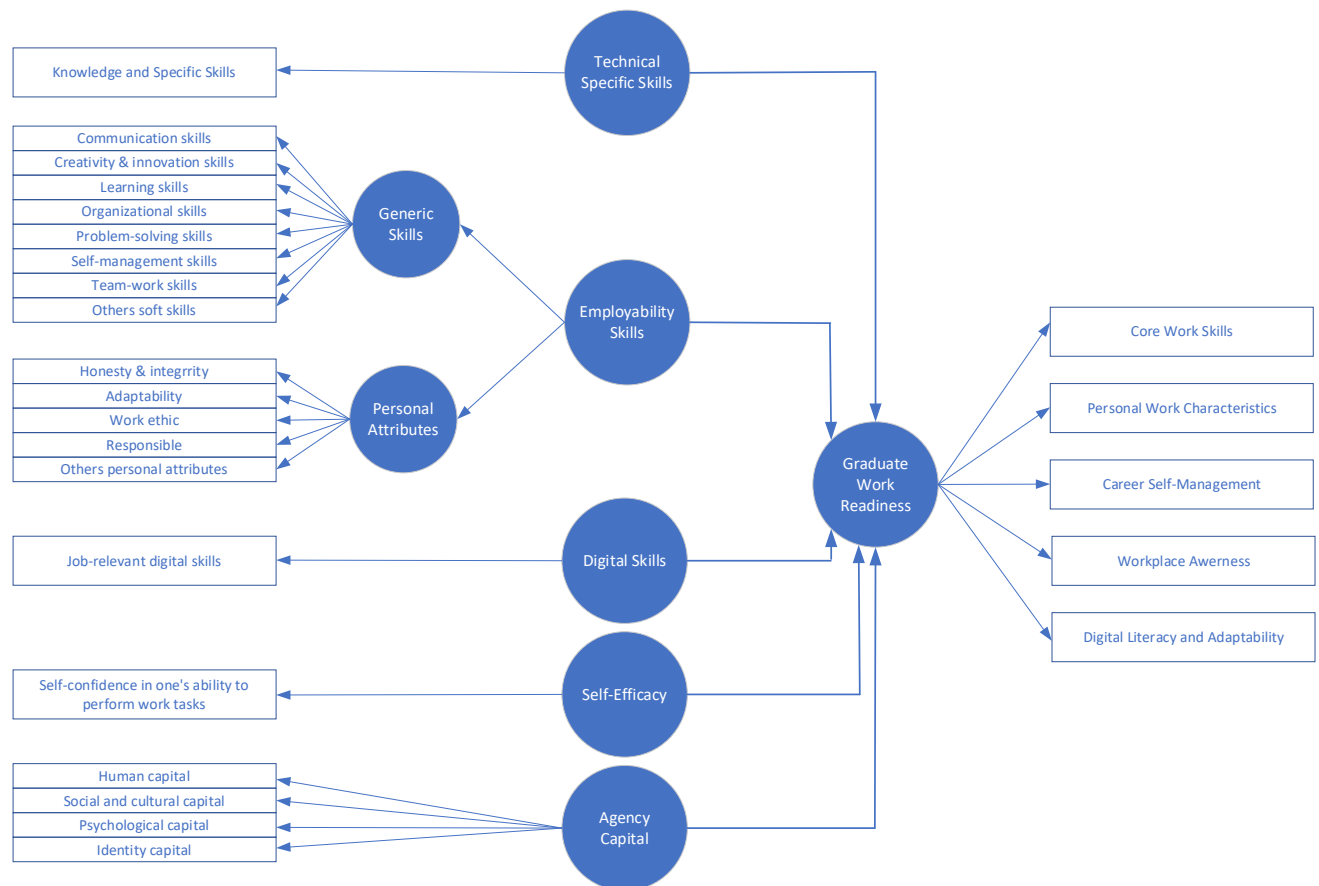


Fig 4. Proposed factors determining graduates' work readiness

Technical Specific Skills

Specific technical skills are the specialized, practical abilities required to perform specific tasks related to a job or profession. These skills are acquired through education, training, or direct work experience in the industry. To pursue a career in a specific field, a graduate needs adequate technical knowledge and skills (Smaldone, et al., 2022; Twyford & Dean, 2024; Wimer & Bohndick, 2023). These skills are often referred to as hard skills because they are associated with the ability to perform work tasks using specialized tools or processes. These skills are fundamental to career success in almost any profession.

Employability Skills

Employability skills have been identified as a crucial indicator of graduates' work readiness, particularly in enhancing competitiveness, productivity, and long-term career development. Discourse on employability skills is found in nearly all texts from various perspectives. In the context of educational institutions, employability skills are discussed as a central issue in institutional efforts to address the challenges of industrial advancement through improvements to learning systems and processes (Baron & McCormack, 2024; Kercher, et al., 2025; Martinussen & Mulcahy, 2024; Tsiligiris & Bowyer, 2021; Twyford & Dean, 2024). Educational institutions can develop employability skills through various means, such as developing a roadmap to align the curriculum with developments in the world of work, increasing educator capacity in using learning methods to develop students' employability skills, and embedding employability skills in the syllabus and curriculum.

Communication skills, critical thinking and problem solving, teamwork skills, self-management, creativity and innovation, organizational and learning skills, and learning skills have been identified as the main elements of employability skills (Kercher, et al., 2025; Kovačević, et al., 2024; Pereira, et al., 2019; Prikshat, et al., 2020; Tight, 2023; Twyford & Dean, 2024; Zhao & Cox, 2022). Besides that, personal attributes such as curiosity, initiative, persistence, and adaptability, and emotional intelligence, ethical and responsible behaviour are also identified as elements of employability skills (Kercher, et al., 2025; Zhao & Cox, 2022). These attributes describe individual qualities that support their readiness to enter the workforce. In the context of this study, the authors articulate employability skills as a combination of two main indicators: generic skills and personal attributes. Generic skills are a set of abilities that are not specific to a particular job, field, or industry but can be applied broadly across various roles and can be transferred to other sectors. Personal attributes describe the characteristics, traits, and qualities that define each individual's character.

Digital Skills

Digital skills are the abilities needed to use digital technology effectively in the workplace. Studies Adegbite (2024) highlight the importance of digital literacy skills for students' readiness for future jobs. In accounting and business, a variety of digital skills are needed (Suarta & Suwintana, 2021; Teng, et al., 2019), ranging from basic to advanced digital technology skills. Digital skills are one of the competencies required by future accountants (Nie & Mastor, 2024; Tsiligiris & Bowyer, 2021), making them crucial for their development to address gaps in the technology-based workforce. Digital communication and collaboration skills, as well as digital creativity and innovation, are increasingly needed in the digital era (Kholifah, et al., 2025). The increasing need for digital skills encourages educational institutions to address this challenge through curriculum development to improve graduate readiness for the digital workforce.

Self-Efficacy

Self-efficacy is an individual's belief in their ability to perform certain actions or complete certain tasks. This concept was introduced by Albert Bandura as part of social cognitive theory (Bandura, 1986). In the context of the transition from academia to the workplace, it plays a crucial role because it influences employability and career development (Kovačević, et al., 2024). There is a reciprocal relationship between self-efficacy, employability, work readiness, and career development. A person's belief that they have the skills to complete a specific task influences their perception of work readiness (Borg, et al., 2025; Huang, et al., 2024). Self-efficacy can mediate employability skills in improving graduates' work readiness (Honicke, et al., 2020; Royston & Reiter-Palmon, 2019; Zhan, et al., 2024). Graduates with high levels of self-efficacy are more confident in overcoming work-related challenges.

Agency Capital

Employability skills are also identified as agency capital that bridges graduates into the workforce. This capital includes human capital, cultural and social capital, identity, and psychological capital (Kovačević, et al., 2024; Pham, et al., 2024). These various forms of capital play a crucial role at various stages of graduates' career development. Social and cultural capital emerge as crucial elements when graduates seek opportunities to enter the labour market. These forms of capital enable graduates to mobilize their human capital. However, to overcome workplace barriers, a sound understanding of work culture becomes

a 'must' as graduates struggle to understand the hidden rules and conventions of the labour market.

Conclusion and Recommendation

The findings of this study conclude that the concept of graduate job readiness in the digital era is a multidimensional construct focusing on the combination of skills, knowledge, attitudes, personal qualities, workplace awareness, and digital competencies required for graduates to participate effectively in the workforce. These dimensions need to be developed and validated so they can be used as an instrument to measure graduate job readiness. This study also identified and analysed the determinants of graduates' work readiness, including: technical skills in specific occupations, employability skills, digital skills, self-efficacy, and agency capital. Each of these factors contributes to improving graduates' work readiness.

This study recommends that educational institutions facilitate a smooth transition from academia to the workplace. Integrating various determinants into the curriculum and providing ample opportunities for work experience are highly recommended to ensure graduates are prepared for the digital age. Further research is needed to support institutions in developing policies to strengthen graduates' work readiness.

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References

- Adegbite, W. M. (2024). Unpacking mediation and moderating effect of digital literacy and life-career knowledge in the relationship between work-integrated learning and graduate employability. *Social Sciences & Humanities Open*, 10, Article No. 101161. doi:<https://doi.org/10.1016/j.ssaho.2024.101161>
- Aničić, K. P., Munđar, J. G., & Šimić, D. (2023). Generic and digital competences for employability — results of a Croatian national graduates survey. *Higher Education*, 86(October), 407–427. doi:<https://doi.org/10.1007/s10734-022-00940-7>
- Baiyere, A., Salmela, H., & Tapanainen, T. (2020). Digital transformation and the new logics of business process management. *European Journal of Information Systems*, 29(3), 238–259. doi:<https://doi.org/10.1080/0960085X.2020.1718007>
- Baron, P., & McCormack, S. (2024). Employable me: Australian higher education and the employability agenda. *Journal of Higher Education Policy and Management*, 46(3), 257–273. doi:<https://doi.org/10.1080/1360080X.2024.2344133>
- Behle, H. (2020). Students' and graduates' employability. A framework to classify and measure employability gain. *Policy Reviews in Higher Education*, 4(1), 105–130. doi:<https://doi.org/10.1080/23322969.2020.1712662>

- Benati, K., Lindasy, S., & Fischer, J. (2021). Applying theory in practice: views of graduating business students. *Education + Training*, 63(9), 1213-1224. doi:<https://doi.org/10.1108/ET-07-2020-0197>
- Björck, V. (2021). Taking issue with how the Work-integrated Learning discourse ascribes a dualistic meaning to graduate employability. *Higher Education*, 82(2), 307-322. doi:<https://doi.org/10.1007/s10734-020-00650-y>
- Brunelli, S., Sciascia, S., & Baù, M. (2023). Nonfinancial reporting in family firms: A systematic review and agenda for future research. *Business Strategy and the Environment*, 32. doi:10.1002/bse.3484
- Chinn, D., Hieronimus, S., Kirchherr, J., & Klier, J. (2020). *The future is now: Closing the skills gap in Europe's public sector*. McKinsey & Co. Retrieved from <https://www.mckinsey.com.br/>
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: economic analysis and literature review. *Review of Accounting Studies*, 26(3), 1176-1248. doi:10.1007/s11142-021-09609-5
- Dou, B., Guo, S., Chang, X., & Wang, Y. (2023). Corporate digital transformation and labor structure upgrading. *International Review of Financial Analysis*, 90(November), Article No. 102904. doi:<https://doi.org/10.1016/j.irfa.2023.102904>
- Ekman, P., Thilenius, P., Thompson, S., & Whitaker, J. (2020). Digital transformation of global business processes: the role of dual embeddedness. *Business Process Management Journal*, 26(2), 570-592. doi:<https://doi.org/10.1108/BPMJ-02-2019-0080>
- Faina, I., & Almeida, F. (2020). Key Competencies for Digital Transformation in Workplace. In F. Matos, V. Vairinhos, I. Salavisa, L. Edvinsson, & M. Massaro, *Knowledge, People, and Digital Transformation: Approaches for a Sustainable Future* (pp. 219-234). Switzerland: Springer Nature. doi:https://doi.org/10.1007/978-3-030-40390-4_14
- Fisch, C., & Block, J. (2018). Six tips for your (systematic) literature review in business and management research. *Management Review Quarterly*, 68, 103-106. doi:[doi:doi.org/10.1007/s11301-018-0142-x](https://doi.org/10.1007/s11301-018-0142-x)
- Fonseca, P., & Picoto, W. (2020). The competencies needed for digital transformation. *The Online Journal of Applied Knowledge Management*, 8(2), 53 - 70. doi:[https://doi.org/10.36965/OJAKM.2020.8\(2\)53-70](https://doi.org/10.36965/OJAKM.2020.8(2)53-70)
- Galera, G., Carini, C., Franchini, B., Tallarini, G., Signoretti, A., Bossuyt, L., . . . Baturina, D. (2022). *Report on trends and challenges for work integration social enterprises (WISEs) in Europe: Current situation of skills gaps, especially in the digital area*. Brussels: B-WISE Project. Retrieved from <https://www.bwiseproject.eu/en/results>
- García-Aracil, A., Monteiro, S., & Almeida, L. S. (2021). Students' perceptions of their preparedness for transition to work after graduation. *Active Learning in Higher Education*, 22, 49-62. doi:<https://doi.org/10.1177/1469787418791026>
- García-Pérez, L., García-Garnica, M., & Olmedo-Moreno, E. M. (2021). Skills for a Working Future: How to Bring about Professional Success from the Educational Setting. *Education Sciences*, 11(1), 103 - 127. doi:<https://doi.org/10.3390/educsci11010027>
- Giang, N. T., Hai, P. T., Tu, N. T., & Tan, P. X. (2021). Exploring the Readiness for Digital Transformation in a Higher Education Institution towards Industrial Revolution 4.0. *International Journal Engineering Pedagogy*, 11(2), 4-24. doi:<https://doi.org/10.3991/ijep.v11i2.17515>

- Gilbert, G., Turner, M., & Haass, O. (2022). Working up to work: Perceived employability of students commencing a project management degree. *Project Leadership and Society*, 3(December), Article No. 100048. doi:<https://doi.org/10.1016/j.plas.2022.100048>
- Han, H., Shiwakoti, R. K., Jarvis, R., Mordi, C., & Botchie, D. (2023). Accounting and auditing with blockchain technology and artificial Intelligence: A literature review. *International Journal of Accounting Information Systems*, 48, 1-16. doi:[10.1016/j.accinf.2022.100598](https://doi.org/10.1016/j.accinf.2022.100598)
- Herbert, I. P., Rothwell, A. T., Glover, J. L., & Lamber, S. A. (2020). Graduate employability, employment prospects and work-readiness in the changing field of professional work. *The International Journal of Management Education*, 18(2), Article No. 100378. doi:[10.1016/j.ijme.2020.100378](https://doi.org/10.1016/j.ijme.2020.100378)
- Hetmańczyk, P. (2024). Digitalization and its impact on labour market and education. Selected aspects. *Education and Information Technologies*, 29(9), 11119–11134. doi:<https://doi.org/10.1007/s10639-023-12203-8>
- Hossain, M. M., Alam, M., Alamgir, M., & Salat, A. (2020). Factors affecting business graduates' employability—empirical evidence using partial least squares (PLS). *Education + Training*, 62(3), 292-310. doi:<https://doi.org/10.1108/ET-12-2018-0258>
- Jaramillo, J. Á., Sossa, J. W., & Mendoza, G. L. (2019). Barriers to sustainability for small and medium enterprises in the framework of sustainable development—Literature review. *Business Strategy and the Environment*, 28(4), 512–524. doi:[10.1002/bse.2261](https://doi.org/10.1002/bse.2261)
- Kalleberg, A. L. (2020). Labor Market Uncertainties and Youth Labor Force Experiences: Lessons Learned. *The ANNALS of the American Academy of Political and Social Science*, 688(1), 258-270. doi:<https://doi.org/10.1177/0002716220913861>
- Kercher, K., Todd, J., Gill, C., Bennet, D., & Gepp, A. (2025). An investigation into accounting and business students' employability beliefs. *Accounting Education*, 34(3), 321-344. doi:<https://doi.org/10.1080/09639284.2024.2332678>
- Kholifah, N., Nurtanto, M., Sutrisno, V. L., Majid, N. W., Subakti, H., Daryono, R. W., & Achmadi, A. (2025). Unlocking workforce readiness through digital employability skills in vocational education Graduates: A PLS-SEM analysis based on human capital Theory. *Social Sciences & Humanities Open*, 11, Article No. 101625. doi:<https://doi.org/10.1016/j.ssaho.2025.101625>
- Kovačević, M., Dekker, T. J., & van der Velden, R. (2024). Employability development in undergraduate programmes: how different is liberal arts education? *Teaching in Higher Education*, 29(8), 2184-2204. doi:<https://doi.org/10.1080/13562517.2023.2212602>
- Lauder, H., & Mayhew, K. (2020). Higher education and the labour market: an introduction. *Oxford Review of Education*, 46(1), 1-9. doi:<https://doi.org/10.1080/03054985.2019.1699714>
- Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and Beyond. *Information Systems Frontiers*, 26(5), 1697–1712. doi:<https://doi.org/10.1007/s10796-022-10308-y>
- Martinussen, M., & Mulcahy, D. (2024). Working-class student-hood and 'job-readiness': Affective relations of class, gender and employability policy in higher education. *Journal of Education Policy*, 39(4), 583-601. doi:<https://doi.org/10.1080/02680939.2023.2228755>
- Monteiro, S., Almeida, L., & García-Aracil, A. (2021). "It's a very different world": work transition and employability of higher education graduates. *Higher Education, Skills and Work-Based Learning*, 11(1), 164-181. doi:<https://doi.org/10.1108/HESWBL-10-2019-0141>

- Mwita, K. M., Kinunda, S., Obwolo, S., & Mwilongo, N. H. (2023). Soft skills development in higher education institutions: students' perceived role of universities and students' self-initiatives in bridging the soft skills gap. *International Journal of Research in Business & Social Science*, 12(3), 505-513. doi:10.20525/ijrbs.v12i3.2435
- Newman, M., & Gough, D. (2020). Systematic Reviews in Educational Research. In O. Zawacki-Richter, M. Kerres, S. Bedenlier, M. Bond, & K. Buntins, *Systematic Reviews in Educational Research: Methodology, Perspectives and Application* (pp. 3-22). Germany: Springer VS. doi:doi.org/10.1007/978-3-658-27602-7_1
- Ng, P. M., Chan, J. K., Wut, T. M., Lo, M. F., & Szeto, I. (2021). What makes better career opportunities for young graduates? Examining acquired employability skills in higher education institutions. *Education + Training*, 63(6), 852-871. doi:https://doi.org/10.1108/ET-08-2020-0231
- Nie, Y., & Mastor, N. H. (2024). Accounting employability: a systematic review of skills, challenges, and initiatives. *Cogent Business & Management*, 11(1), Article No. 2433161. doi:https://doi.org/10.1080/23311975.2024.2433161
- Noor, N. N., Rodzalan, S. A., Abdullah, N. H., Saat, M. M., Othman, A., & Singh, H. (2024). Skills of future workforce: skills gap based on perspectives from academicians and industry players. *International Journal of Evaluation and Research in Education (IJERE)*, 13(2), 774-783. doi:10.11591/ijere.v13i2.25163
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., ..., & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372. doi:doi.org/10.1136/bmj.n71
- Pandya, B., Patterson, L., & Ruhi, U. (2021). The readiness of workforce for the world of work in 2030: perceptions of university students. *International Journal of Business Performance Management*, 23(1-2), 54-75. doi:https://doi.org/10.1504/IJBPM.2022.119555
- Peersia, K., Rappa, N. A., & Perry, L. B. (2024, August 12). *A new multidimensional graduate work readiness scale: An exploratory study of its factor structure and reliability*. doi:https://doi.org/10.21203/rs.3.rs-4886175/v1
- Pereira, E. T., Vilas-Boas, M., & Rebelo, C. C. (2019). Graduates' skills and employability: the view of students from different European countries. *Higher Education, Skills and Work-Based Learning*, 9(4), 758-774. doi:https://doi.org/10.1108/HESWBL-10-2018-0098
- Pham, L. T. (2024). Work readiness of graduates in the digital age: A literature review. *HCMCOUJS-Social Sciences*, 14(2), 120-128. doi:10.46223/HCMCOUJS.soci.en.14.2.2820.2024
- Pham, T., Soltani, B., & Singh, J. K. (2024). Employability capitals as essential resources for employment obtainment and career sustainability of international graduates. *Journal of Further and Higher Education*, 48(4), 436-448. doi:https://doi.org/10.1080/0309877X.2024.2344771
- Phan, D., Yapa, P., & Nguyen, H. T. (2020). Accounting graduate readiness for work: a case study of South East Asia. *Education + Training*, 63(3), 392-416. doi:10.1108/ET-02-2019-0036
- Polakova, M., Suleimanova, J. H., Madzík, P., Copus, L., Molnarova, I., & Polednova, J. (2023). Soft skills and their importance in the labour market under the conditions of Industry 5.0. *Heliyon*, 9(8), e18670. doi:https://doi.org/10.1016/j.heliyon.2023.e18670
- Popelo, O., Kychko, I., Tulchynska, S., Zhygalkevych, Z., & Treitiak, O. (2021). The Impact of Digitalization on the Forms Change of Employment and the Labor Market in the Context

- of the Information Economy Development. *International Journal of Computer Science & Network Security*, 21(5), 160-167. doi:<https://doi.org/10.22937/IJCSNS.2021.21.5.23>
- Potgieter, I. L., Coetzee, M., & Ferreira, N. (2023). University Students' Digital World of Work Readiness in Relation to Their Employability Competency. *Journal of Learning Development in Higher Education*, 27(April), 93-116. doi:<https://doi.org/10.47408/jldhe.vi27.922>
- Prikshat, V., Kumar, S., & Nankervis, A. (2019). Work-readiness integrated competence model: Conceptualisation and scale development. *Education + Training*, 61(5), 568-589. doi:10.1108/ET-05-2018-0114
- Prikshat, V., Montague, A., Connell, J., & Burgess, J. (2020). Australian graduates' work readiness – deficiencies, causes and potential solutions. *Higher Education, Skills and Work-Based Learning*, 10(2), 369-386. doi:<https://doi.org/10.1108/HESWBL-02-2019-0025>
- Qin, S., Liu, Z., Wang, J., & Wu, Y. (2024). The impact of digital transformation on labour demand quantity and structure: Evidence from China. *Economic Analysis and Policy*, 84(December), 1452-1469. doi:<https://doi.org/10.1016/j.eap.2024.10.036>
- Römgens, I., Scoupe, R., & Beusaert, S. (2020). Unraveling the concept of employability, bringing together research on employability in higher education and the workplace. *Studies in Higher Education*, 45(12), 2588-2603. doi:<https://doi.org/10.1080/03075079.2019.1623770>
- Schneider, S., & Pilz, M. (2024). India's labour market challenges: Employability of young workforce from the perspective of supply and demand. *PROSPECTS*, 54(3-4), 687–708. doi:<https://doi.org/10.1007/s11125-024-09691-y>
- Scott, F. J., Connell, P., Thomson, L. A., & Willison, D. (2019). Empowering students by enhancing their employability skills. *Journal of Further and Higher Education*, 43(5), 692-707. doi:<https://doi.org/10.1080/0309877X.2017.1394989>
- Smaldone, F., Ippolito, A., Lagger, J., & Pellicano, M. (2022). Employability skills: Profiling data scientists in the digital labour market. *European Management Journal*, 40(5), 671-684. doi:<https://doi.org/10.1016/j.emj.2022.05.005>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(November 2019), 333-339. doi:<https://doi.org/10.1016/j.jbusres.2019.07.039>
- Suarta, I. M., & Suwintana, I. K. (2021). The new framework of employability skills for digital business. *Journal of Physics: Conference Series: International Conference on Technology and Vocational Teachers (ICTVT) 2020*, 1833(2021), 012034. doi:10.1088/1742-6596/1833/1/012034
- Suarta, I. M., Suwintana, I. K., Sudiadnyani, I. G., & Sintadevi, N. P. (2024). Employability and digital technology: what skills employers want from accounting workers? *Accounting Education*, 33(3), 274-295. doi:10.1080/09639284.2023.2196665
- Succi, C., & Canovi, M. (2020). Soft skills to enhance graduate employability: comparing students and employers' perceptions. *Studies in Higher Education*, 45(9), 1834-1847. doi:<https://doi.org/10.1080/03075079.2019.1585420>
- Teng, W., Ma, C., Pahlevansharif, S., & Turner, J. J. (2019). Graduate readiness for the employment market of the 4th industrial revolution: The development of soft employability skills. *Education + Training*, 61(5), 590-604. doi:10.1108/ET-07-2018-0154
- Tight, M. (2023). Employability: a core role of higher education? *Research in Post-Compulsory Education*, 28(4), 551-571. doi:<https://doi.org/10.1080/13596748.2023.2253649>

- Tsiligiris, V., & Bowyer, D. (2021). Exploring the impact of 4IR on skills and personal qualities for future accountants: a proposed conceptual framework for university accounting education. *Accounting Education*, 30(4). doi:10.1080/09639284.2021.1938616
- Tushar, H., & Sooraksa, N. (2023). Global employability skills in the 21st century workplace: A semi-systematic literature review. *Heliyon*, 9(11), 1-14. doi:doi.org/10.1016/j.heliyon.2023.e21023
- Twyford, E., & Dean, B. A. (2024). Inviting students to talk the talk: developing employability skills in accounting education through industry-led experiences. *Accounting Education*, 33(3), 296-318. doi:https://doi.org/10.1080/09639284.2023.2191288
- van Laar, E., van Deursen, A. J., van Dijk, J. A., & de Haan, J. (2020). Determinants of 21st-Century Skills and 21st-Century Digital Skills for Workers: A Systematic Literature Review. *SAGE Open*, 10(1). doi:https://doi.org/10.1177/2158244019900176
- Wimer, A., & Bohndick, C. (2023). Employability models for higher education: A systematic literature review and analysis. *Social Sciences & Humanities Open*, 8(1), Article No. 100588. doi:https://doi.org/10.1016/j.ssaho.2023.100588
- Winterton, J., & Turner, J. J. (2019). Preparing graduates for work readiness: an overview and agenda. *Education + Training*, 61(5), 536-551. doi:https://doi.org/10.1108/ET-03-2019-0044
- Xiao, Y., & Watson, M. (2019). Guidance on Conducting a Systematic Literature Review. *Journal of Planning Education and Research*, 39(1), 93-112. doi:10.1177/0739456X17723971
- Zahn, E.-M., Schöbel, S., Saqr, M., & Söllner, M. (2025). Mapping soft skills and further research directions for higher education: a bibliometric approach with structural topic modelling. *Studies in Higher Education*, 50(6), 1055-1075. doi:https://doi.org/10.1080/03075079.2024.2361831
- Zhao, X., & Cox, A. (2022). Chinese students' study in the UK and employability: the views of Chinese employers, students and alumni, and UK teachers. *Journal of Education and Work*, 35(4), 422-440. doi:https://doi.org/10.1080/13639080.2022.2073339