

A SYSTEMATIC REVIEW OF INDONESIAN HIGHER EDUCATION STUDENTS' AND GRADUATES' WORK READINESS

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Abstract

This literature review aims to determine the work readiness of undergraduate graduates to meet the qualifications required by employers in the world of work. The method used in this paper involved searching for all studies that examined work readiness and were published from 2019 to 2023. 5 out of 200 studies found on Google Scholar and Scopus were included in this review. Research findings show that programs in higher education, including internships and soft skills training, play an important role in increasing graduates' work readiness, demonstrating that the MBKM Program has effectively developed the skills and competencies required by the world of work. Research discussions highlight that these programs, including internships and soft skills training within the MBKM Program, are crucial for ensuring the relevance of education to job market needs. This research presents novelty by exploring and identifying the factors that influence the job readiness of prospective undergraduate graduates after participating in the Independent Campus Learning Program (MBKM), thus offering a new perspective in the context of higher education in Indonesia. The implications of this research are significant for curriculum development and learning programs in universities, which must continue to develop programs that support the development of soft skills and hard skills to increase graduates' work readiness.

Keywords: High Education; MBKM; Systematic Review; Work Readiness



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INTRODUCTION

Developing countries focus on the potential utilization of natural resources in order to be able to increase regional economic growth (Wint and Williams, 2002). Indonesia as an agricultural country has a main development focus on the agricultural sector. Agricultural development is faced with the challenge of how to achieve economic growth so as to be able to increase farmers' income in a sustainable manner. The agricultural development paradigm must have goals that will be achieved if carried out with policies that are planned, implemented and comprehensively evaluated (Ministry of

Agriculture, 2020). The development process must be carried out through optimizing the use of natural resources in a sustainable manner with supervision and by paying attention to the potential impacts that result (Fifekova and Nemcova, 2015). The perspective of regional development through the utilization of potential natural resources as centers of economic growth is carried out to maintain and increase development in an equitable and balanced manner so that increased community economic productivity increases (Tamura et al., 2019). Developing the potential of a region requires several appropriate approaches so that the efforts made are efficient and effective (Adri et al., 2022).

The challenge of getting a job in the Society 5.0 era emphasizes the integration of human soft skills with advanced technologies such as AI and IoT in addressing social problems in both virtual and real environments (Warastri, 2023). These changes create a competitive landscape where graduates must be innovative, creative, and have a blend of soft and hard skills to utilize information technology effectively (Pang et al., 2019; Rainsbury et al., 2002). The role of higher education is crucial, demanding synergistic cooperation with business and industry sectors to ensure the relevance of educational programs (Rusdiana & Nasihudin, 2018). Thus, education transformation in Indonesia focuses on improving workforce competitiveness through the integration of practical skills and theoretical knowledge in vocational education and higher education, as described (Indrawati & Kuncoro, 2021). The transformation, which takes place from 2019 to 2024, aims to align educational outcomes with national goals to improve economic and industrial competitiveness on a global scale (Indrawati & Kuncoro, 2021).

Competition in the working world is increasingly competitive, it is imperative for college graduates to acquire relevant skills in order to thrive and achieve success (Mayorga, 2019). A new graduate experiences a transition from university to the workforce, from being a student to becoming a worker. They need to possess various skills or attributes to adapt to this new environment. These skills include the ability to work, organize, build relationships, and other attributes not typically acquired during their time in university. Verma et al., (2018) state that companies consider new graduates to lack practical skills. Additionally, Tulu (2017) states that new graduates have skills, knowledge, and practical experience that do not yet meet the expectations of companies.

Many new graduates still lack the skills, knowledge, and practical experience that align with company expectations (Sagita et al., 2020). Adequate skills are essential for graduates, especially those from vocational and undergraduate programs, to adapt to the workforce. Each individual graduate from vocational and undergraduate programs needs to understand both theoretical and practical concepts (Sagita et al., 2020). Several previous studies have shown that vocational and undergraduate graduates lack readiness for work, particularly in personal competence and social relations (ACNielsen Research Services, 2000; Casner-Lotto & Barrington, 2006; Gardner & Liu, 1997; Walker & Costa, 2017). The Australian Council For Educational Research by Hambur et al., (2002) also developed the concept of work readiness with several factors, such as critical thinking, problem solving, interpersonal, comprehension and written communication.

The importance of fulfilling the work readiness needs of graduates, especially at the SMK and S1 levels, and as a requirement and qualification for one of the stages in the selection process in companies, for this very urgent need to be able to assess work readiness systematically to become a construct. (Caballero and Walker 2010; Caballero et al., 2011). Not only that, work readiness can also be assessed from learners who do not know their field of work, interests and abilities (Sulastiana and Sulistiobudi, 2017). While this theory of work readiness is still in its early phases of study and development, it can be described as a parameter for measuring the extent to which graduates are judged to have the skills and attributes that make them 'ready' or 'prepared' for success in the world of work (Caballero and Walker 2010; Caballero et al., 2011). Based on personal attributes, namely the ability to build relationships, work competence, social intelligence, and organizational skills will be factors that determine work readiness (Caballero and Walker 2010; Caballero, Walker et al., 2011). In addition, research findings from Sagita et al., (2020) elaborates more comprehensively on the understanding of various work readiness factors (Caballero and Walker 2010; Caballero et al., 2011) personal characteristics are the way individuals perceive themselves in relation to various work situations. (Goleman, 1998). Organizational skills are knowledge about an organization that includes its protocols and practices in the work environment (McClelland, 1973). Job competency is one focus in looking at comprehensive strengths and competencies related to the job (McClelland, 1973). Social intelligence is the social skills and ways in which individuals adjust and interact in work situations (Boyatzis 1991; Sagita et al., 2020).

Exposure to work readiness factors according to Caballero et al., (2011); Caballero and Walker (2010); Sagita et al., (2020) are elaborated by research findings from Wijayanti (2019) which explain that there are several factors of work readiness, namely first, personal characteristics which include skills, abilities, knowledge, self-direction, adaptability and flexibility, second, organizational skills which include ethics or professionalism at work, social responsibility, global knowledge and self-direction or lifelong learning, third, work competencies which include critical thinking, organizational skills, creativity or innovation and problem solving, and fourth, social intelligence such as the ability to work together or collaborate in teams, adaptability, interpersonal or social skills and communication skills.

There are several research gaps regarding work readiness in various previous studies. Universities to continue to develop learning about soft skills to students so that their graduates can compete in the world of work on the readiness of accounting students is also influenced by spiritual intelligence (Afif & Arifin, 2022; Ayaturrahman & Rahayu, 2023). The importance of soft skills and self-efficacy in entering the world of work and can be used as preparatory material for final year students in shaping work readiness so that later after graduating from university and holding a bachelor's degree can have mature work readiness in entering the world of work (Azizah et al., 2021). The relationship between soft skills variables and work readiness, soft skills such as communication, teamwork, leadership, and problem solving, are essential for work readiness in today's complex work environment (Ritter et al., 2017).

Students' work readiness depends not only on their technical abilities but also their self-will, positive social environment (Bhadraswara, 2020). The strategy to increase the competence of Islamic economics graduates by optimizing the role of academic advisors, improving hard skills and soft skills, and synchronizing programs and curricula implemented by Islamic economics universities and Islamic banks (Zakiy, 2021). In addition, the most relevant skills for students' work readiness are oral communication and presentation skills, knowledge of internet marketing and software knowledge, teamwork, accuracy and attention to detail, and planning (Kovács & Zarádné, 2022). This is in line with research findings from Bosch & Rice (2022) there is a relationship between soft skills, hard skills and work readiness variables, in this research article shows that the lack of hard skills and soft skills of a worker often has a negative impact on organizational outcomes, such as employee engagement, safety, attendance, and retention.

In the world of work and profession, of course, it is necessary to have competence which is an absolute requirement and plays a very important role to support success (Muwarni et al., 2016). Other empirical evidence from research on student work readiness contains other variables including leadership style, managerial ability, self-efficacy, and learning achievement (Gunawan et al., 2019), soft skills, self-efficacy, work motivation and organizational activeness (Rahmadani, 2022), soft skills, organizational activeness (Sholikhah, 2022). Interesting previous empirical evidence findings on adversity quotient variables; soft skills; work readiness (Jasak et al., 2020). In previous research conducted by (Bijl & Shortridge-Baggett, EdD, RN, 2001) with coaching variables; employability competences; higher education; school-to-work transition; work readiness; workplace. Increasing soft competencies and personal hard competencies is supported by increasing self-efficacy (Sinaga, 2024). Then work readiness is indicated by the individual's ability to demonstrate the technical skills and interpersonal behavior needed for work (Overtoom, 2000).

The research has a novelty that relates the impact of implementing the Merdeka Belajar Kampus Merdeka (MBKM) Program on the work readiness of prospective undergraduate students in facing the world of work. Through this research, researchers try to describe and explain how the work readiness of undergraduate graduates is classified based on the competence and personality of each individual to face competition in the world of work. To find out the factors that influence the job readiness of prospective undergraduate graduates in Indonesia after participating in the Merdeka Belajar Kampus Merdeka Program.

Conceptualization of Work Readiness

In previous research, Work Readiness is a relatively new concept that has emerged in the literature as a selection criterion to predict graduate potential (ACNielsen Research Services, 2000; Casner-Lotto & Barrington, 2006; Gardner & Liu, 1997). Caballero & Walker (2010) define Work Readiness (WR) as the extent to which graduates possess attributes and attitudes that prepare them for success in the world of work. WR has been linked to graduates' performance potential, success, and

promotion potential (Prikshat et al., 2019; Walker & Campbell, 2013). However, there are inconsistent conceptualizations in the WR- related literature, both in terms of the terminology used (e.g., 'graduate employability', 'transferable skills', and 'job readiness') and what WR includes (Caballero et al., 2011).

As a construct, WR is supported by latent trait theory, which states that capabilities are not observable (latent). They do not exist in a physical or physiological sense, they are defined and constructed, and it is through the construction and interpretation of capabilities that observations can be interpreted or understood (Griffin, 1995). To address such conceptual differences, Sagita et al., (2020) developed an assessment tool, the Work Readiness Scale (WRS), to assess perceptions of WR. They surveyed undergraduate students (n = 118) from various disciplines and found that WR encapsulates four factors of work competence, personal characteristics, organizational acumen, and social intelligence. Applying a latent theory approach, WRS provides a description of WR that aids the observation and interpretation of WR, helping to distinguish between people based on the four dimensions of WR ability (Griffin, 1995). The results of this study prove that the factors in Caballero & Walker (2010) work readiness are appropriate in the context of new graduates' work readiness in Indonesia. The test results show that the items are interconnected and describe factors of work readiness and also factors that describe latent variables. The four dimensions of WR have been consistently confirmed in students and recent graduates in Indonesia (Sinaga, 2024). The idea that WR is a multidimensional concept is supported in the literature (Caballero & Walker, 2010; Hager & Holland, 2007; Jackson & Bridgstock, 2018). Given the increasing focus in HE on employability and the successful transition of graduates into the world of work, educational institutions play a critical role in developing work-ready individuals.

Bridging The Gap Between Higher Education and Industry

It is important to consider the extent to which the skills taught during higher education are transferable to industry-related jobs (Hager & Holland, 2007). In Indonesia, several studies related to work readiness for new graduates have been conducted. Sawitri & Dewi (2018) examined self perceived employability in university students. The researchers found that students perceive themselves to be able to get a job according to their qualifications when they have career aspirations and self-regulation. In addition, research from (Sulastiana & Sulistiobudi, 2017) examined psychological readiness, and work readiness training in improving the work readiness of new graduates. Research by Fathoni et al., (2019) considered improving competitiveness and work readiness with vocational school education programs for final year students. The results showed that work experience and longer schooling will increase competitiveness and work readiness. In addition, there are also studies regarding the antecedents and consequences of work readiness. Harahap & Sagala (2019) found that emotional intelligence affects work readiness in paramedical students. (Pratama & Sagala, 2018) found the effect of work readiness on career development in diploma and undergraduate students. However, no study has explicitly developed an instrument to measure the work readiness of new graduates and how new graduates perceive themselves to have attributes that indicate work readiness.

The Value of A Work-Ready Learning Environment

There are various work-integrated learning (WIL) opportunities, through embedded and co-curricular programs, that can be undertaken during higher education for students to develop their employability skills (Smith et al., 2018). Embedded programs are incorporated into students' formal curriculum, while co-curricular activities are outside of students' formal learning but can be organized by their university (Jackson & Bridgstock, 2018). WIL is an umbrella term that refers to approaches and strategies that engage students in meaningful industry and/or community engagement, designed to integrate theory with work practice (Jackson & Bridgstock, 2018; Rook & Sloan, 2021). These programs vary in design and industry. For example, non-placement-based WIL programs for chemical and food engineering students in Colombia (Reedy et al., 2020), clinical placements in healthcare (Newton, 2011), and internships for accounting students (Jackling & Natoli, 2015). Fleischmann (2015) reported that creative arts students (n=52) found on-campus WIL experiences beneficial for developing work-ready attributes and an understanding of professional practice. Similarly, final- year physical education students (n = 25) felt that the university-run mentoring program (i.e. Assessment and Mentoring Program) provided them with opportunities to develop work-ready attributes (Jenkinson & Benson, 2016). It is argued that students in these programs feel safer to make mistakes, with the

understanding that they are in a learning environment designed to develop WR skills relevant to their industry (Fleischmann, 2015; Hager & Holland, 2007).

Various studies have found graduate employability-focused learning environments enable students to develop their WR skills. For example, Dudley et al., (2020) assessed predictors of WR in Australian graduate nurses (n=75) after an 8-10 week placement. They found aspects of students' clinical learning environment (i.e., valuing nurses, innovative and adaptive culture, and individualization) significantly predicted two aspects of WR - work competence and organizational acumen (Dudley et al., 2020). Howieson & Rogers (2018) found that law students (n = 67) largely attributed increased knowledge and practical skills to the adopted experiential learning method (i.e., role-playing), followed by lectures and group presentations. These results demonstrate the impact of various contexts, developed through the WIL program, on students' perception of WR. Recently, there has been a demand for quantitative tools to assess the added value these programs have in developing WR skills (Jackson & Bridgstock, 2018).

RESEARCH METHOD

A systematic review was conducted to gather literature assessing the conceptualization of WR and the tools used to assess it, in students and graduates in Indonesia. The current systematic review was conducted in accordance with the Cochrane Collaboration Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009)). Inclusion and exclusion criteria were agreed upon by the research team. This research used a qualitative approach to carefully explore and document the evolving perceptions and experiences of individuals within a defined domain, integrating comprehensive narrative data that supported the thematic framework established in the systematic review. This approach allows for an in-depth examination of complex, context-dependent variables, which quantitative methods may not be able to fully capture. The research was conducted within a timeframe that aligns with the update cycles of the literature review, from December 2022 through November 2023. The geographical scope and specific settings of the research are tailored to the needs of the systematic review, potentially involving multiple locations where the included studies were conducted or applicable, ensuring a comprehensive understanding of the global or region-specific trends and practices within the field of study.

Especially for qualitative research, the time and place of research need to be clearly documented to provide context and enhance the validity and replicability of the findings. This requirement is also critical for quantitative studies to ensure the reliability of data across different settings and timeframes. This allows future researchers to understand the conditions under which the research was conducted and to potentially replicate the study in similar or varied environments to test the findings' consistency.

In this study, the research targets for qualitative analysis or the sample population for quantitative research are defined based on criteria that align with the systematic review's objectives. For qualitative research, participants were selected using purposive sampling to ensure that their experiences and insights directly relate to the phenomena under study. For quantitative research, a stratified sampling technique was employed to represent diverse subgroups within the population, ensuring comprehensive data collection. These methodologies enhance the relevance and depth of the findings, contributing significantly to the field of study. The researcher in the study conducted the inclusion and exclusion identification process which was used to select research articles and journals. Researchers searched for studies related to research topics from a single database online, namely google scholar and scopus. Researchers to help review research articles and journals use Publish or Perish software, which is software for systematic reviews. Systematic literature review research is conducted by searching for studies related to the topic, then determining the type and topic of the research report by setting inclusion and exclusion criteria with the PICO format as in the following table 1.

Table 1. Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Population	Graduates	In addition to Graduates
Intervention	Higher Education	In addition to Higher Education
Comparators	Graduates Attributes or Skills or Competencies	In addition to Graduates Attributes or Skills or Competencies
Outcomes	Measuring work readiness in graduates with the Work Readiness Scale (WRS).	
Study Design	All types of research	-
Publication Years	2019-2023	Other than 2019-2023
Language	Indonesian and English	In addition to Indonesian and English

In this study, data collection involved several methods. If a full-text article was unavailable, the researchers directly contacted the authors to access the needed information. Data taken from the research includes the author's name (year), research title, research objectives, population and sample, type of research, data collection and research findings. The data collection instruments used in this research are literature studies, conducting data assessment studies in journals related to work readiness obtained from <https://scholar.google.com> and <https://www.scopus.com/search/>. The reasons why to use Google Scholar and Scopus are: a) Google scholar and Scopus provide complete data; b) The required data is easy to find, because it has complete data; c) The data displayed is the latest information displayed as needed; d) For the Google Scholar feature, there are filters for research publication year range, research relevance, by date, document type and review the article; e) For the Scopus feature, there are filters for the range of publication years and individual years, subject area, document type, language, keywords, country/territory, source type, source title, author name, publication stage, affiliation, funding sponsor, open access, apart from that there are features export reference data, download, sort by date, sort by cite, relevance, first author, source title.

Journal analysis resulting from this literature review uses the critical appraisal method. Critical appraisal is a journal analysis process that is used as a theoretical basis regarding the differences, similarities and shortcomings of the journals used. Journals are reviewed to select journals with measurement results that are appropriate to the topic. From searches carried out on Google Scholar and Scopus, 5 articles from 2019 to 2023 met the research topic. After that, it is analyzed using the Critical Appraisal table with Include: title and author of the journal, year of publication, variables measured, results of the research study and connection with the research results.

The strength of this research lies in the systematic approach used to collect and analyze data from various trusted sources. By filtering 5 studies from a total of 200 studies found on Google Scholar and Scopus, this research ensures that the data used is relevant and has high validity. Although the number of included studies is relatively small, the quality of these studies is assessed using critical appraisal, so that the conclusions drawn are based on strong and reliable evidence. This approach allows for an in-depth exploration of the factors that influence work readiness, providing meaningful insights into the context of higher education in Indonesia.

RESULTS AND DISCUSSION

We provide an overview of the search and selection process following the PRISMA model in Figure 1 (Moher et al., 2009). The initial search yielded 200 studies from the Scopus database search. The titles and abstracts of the 200 studies were reviewed. After the title and abstract search, 159 studies were included for full-text review. After that, 5 articles were identified assessing the conceptualization of students' and graduates' work readiness skills in the Indonesian context and were included in this review.

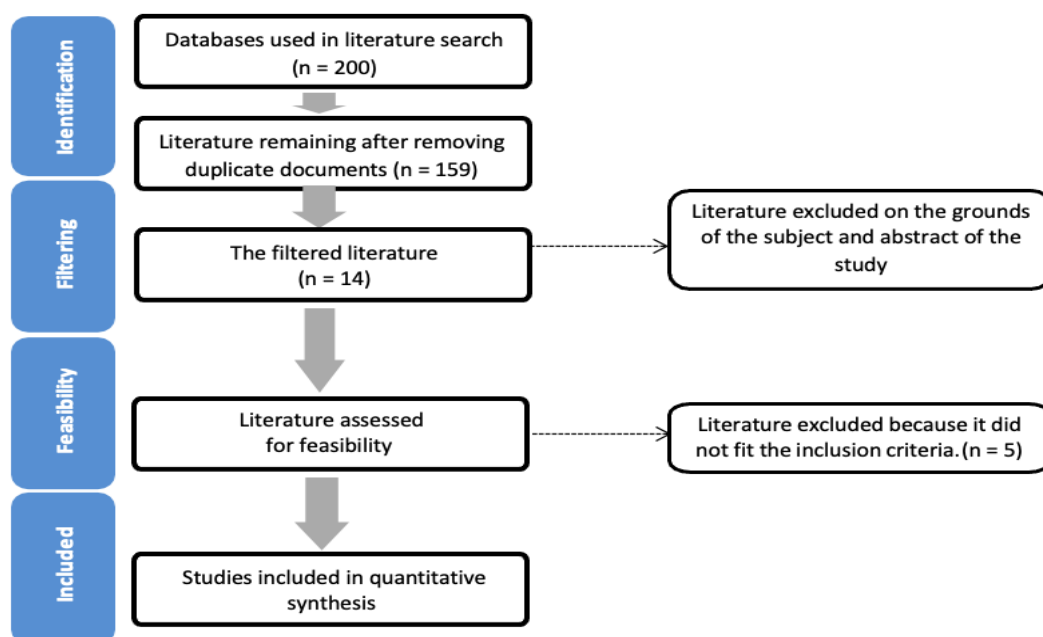


Figure 1. Flowchart for systematic review search strategy

Based on the search and selection process, the results of studies that match the topic in this literature review are shown in the following table 2.

Table 2. Summary of literature

No.	Researcher Name and Year	Journal Name	Research Results
1	Sagita <i>et al.</i> , (2020)	Journal of Psychology, 19(3), 297-314. https://doi.org/10.14710/jp.19.3.297-314	As a result, the validity test based on internal structure using confirmatory factor analysis (CFA) shows that the measuring instrument developed is able to measure the construct of work readiness. The results of the reliability test using Cronbach's coefficient alpha are 0.961, which means that the measuring instrument developed is reliable. The results of the analysis show that the development of this work readiness measuring instrument has good validity and reliability.
2	Caballero <i>et al.</i> , (2011)	Journal of Teaching and Learning for Graduate Employability, 2(1), 41-54. https://doi.org/10.21153/jtlge2011vol2no1art552	The findings suggest that work readiness is a multidimensional construct and preliminary evidence is provided for the construct validity of the WRS.

No.	Researcher Name and Year	Journal Name	Research Results
3	Walker et al., (2015)	Nursing Outlook, 63(6), 632-638. https://doi.org/10.1016/j.outlook.2015.06.001	Exploratory factor analysis supported the original four-factor solution (social intelligence, personal job characteristics, organizational acumen, and job competencies). The final WRS-GN consisted of 46 items, showed excellent reliability, and explained 73.55% of the variance in the
4	Li et al., (2020).	Nurse Education Today https://doi.org/10.1016/j.nedt.2020.104416	The Chinese version of the WRS-GN with good
5	Verma et al., (2018)	<i>Education and Training</i> (2019) 61(5) 568-589 DOI: 10.1108/ET-05-2018-0114	A final 53-item WRICM scale covering four dimensions and ten sub-dimensions of GWR was developed based on the perceptions of 362 HR professionals and managers from seven Asia-Pacific countries. The ten sub-dimensions covering 53 work-readiness skills reflect the perceptions of stakeholders regarding the work-readiness of graduates. The scale was found to be psychometrically sound for measuring GWR

Based on the research table above, we can identify several key findings regarding graduate work readiness. This study shows that the developed measurement tool has good validity and reliability in measuring work readiness. The results of the Confirmatory Factor Analysis (CFA) and a Cronbach's alpha coefficient of 0.961 indicate that this instrument is reliable for measuring the construct of work readiness (Sagita et al., 2020). This is in line with the findings of research conducted by Caballero et al., (2011) showed that work readiness is a multidimensional construct, and preliminary evidence was provided for the construct validity of the Work Readiness Scale (WRS). This emphasizes the importance of measuring tools that can evaluate various aspects of work readiness. Additionally research conducted by Walker et al., (2015) showed that exploratory factor analysis supported the initial four factor solution (social intelligence, personal job characteristics, organizational acumen, and job competency). The WRS-GN consists of 46 items that show excellent reliability and explain 73.55% of the variance in work readiness. Research findings conducted by Li et al., (2020) show that the Chinese version of the WRS-GN shows good validity and reliability, thus confirming that the scale can be applied cross-culturally. Research conducted by Verma et al., (2018) explained that this study identified work readiness challenges in the Asia-Pacific region and the role of Human Resource Management (HR) in overcoming these challenges. This study emphasizes the importance of relevant job skills and competencies in today's complex work environment.

The research findings illustrate that work readiness is a multifaceted and intricate concept that includes elements like social intelligence, job competence, personal traits, and organizational skills. Studies have confirmed the reliability and validity of the Work Readiness Scale (WRS) for measuring work readiness, proving its effectiveness in various cultural settings. Additionally, the research highlights the crucial role of collaboration between universities and industries in crafting programs that boost work readiness among graduates. Initiatives such as internships, soft skills training, and direct

industry involvement are instrumental in helping graduates acquire the skills and competencies needed for workplace success. In essence, this research sheds light on effective methods to assess and enhance work readiness through targeted educational programs and underscores the necessity of using reliable and valid tools for evaluating graduates' preparedness for the workforce.

These results align with previous studies that emphasize the importance of soft skills and practical experience in preparing graduates for the workforce. For example, studies by Ritter et al. (2017) and Sawitri & Dewi (2018) demonstrate that skills such as communication, teamwork, leadership, and problem-solving are vital in increasingly complex work environments. However, this research provides a new perspective by demonstrating the specific effectiveness of MBKM in improving graduates' work readiness. Evidence from the five studies analyzed shows significant improvements in the skills and competencies of graduates who participated in this program. The research also highlights the importance of collaboration between universities and industries to ensure that educational programs remain relevant to job market needs. As a result, graduates will be better prepared to face workforce challenges and contribute effectively in the continuously evolving digital era. In summary, the discussion concludes that integrating internship programs and soft skills training into higher education curricula is a strategic step that universities need to take to enhance their graduates' work readiness. Additionally, this research emphasizes the need for further studies with larger and more diverse samples to confirm these findings and deepen the understanding of the factors influencing graduates' work readiness in Indonesia.

Competition for jobs in the era of Society 5.0, which integrates human soft skills with technology (AI and IoT) to solve social problems in both virtual and real spaces, is intense. This environment demands that diploma and undergraduate graduates be smart, creative, innovative, and equipped with both soft and hard skills to effectively utilize information technology. It is crucial for college graduates, especially those from vocational and undergraduate programs, to acquire relevant skills for career success in a complex work environment (Mayorga, 2019). The main goal for vocational and undergraduate students is to develop competencies and skills needed for high-paying jobs (Abel et al., 2014 in Borg & Scott-Young, 2020; Jackson, 2014). Higher education institutions play a vital role in equipping graduates with work competencies, skills, and lifelong learning attributes that are valuable throughout their careers (Jackson, 2014; Savage et al., 2010 in Borg & Scott-Young, 2020). These institutions are responsible for developing employability skills and competencies, ensuring that graduates are qualified to work professionally (Fallows & Steven, 2000; Matsouka & Mihail, 2016).

Employers view universities as responsible for developing work skills and competencies according to industry qualifications (Cassidy, 2006 in Matsouka & Mihail, 2016). A survey by Matsouka & Mihail (2016) found a gap between graduates' perceptions of their qualifications and the expectations of HR managers. While graduates believe they possess the necessary soft and hard skills, employers often find fresh graduates lacking in these areas, especially soft skills and work experience. Key competencies valued by employers include emotional intelligence, learning orientation, cooperation, and flexibility (Matsouka & Mihail, 2016). Empirical evidence suggests a need for effective cooperation between employers and universities, such as offering internships and mentoring programs aligned with labor market needs, to enhance the abilities and employability of graduates (Matsouka & Mihail, 2016).

The importance of soft skills in navigating the competitive job market was also examined by Clokie & Fourie (2016). Their study highlights the gap between employers' expectations for graduates' communication skills and the content taught in first-year communication courses across various disciplines. Survey results indicated that employers find soft skills and communication abilities crucial for new graduates. However, some respondents noted deficiencies in interpersonal communication skills among fresh graduates. This underscores the need for sustainable and integrated industry cooperation to enhance ongoing engagement between universities and industry.

Some empirical evidence such as findings from Clokie & Fourie (2016) found that mandatory communication courses given in the first year may not be enough to prepare students to meet employer expectations, where competencies required are higher. The gap can be addressed in two ways: first, universities need to ensure the relevance of courses to industry through modeling, examples, case studies, and work placements or internships; and second, incorporating communication skills and competencies at all levels of learning, either through program or course design. It is the responsibility of universities, employers, and communication educators to collaborate further to develop the competencies needed in undergraduate and diploma programs (Clokie & Fourie, 2016).

Research conducted by Mayorga (2019) has research findings showing that business incubators provide experiences for students to strengthen self-efficacy, to help develop work readiness attributes and help achieve maximum potential (Lent et al., 2002 in Mayorga, 2019). Then from the research of Evans & Yusof (2020), it shows that the skills needed in full-time and part-time jobs have several similarities, namely the importance of effective communication, providing good customer service, the ability to build relationships with coworkers and work in a team environment. This is important because it shows that students can develop the skills needed for employment while participating in part-time work activities (Evans & Yusof, 2020). The research is in line with Muldoon (2009) in Evans & Yusof (2020) who recognized that part-time work experience can improve graduates' work readiness. When choosing a part-time job, students should also consider thinking more strategically about the potential of the part-time job and how it relates to future careers, so that they are not just looking for extra income.

This also suggests that universities should encourage and support students to work part-time, as recommended by Robotham (2012) in Evans & Yusof (2021). Higher Education Institutions (HEIs) can offer better guidance to help graduating students find jobs that align with their career profiles and aspirations (Chen & Hu, 2008 in Evans & Yusof, 2021). Additionally, HEIs should help develop skills not typically gained through part-time jobs, such as creativity and innovation. Evans & Yusof (2020) emphasize the UK context, affected by Brexit and COVID-19, highlighting the need for international comparisons. A longitudinal study on these factors would be valuable, especially with potential employment changes due to Brexit and COVID-19 (Evans & Yusof, 2021).

Research by Ardias & Rambe (2020) indicates that leadership plays a crucial role as a soft skill necessary for work readiness among undergraduate graduates in West Sumatra. Leadership skills can be developed through various intra and extracurricular activities during the higher education process, preparing graduates better for the workforce (Ardias & Rambe, 2020). According to an article by Borg & Scott-Young (2020), the work readiness profile of graduates varies based on the reputation of the employer and the college. These findings highlight the importance of a more industry-consultative approach in preparing graduates for project-based workplaces (Borg & Scott-Young, 2020).

Indonesian education programs have implemented numerous innovations to enhance the quality of graduates. One significant role of higher education in this context is the industrial field experience program, which is a mandatory course for students in the IKK Department at Padang State University, carrying 4 credits. This program aims to provide additional knowledge and skills beyond the classroom. The university collaborates with industries to send students for industrial field experiences, allowing them to apply and develop the knowledge and skills acquired during their studies, thereby boosting their confidence to be job-ready after graduation. Research findings indicate that involvement in industrial field experiences positively correlates with the work readiness of graduates from the Family Welfare Education Study Program (Rusmiati et al., 2016).

The limitation in this literature review is that there are few qualitative research articles and journals that provide an in-depth explanation of work readiness in graduates or undergraduates in Indonesia who have not yet worked. The skills, both technical and soft skills required by graduates provided by universities vary greatly, so further discussion is recommended. These identified limitations highlight the need for future research to continue developing a consistent multidimensional conceptualization of WR and psychometrically sound assessments to compare and evaluate HEI programs and WR capabilities. As graduates transition from higher education to the world of work, they are required to translate the skills they have learned into competencies relevant to their roles. However, it has been reported that graduates may face the shock of transition from education to industry, resulting in stress (Duchscher, 2009), burnout (Walker & Costa, 2017), and reduced retention (Merga, 2016). Therefore, it is important to develop individuals, within the learning environment, to be work-ready. This innovation can be integrated into the higher education curriculum, during embedded and co-curricular WIL programs (Dean et al., 2020; Smith et al., 2018). As we shift towards a match between HE and graduate expectations, it is imperative to consistently conceptualize and define WR, which includes skills, attributes, attitudes, abilities and competencies.

CONCLUSION

This study highlights the importance of various higher education programs in preparing graduates for the workforce, particularly through the Merdeka Belajar Kampus Merdeka (MBKM) program. The research findings indicate that programs such as internships and soft skills training play a crucial role in enhancing the skills and competencies required by industries. This finding is consistent

with previous research that emphasizes the importance of soft skills and practical experience in preparing graduates to enter the workforce as skills such as communication, teamwork, leadership, and problem solving are essential in an increasingly complex work environment. However, this study provides a new perspective by demonstrating the specific effectiveness of MBKM in improving graduates' work readiness. Evidence from the five analyzed studies shows significant improvements in the skills and competencies of graduates who participated in this program. The research also emphasizes the importance of collaboration between universities and industries to ensure that educational programs remain relevant to job market needs. Consequently, graduates will be better prepared to face workforce challenges and contribute effectively in the continuously evolving digital era. Overall, the discussion in this study concludes that integrating internship programs and soft skills training into higher education curricula is a strategic step that universities need to take to enhance their graduates' work readiness. Additionally, this research highlights the need for further studies with larger and more diverse samples to confirm these findings and deepen the understanding of the factors influencing graduates' work readiness in Indonesia.

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AUTHOR CONTRIBUTIONS

Author 1, 2 and 3 contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

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