

Vol 11, Issue 1, (2022) E-ISSN: 2226-3624

Systematic Literature Reviews of Marketability and Employability of Graduates

Norfarahzatul Asikin Zakari, Mohamad Zuber Abd. Majid & Sheerad Sahid

Faculty of Education, The National University of Malaysia (UKM), Bangi, Selangor, Malaysia

To Link this Article: http://dx.doi.org/10.6007/IJAREMS/v11-i1/12278 DOI:10.6007/IJAREMS/v11-i1/12278

Published Online: 08 January 2022

Abstract

A systematic literature review on the marketability and employability of graduates is presented in this paper. It delves into the themes that emerge from 31 papers found in Scopus and the Web of Science database. The study was carried out and conducted using the Preferred Reporting Items for Systematic Reviews (PRISMA) method, which is a thorough guideline for systematic review and data collection. The review included research studies published between 2017 and 2022. The themes were divided into three categories: graduate attributes, teaching strategy and development, and workplace skills. These topics are discussed in depth in this paper and are presented in the literature review. Rather than reiterating the literature research and recognizing the issue, an approach that focuses on an early valuation of graduate employability in order to educate graduates with the appropriate information and skills was also presented. This study found that graduate attributes such as communication skills, problem-solving abilities, teamwork, and leadership abilities were found to have a significant impact on employability and marketability. Furthermore, these characteristics are necessary to improve a graduate's prospects of achieving a more stable future in their chosen job. This research is particularly significant since it helps academics obtain a better understanding of peer-reviewed literature reviews. It also helps them to gain a better grasp of the marketability and employability of recent graduates in the labor market. Further research is proposed to figure out why graduates believed that a list of soft skills was being established through the curriculum, and what components of their university experience prepared them for the job market.

Keywords: Marketability, Employability, Education, Systematic Literature Review (SLR)

Introduction

In order to achieve sustainable globalization and socioeconomic advancement, it is necessary to have a combination of education and skills that are complementary to one another. A large part of an employee's ability to survive and thrive throughout this digital age is dependent on their particular talents, which are becoming increasingly vital. A broad range of skills can help graduates stand out in today's world of competition, diversity, and globalization by allowing them to differentiate themselves from their peers. Competent graduates are required to fill

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

the open positions in the sector, whether as semi-skilled employees or as skilled workers, in order to meet the demand for the positions. These employees are responsible for improving living conditions and social harmony in the community. Graduates must be able to perform job-related tasks, rather than simply knowing how to study and use technology (Hanafi, 2015; Harreveld, 2010), in order to get hired.

Graduating students must master workplace skills such as self-control and honesty, interpersonal, qualifications, innovative thinking, career advancement, and applied knowledge skills. These skills can be developed in the lessons that they have taken together as part of their degree requirements (Puad, 2015; Tang, 2019). Additionally, organisations are searching for graduates who can communicate well and collaborate effectively with others, as well as effectively in a group and solve problems in a critical manner, among other distinctive skills.

According to the Malaysian National Graduates Employability Blueprint (2012–2017), several issues that employers have encountered with graduates include poor communication skills, particularly in English, which affects approximately 55.8 percent of graduates, low employee abilities in terms of attitude and personality, which affects approximately 37.3 percent of graduates, lack of experience in problem-solving, which affects approximately 25.9 percent of graduates, and limited knowledge in the specific field, which affects approximately 23.8 percent of graduates. In order to be successful in the workplace, recent graduates must be on the lookout for the important workplace talents that are required to be hired for a career and to maintain that position after graduation. A country's most important assets are graduates who are very well in the workplace since they may have a big impact on firms and contribute to the advancement of the economic growth of the country (Heusdens et al., 2016).

Therefore, this systematic literature review will determine the factors that influence the marketability and employability of graduates, such as graduate attributes, teaching strategy and development, and workplace skills. This evaluation will address a gap in the field of theory regarding marketability and employability around the world. Furthermore, existing systematic review studies on the topic do not go into great detail about the review methodologies, which include keyword identification, article screening, and article eligibility, among other things. The effect is that future researchers will be unable to replicate the review, confirm the interpretation, or determine the scope of data addressed by these studies.

This research is also important since it enables researchers in reading peer-reviewed literature reviews, which can help them gain a better knowledge of the marketability and employability of graduates in the labor market, along with other things, as they do further research. The primary study question, "What are the factors that influence the marketability and employability of graduates?" is addressed in the present comprehensive analysis. The current research question serves as the basis for this methodical study. Additionally, this research addresses the necessity to perform a comprehensive evaluation of the attributes of graduates. The approaches that were implemented to answer the research objectives that is the focus of this study are described in greater detail in the next section. The technique for conducting a systematic review and synthesis of scientific literature, which is used to identify, select, and analyze the research that needs to be done, is described in the following section. The final section presents recommendations for initiatives and improvements that might be

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

implemented in order to establish a more favorable balance between employability and professional achievements. This paper also contains suggestions and recommendations for further research that should be taken into consideration.

Methodology

This systematic literature review will be guided by using PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). This method is used as a guideline for high-quality literature reviews since it is a rigorous and extensive procedure that involves enormous amounts of data and requires a lot of time. The advantage of PRISMA is that, through certain processes, it may demonstrate elements of openness, consistency, and high skill in producing qualitative study reports, all of which are beneficial (Flemming et al., 2018). As part of this process, a clear protocol and a complete scope are developed, which can be utilised or copied by other researchers that use the same approach to explore a subject matter (Okoli, 2015). As a result of conducting literature review using the PRISMA method in the field of social science, investigators can explain the limitations of their study using keywords rather than wasting time and wondering if their work's literature is sufficient. The works obtained are from high-quality sources of data and are recognised by all investigators (Okoli 2015). Identification, screening, eligibility, and inclusion are the four steps that PRISMA uses to assist researchers in identifying the appropriate literature for their study based on the objectives of the study (Gilath & Karantzas, 2019).

Identification

The discussion in this study is based on two major online databases, namely Scopus and Web of Science (Wos), which were used in the research. It is possible to find scientific and empirical studies in both databases in a variety of subjects such as social science and engineering, as well as environmental science and economics including accounting, development, medicine, law, and marketing (Shafrill et al., 2018). Starting with a search for the primary keyword, using the search string that is available in search capabilities and exclusive commands defined in the WoS and Scopus databases, the procedure is followed until the main keyword is found (Malik et al., 2020). This process uses the keyword matching discovered in the thesaurus and is assisted by the Boolean Operator function (Xiao & Watson 2019) in both databases as shown in Table 1.

Table 1
The search strings

Scopus	TITLE-ABS-KEY (marketability OR employability AND education) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017)) AND (LIMIT-TO (DOCTYPE, "ar"))
Web of Science	marketability OR employability AND education (All Fields) and Articles (Document Types) and 2022 or 2021 or 2020 or 2019 or 2018 or 2017 (Publication Years)

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

Screening

The screening step began with the identification and exclusion of duplicate items from consideration. The search results for the keyword returned 86 articles, 44 of which were found using Scopus and 42 of which were located in WoS. With the assistance of Microsoft Excel software, a total of 32 overlapping articles from the two databases were identified and sorted. Following that, the screening process is carried out in accordance with the criteria that have been chosen. First, only journal papers in the form of studies were considered for inclusion in the process, with publications consisting of chapters in books, seminar articles and proceedings, as well as literature review articles, being omitted. Second, only articles written in English should be chosen, as should articles that are linked to economics, social sciences, business, and management, as well as psychology. Third, during a short time period between 2017 and 2020, following the screening procedure, only 36 papers were accepted out of a total of 54 submissions, with 18 being rejected. Despite the fact that the omitted publications were not included in the study's analysis, they will be used as additional references in the later.

Eligibility

This stage is the stage where eligibility is determined so that the selected articles are more specific and lead to the research questions as in Table 2. A total of 36 articles have been prepared. All articles' titles and key content were thoroughly reviewed at this stage to ensure that the inclusion requirements were fulfilled and fit into the present study with the current research aims. Therefore, five articles were omitted because they were not eligible for use in this research based on empirical evidence. Finally, 31 articles are available for review.

Table 2
The selection criterion is searching

Criterion	Inclusion		Exclusion
Language	English		Non-English
Timeline	2017-2021		< 2017
Literature type	Journal	(only	Journal (book chapter
Subject Area	research artic	les)	conference proceeding) Besides SS, B, E, AH

Data Abstraction and Analysis

All the article selection processes for the purpose of systematic literature review (SLR) are shown and explained through the PRISMA flow chart in Figure 1. For the purpose of identifying important topics, an inductive thematic analysis (Braun and Clarke, 2006) was applied. Three major themes emerged from the analysis, which covered three broad thematic areas: graduate qualities, teaching strategy and development, and workplace abilities. This process consisted of six steps: getting to know the material, categorising and organising it, determining what the major concepts were, defining and labelling those ideas, and reporting the findings.

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

Result and Findings

All 31 articles were subjected to in-depth reading, beginning with the abstract and progressing through the entire article, in order to discover elements that contribute to the marketability and employability of graduates after graduation. All articles were classified based on three key topics derived from the reading, which include graduate attributes which included 13 articles, teaching strategy and development which included 12 articles, and workplace skills which included 6 articles, as shown in Table 3.

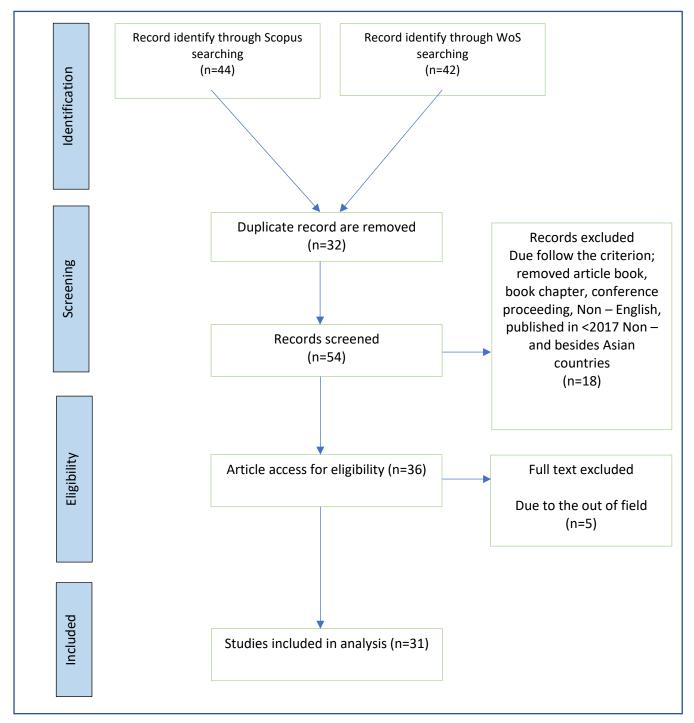


Figure 1: PRISMA Flowchart adaptation from Moher et al (2009) & Shafrill et al (2018)

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

Table 3

The research article finding based on the proposed searching criterion

No	Author	Journal	Title	Scopus	WoS	Remarks
1	Ab-Rahman et al	(2022) Sustainability (Switzerland), 14(3).	A Global Program- Educational- Objectives Comparative Study for Malaysian Electrical and Electronic Engineering Graduates	/		Graduate Attributes
2	Zulkifli et al	(2021) International Journal of Emerging Technologies in Learning, 16(23), 16-28.	Online Reciprocal Peer Tutoring Approach in Facebook: Measuring Students' Critical Thinking	/	/	Strategy and Development
3	Jamaludin et al	(2020) Humanities and Social Sciences Communications, 7(1).	Technical communication pedagogical model (TCPM) for Malaysian vocational colleges	/	/	Teaching Strategy and Development
4	Mohamed et al	(2021), Pertanika Journal of Social Science and Humanities, 29(1),107-125.	Workplace Skills and Teacher Competency from Culinary Arts Students' Perspectives		/	Workplace Skills
5	Chen & Phan.	(2021), Pertanika Journal of Social Science and Humanities, 29(2), 819- 837.	Development of the Self-Efficacy Beliefs of Engineering Undergraduates Preparing for an International Contest		/	Graduate Attributes
6	Zuber et al	(2020), Malaysian Journal of Society and Space, 16(1), 36- 45.	The Employability Skills among Students of Public Higher Education Institution in Malaysia		/	Graduate Attributes
7	Herlambang et al	(2021), Sustainability (Switzerland), 13(9).	Quality assurance for sustainable higher education: Structural equation modelling	/		Teaching Strategy and Development
8	Aman	(2021), Sustainability (Switzerland), 13(1), 1-11.	Sustainability of impact sourcing initiatives in higher education for	/	/	Workplace Skills

			graduates' employability			
9	Ghazali and Bennett	(2017), International Journal of Music Education, 35(4), 588-600.	Employability for music graduates: Malaysian educational reform and the focus on generic skills		/	Graduate Attributes
10	Chong & Thi	(2020), Asian Journal of University Education, 16(4), 181-189.	University Freshman Mentoring Effectiveness and Scale Enhancement	/		Teaching Strategy and Development
11	Omar et al	(2020), Universal Journal of Educational Research, 8(3), 95-104.	Knowledge, skills, and attitudes as predictors in determining teachers' competency in Malaysian TVET institutions	/		Teaching Strategy and Development
12	Teng et al	(2019), Education and Training, 61(5), 590-604.	Graduate readiness for the employment market of the 4th industrial revolution: The development of soft employability skills	/	/	Graduate Attributes
13	Olojuolawe & Fadila	(2019), International Journal of Engineering Education, 1(1), 57-66.	Determination of employability skills required by electrical technology students in colleges of education in Nigeria	/		Workplace Skills
14	Liu et al	(2020), Frontiers in Psychology, 11(0), 1-12.	Key Teacher Attitudes for Sustainable Development of Student Employability by Social Cognitive Career Theory: The Mediating Roles of Self-Efficacy and Problem-Based Learning	/	/	Graduate Attributes
15	Kelly et al	(2020), Journal of International Students, 10(1), 145-158.	Postdegree intentions of female international undergraduate students studying in Malaysia: A qualitative study	/	/	Graduate Attributes

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

16	Ahmad et al	(2017), Malaysian Online Journal of Educational Management, 5(4), 63-86.	Employability skills for hospitality students in Malaysia	/		Workplace Skills
17	Abd Samad et al	(2018), Journal of Technical Education and Training, 10 (1), 82-90.	Exploring domains and elements for behavioural competency and employability skills	/		Teaching Strategy and Development
18	Harun et al	(2019), International Journal of Environmental Research and Public Health, 17(0), 1-15.	Employment Experiences among Young Malaysian Adult with learning Disabilities		/	Graduate Attributes
19	Ghani & Muhammad	(2019), International Journal of Education and Practice, 7(1), 19-29.	Industry 4.0: Employers' expectations of accounting graduates and its implications on teaching and learning practices	/		Workplace Skills
20	Isa et al	(2020), Universal Journal of Educational Research, 8(9A), 31-40.	Enhancing employability skills of woodwork technology education students through project- based learning at colleges of education (technical) in Nigeria	/		Teaching Strategy and Developmen
21	Hajar & Sulaiman	(2021), Multidisciplinary Journal for Education Social and Technological Sciences, 8(1), 45-57.	Students' perception to integrate education 4.0 in science program		/	Graduate Attributes
22	Noah & Aziz	(2020), Universal Journal of Educational Research, 8(10), 4610-4617.	A case study on the development of soft skills among TESL graduates in a university	/		Teaching Strategy and Developmen
23	Ling & Kui- Ling	(2019), Journal Kajian Malaysia, 37(2), 75-94.	Study abroad and behavioural changes: The case of Malaysian learners of Japanese	/		Graduate Attributes

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

24	Fahimirad et al	(2019), International Journal of Higher Education, 8(6), 26-35.	Integration and development of employability skills into Malaysian higher education context: Review of the literature	/		Teaching Strategy and Development
25	Raba'ah et al	(2021), International Journal of Adolescence and Youth, 26(1), 83- 93.	The mediating role of career decision self-efficacy on the relationship of career emotional intelligence and self-esteem with career adaptability among university students		/	Graduate Attributes
26	Jason & Gary	(2017), Journal of Management Development, 1-16.	Enterprise education: Towards a framework for effective engagement with the learners of today		/	Graduate Attributes
27	Rozmel et al	(2017), The Southeast Asian Journal of English Language Studies, 24(1), 128 – 144	E.X.P.E.R.T. Role Play Technique for Workplace Readiness		/	Teaching Strategy and Development
28	Syamimi et al	(2018), Journal of Language Studies, 18(3), 135-152.	Spoken Metadiscourse in Malaysian ESL Job Interviews		/	Workplace Skills
29	Noorhayati et al	(2018), Asia Pacific Journal of Educators and Education, Vol. 33, 47–55.	Career Consultation as An Intervention Strategy In Alleviating Family's Mental Health: A Case Study On Students With Disabilities	/		Teaching Strategy and Development
30	Hazlina et al	(2018), iJET – Vol. 14, No. 20, 73-86.	Experts' Consensus to Identify Elements of Career Management Competencies in Work-Based Learning (WBL) Program Using Fuzzy Delphi Analysis		/	Teaching Strategy and Development
31	Hisham et al	(2019), International Journal of Educational	Psychological Impact of Work- Integrated Learning Programmes in Malaysia: The Moderating Role of		/	Graduate Attributes

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

Psychology,	Self-Esteem on
8(2),188-213.	Relation between
	Self-Efficacy and Self-
	Confidence

Theme

The analysis of articles is categorized into three themes: graduate attributes, teaching strategy and development, and workplace skills.

Graduate Attributes

In addition to enhancing employability, graduate attributes can also assist in the development of intellectual, civic, and professional abilities. The development of academic performance guidelines is something that a university majority thinks should be established by its graduates as a result of completing their studies effectively. A typical graduate quality that colleges are searching for is intellectual curiosity. Other popular graduate attributes include analytical reasoning, problem-solving, and reflective judgement, which are all examples of critical thinking skills. Communication skills, mentorship, teamwork, and leadership abilities are all crucial as are other characteristics. The ability to conduct research and investigate issues is crucial, as is information literacy and digital literacy.

Throughout the last two decades, there has been a growing emphasis on quality assurance in higher education, and graduate qualities have become well established at many schools (Thaker et al., 2018; Ab-Rahman et al., 2020). Despite the fact that graduate attributes and qualities are still sought after, this interest has recently been reignited (Hajar & Sulaiman 2021). Chen and Phan (2021) explored the correlation between fieldwork, a particular teaching, and graduate traits in their study (2021). The use of digital technology for field research learning, as well as the growth of graduate students' understanding, capacities, and moral principles, are all investigated by these academics. Kelly et al (2020) indicated that focus groups were performed with participants' post-fieldwork on four bachelor residential field courses as part of their research. Students were requested to first address the problem in broad terms, then map out their particular experiences, in order to establish how the using mobile apps in the environment had aided the progress of graduate talents. The findings demonstrate that students make clear connections between the usage of a number of mobile apps and the development of graduate attributes such as personal and research literacy, academic literacy, and digital literacy.

As an additional point of interest, Jason and Gary (2017), for example, look into the relation between research and the development of graduate traits, which is mediated by the usage of digital technology. The investigations discovered the success of their approach by using electronic video capture to motivate students to discuss assessment methods in two final-year bachelor physical geography subjects at an university education sector in New Zealand. Furthermore, according to Ghazali and Bennett (2017), student perceptions of digital video in terms of supporting them in comprehending methodologies, procedures, landforms, and environmental conditions are favourable, as evidenced by video diary entries, interview questions, and participant observation approaches. It also encourages students to work in groups and assists them in preparation for academic and non-academic careers after graduation.

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

Ling and Kui-Ling (2019), the authors of a recent study, go beyond traditional research project in their examination of a method to outdoor adventure education that may be able to combine students' cognitive comprehension with their unique identities and potential for pro-environmental action. It is feasible to develop "graduate traits for sustainability" by developing a relational self-in-environment awareness. Students' auto-ethnographic accounts of their embodied encounters with the field may subsequently be used to document and analyse these characteristics. Teng et al (2019) use a second-year undergraduate curriculum as a case study to show how students may focus on their experiences in regard to themselves, others, and the surroundings by creating a reflective journal and completing an auto ethnographic narrative of rock climbing. Throughout the session, students exhibit self-awareness, consider what drives their climbing encounters, and see how using an unique approach to evaluation allows a more holistic engagement with the world.

Liu et al (2020); Hisham et al (2019) explore graduate qualities in Turkey, a country that has received little attention in the literature. They choose the word "employability" since it is more widely used in the United States, and they focus their study on the acquisition of knowledge and skills required for graduate jobs. They then go on to look into the potential for geographic information systems (GIS) teaching and learning to improve graduates' employability in Turkey, gathering information from all various stakeholders, including academics, participants, and hiring managers, via semi-structured interview sessions, surveys, and a review of GIS positions advertised in Turkish media. The study's findings reveal a complicated picture of opportunities and challenges. The global pattern is toward using graduate attributes as a tool to steer curriculum design, collaboration with teaching and learning experiences, and identification of the impact of the qualities on a graduate's marketability and employability (Liu et al., 2020).

Teaching Strategy and Development

Changing the curriculum from its traditional focus solely on material to one that integrates both content and process is critical to the future success of the institution (Noorhayati et al., 2018; Jamaludin et al., 2020; Hazlina et al., 2018). In order to attain student-centeredness, it is necessary to place an emphasis on the "how to," as well as the "what" and "why." This is accomplished because the educator must begin with the students' current level of understanding and describe the goals of the students' education at the particular stage of each specific course. Regarding pedagogy, an irony exists in the fact that, despite the fact that the graduate skills agenda is focused on results, it has also opened up a very exciting educational sector (Noah and Aziz, 2020), which needs a full analysis of technique or process. As a result, curriculum development and curriculum strategy are required in order to produce high-quality graduates who are marketable and employable in the market environment.

Rozmel et al (2017) look at a pedagogic method that might be utilised in the classroom to encourage undergraduates to dive deeper into problems than they would on their own. Student can build a set of unique and research skills that might be regarded key graduate traits by instilling a habit of reasoned scrutiny in them. The technique of causal layered analysis (CLA), according to Chong and Thi (2020), enables students to intentionally examine deeper various meanings within a context by analysing four levels that lie behind the surface appearance of a particular circumstance. These layers deal with the following topics in order: popular understanding, which is common wisdom from lectures and textbooks; social scientific cause and effect, which is the discipline's social construction; world view and cultural

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

tradition, which illustrate culturally mediated presumption and discussion; myth and metaphor, which describe sub-conscious opinions in such an objective and measurable world. The essay uses a variety of classroom tasks to illustrate how the CLA approach may be used to assist final-year graduates critically examine the content of spatial discourse, personal learning, and themselves. Data was gathered via reflective diaries and term papers, revealing that CLA activities can be challenging for students to complete, but perseverance with them encourages students to uncover deeper meaning within their studies. Personal beliefs, hidden subtexts, and cultural prejudices that would normally be acceptable in other circumstances are exposed in this documentary. Students who are more aware of how education and learning are based in the world around them are better able to comprehend themselves and their surroundings from the perspective of others, which aids in their self-awareness (Fahimirad et al., 2019).

Workplace Skills

According to Aman (2021), workplace skills are the ability to blend the appropriate combination of these elements into powerful abilities, which are then further developed into competencies through time. Employer-required workplace skills, according to Ghani and Muhammad (2019), are those that can assist students in building a variety of informational, technical, behavioural, and personal mindsets that are appropriate for the needs of their particular employment. For example, Mohamed et al (2021) defined employability skills as a collection of achievements, competences, knowledge and experience, and personal traits that enable graduate students to obtain employment, succeed in their careers, and have an impact on the economy, society, and their own personal growth. Specialized workplace skills, such as successful communication, teamwork abilities, leadership potential, problem-solving abilities, decision-making expertise, analytic abilities, computational skill sets, and cultural abilities are required by employers, and employees who want to advance in their professional careers must possess these abilities. The Malaysian Education Blueprint (2013-2025) emphasises the significance of this pre-requisite for academic achievement (Ministry of Education Malaysia, 2013). Not only that, but sectors are more inclined to hire graduates who have received thorough training and are prepared to begin working immediately (Ghani & Muhammad 2019). There is a growing pressure for workplace skills among businesses in the sector today, and as a result, workplace skills are critical in assessing a graduate's marketability and employability.

The SCANS Model, according to Olojuolawe and Fadila (2019), distinguishes between two types of workplace skills: basic skills and worker competency. These two types of skills are necessary to improve one's ability to function at the workplace, according to the authors. The model is built around the concepts of skills and efficiency. Specifically, SCANS is concerned with a vital part of schooling that is referred to as the "living system." It is composed of three sets of skills that serve as a foundation: basic abilities, thinking abilities, and personal attributes. This model has outlined five competencies that will be critical for future work success, which are as follows resources, interpersonal relationships, information systems, and technology are among examples. Finding, organising, planning, and distributing resources are all part of the process. Interpersonal refers to the process of working with people from a variety of various backgrounds in a group setting.

Syamimi et al (2018), classified workplace skills into three categories: hard skills, which were a set of integrated or content knowledge and expertise, soft skills, which were a

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

combination of attitude or interpersonal behaviours, communication, and critical thinking, and critical thinking. At the same time, Ahmad et al. (2017) stressed that students needed to learn basic skills as well as workplace skills in order to master job-seeking abilities, according to the study. It was determined that nine significant variables in job-skills must be considered: personal conduct; training requirements; academic abilities; communication abilities; soft skills; corporate abilities; technical abilities; job-seeking abilities; and schooling. Additionally, Aman (2021) classified workplace skills required by employers into five broad categories, which included basic skills such as effective communication, problem-solving, and critical thought; the ability to adapt to changing situations and offices, learn with independence, broaden new ideas and innovations, teamwork and interpersonal, information technology abilities, work under pressure and stress management skills, adaptiveness, and meeting deadlines and expectations.

Discussion

The main objective of this research is to determine the factors that contribute marketability and employability of graduates around the globe through a systematic literature review. Based on the analysis conducted, graduate attributes is the main factor that influence employability in job market. The establishment of the credentials framework has resulted in a greater emphasis being placed on graduate attributes in recent years (Jason & Gary, 2017). In the research on higher education, a variety of subjects connected to graduate qualities have been intensively investigated. One such topic is the ability to communicate effectively. Procedures for recognising and applying such features inside, across, and beyond the curriculum are included in this classification. Chen and Phan (2021) found that a balance between disciplinary content and generic graduate attributes, as well as between academic contemplative and business-minded instrumental orientations to knowledge, was necessary. Upper-level leadership was also necessary, as were institutional enabling structures (Siti Raba'ah et al., 2021; Kelly et al., 2020). Even broad traits like critical thinking and problemsolving must be considered in light of the subject matter and a variety of other local factors, thus each degree programme requires a contextualised graduate profile customised to the subject matter and a variety of other local factors (Ling & Kui-Ling, 2019; Amar Hisham et al., 2019; Harun et al., 2019). It is necessary to meaningfully engage students in the development of their own student identities, graduate attributes, and emerging professional identities in order for them to acknowledge institution in the phase rather than having their identities built for them through integrated systems and implementation (Zuber et al., 2020; Hajar & Sulaiman, 2021; Ghazali & Bennett, 2017).

Extracurricular activities serve an important role in creating a more student-centered partnership approach (Jamaludin et al., 2020). As a consequence, students develop graduate attributes that are important to their sense of self, and they become aware of the skills they have gained during their studies and are able to express them to possible employers directly. With the change to a person-centered approach, management strategies must consider how the development of graduate traits may become more reflective and real, based on self-directed learning that fosters students' ability to adjust flexibly to their current circumstances (Omar et al., 2020). This technique must be implemented in a top-down, centrally controlled setting, which is a difficult task. To play a proactive role in shaping and delivering the graduate skills agenda, the higher education sector will need to formulate a strategy and policy changes, which may necessarily involve cultural development within institutions and, in any

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

case, will lead to a reassessment of teaching, learning, and evaluation processes, both within and outside of curricula, that are appropriate for generating discipline-nuanced graduate characteristics (Zulkifli et al., 2021).

In order to ensure that graduate progress towards specific attributes that are relevant to the job market, academic staff have been identified as having an important role in the implementation the strategy and development in their teaching in order to boost the marketability and employability of students. Lecturers have also been identified as having an important role in taking ownership of institutionally derived descriptors and making them relevant to their corresponding fields of study and research (Jamaludin et al., 2020). It is difficult to evaluate the success of graduating qualities based on their academic achievements (Herlambang et al., 2021). In their disciplinary settings, academics have not yet developed clear mechanisms for developing and accessing traits that are distinct from other disciplines (Chong & Thi, 2020; Omar et al., 2020; Abd Samad et al., 2018). A correctly structured evaluation that is self-directed, analytical, and sincere serves as the foundation of graduate skill development (Isa et al., 2020; Fahimirad et al., 2019). Despite this, many academic staff members continue to adopt poor, teacher-centered, content-focused tactics in their lectures, which ultimately results in lower graduation rates for their students in the long term (Zulkifli et al., 2021). An example of this type of interpretation in practise can be seen in Fahimirad et al., (2019), who used Bigg's SOLO taxonomy to analyse student answers to a test that examined their ability to solve problems: a type of analytical analysis that is highly valued in the business world. Using standards and guidelines that are based on this perspective to evaluate pupils' growth may enable for the identification of and giving of feedback on their development's strengths and weaknesses. When it comes to the time, knowledge and staff growth that would be required to complete the project, a comparable plan would almost certainly place unreasonably high demands on cash-strapped universities that are already stretched thin.

Based on the systematic literature review that has been conducted, in addition to explaining the factors that contribute towards marketability and employability of graduates, a necessary skill is needed for graduates nowadays in order to meet the expectations of their employers in order to perform in the workplace. When it comes to filling unfilled positions in the marketplace, employers are looking for well-prepared graduates who have gotten adequate training and are well-versed in the abilities required for the job. Most of the abilities required for employment and job preparedness are acquired in the workplace, with only 15 percent obtained through academic and basic skills training or education (Mohamed et al., 2021). Workplace skills, also known as workplace competencies, are a collection of qualities, talents, and information that are actually necessary by all individuals in the workforce in order to ensure that they have developed into effective employees (Syamimi et al., 2018). According to Ahmad et al. (2017), workplace skills were defined as the personal and interpersonal qualities that were tricky to see and rate, as well as being hard to define because there were no limits on the skill sets revealed by business owners in the job posting, as traditionally stated in the article. While at the same time claiming that workplace skills did not have a coherent definition, Olojuolawe and Fadila (2019) asserted that the meaning of workplace skills varied depending on the text and the context.

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

Conclusion

Youthful employment and high-quality education are important economic growth variables that are intertwined. Education's rapid advancement is a good indication of economic progress and national development. The disparity between an increasing number of graduates and fewer job opportunities, on the other hand, is disastrous for the country's future and economic progress. As a result, making an early assessment of graduate employability is critical in order to better educate graduates with the necessary information and skills in order to boost their chances of achieving a more sustainable future in their chosen profession. Based on the analysis of the literature review that has been conducted, there are three main factors that contribute towards the employability and marketability of graduates, which are graduate attributes, teaching strategy and development, and workplace skills. In the majority of articles reviewed, graduate attributes were found to be the most significant factor in determining employability and marketability, followed by teaching strategy and development, and workplace skills. Communication skills, problem-solving abilities, teamwork abilities, and leadership abilities were discovered to have a major influence on employability and marketability.

It is the responsibility of educational institutions to guarantee that graduates are prepared with the required skills to find job after graduation in a constantly changing labour market. This research revealed that the graduate from universities believed their institutions helped them build soft skills, yet they were less positive when it came to the competence. Graduating students, in particular, believed that their institution prepared them for the future labour market and helped them develop the abilities they needed for a career, which alludes to the central issue of this research. As previously stated, this research contributes to current literature by demonstrating the significance of the education - learning culture on the capacity of higher education institutions to transmit the requisite employability skills to students. In terms of the practical ramifications, it is evident that if students are equipped with the necessary skills to succeed in the workplace, this is beneficial to all stakeholders, including future employees, employers, and educational institutions. According to the findings of the research, there is room for further development of their curriculum, as well as the possibility of changing their teaching and learning approach, in order to improve the degree of soft skills development among students in preparation for the career path in the fourth industrial revolution.

In this regard, further study is focused on understanding why graduates thought that a list of soft skills was being built via the curriculum, as well as what aspects of their university experience best prepared them for the job market. It would be useful to collect more feedback on the development of soft skills from graduates from other universities, with a particular focus on emotional and spiritual intelligence. The study of emotional and spiritual intelligence is being researched because graduate employability is becoming increasingly crucial (Jameson et al., 2016). It was seen as having a place in the university's academic curriculum by students. Throughout the investigation, they reported a consistent impression that their school's soft skills were lacking. Finally, further research should be done to understand the perspectives of students who do not think their soft skills are being enhanced while they are at university. The fact that these students made up a small percentage of those who required help with their employability does not negate the reality that they made up a sizable group of students with unmet employability needs, particularly among those students. Acknowledging the differences between students who believed their soft skills were being

Vol. 11, No. 1, 2022, E-ISSN: 2226-3624 © 2022

developed and those who did not believe their soft skills were being developed is critical for making the learning experience more inclusive for all students and improving graduate employability rates around the world.

Conflicts of Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

References

- Abd Samad, N., Ahmad, W. M. R., Sern, L. C., Harun, H., Awang, H., Noor, M. S. N. F. (2018). Exploring domains and elements for behavioural competency and employability skills. *Journal of Technical Education and Training*, 10 (1), 82-90.
- Ahmad, N. A., Kenayathulla, H. B., Idris, A. R. (2017). Employability skills for hospitality students in Malaysia. *Malaysian Online Journal of Educational Management*, 5(4),63-86.
- Aman, A. (2021). Sustainability of impact sourcing initiatives in higher education for graduates' employability. *Sustainability (Switzerland)*, 13(1), 1-11.
- Hisham, A. J., Ibrahim, H. I., Rajadurai, J., Sohail, M. S. (2019). Psychological Impact of Work-Integrated Learning Programmes in Malaysia: The Moderating Role of Self- Esteem on Relation between Self-Efficacy and Self-Confidence. *International Journal of Educational Psychology*, 8(2),188-213.
- Cheng, H. C., & Nga, T. T. P. (2021). Development of the Self-Efficacy Beliefs of Engineering Undergraduates Preparing for an International Contest. *Pertanika Journal of Social Science and Humanities*, 29(2),819-837.
- Chong, Y., & Thi, L. S. (2020). University Freshman Mentoring Effectiveness and Scale Enhancement. *Asian Journal of University Education*, 16(4), 181-189.
- Fahimirad, M., Nair, K. P., Kotamjani, S., Mahdinezhad, M., Feng, B. J. (2019). Integration and development of employability skills into Malaysian higher education context:

 Review of the literature. *International Journal of Higher Education*, 8(6), 26-35.
- Flemming, K., Booth, A., Hannes, K., Cargo, M., & Noyes, J. (2018). Cochrane Qualitative and Implementation Methods Group Guidance Paper 5: Reporting guidelines for qualitative, implementation and process evaluation evidence syntheses. *Journal of Clinical Epidemiology*, 97, 70-78.
- Ghani, E. K., & Muhammad, K. (2019). Industry 4.0: Employers' expectations of accounting graduates and its implications on teaching and learning practices. *International Journal of Education and Practice*, 7(1), 19-29.
- Ghazali, G., & Bennett, D. (2017). Employability for music graduates: Malaysian educational reform and the focus on generic skills. *International Journal of Music Education*, 35(4), 588-600.
- Gillath, O., & Karantzas., G. (2019). Attachment security priming: a systematic review. *Current Opinion in Psychology*, 2(SI), 86-95.
- Hanafi, Z. (2015). Training match on job among electrical engineering graduates in community colleges. Doctoral dissertation. Universiti Teknologi Malaysia.
- Harreveld, R. (2010). Philipp Gonon, Katrin Kraus, Jürgen Oelkers & Stefanie Stolz (eds): Work, education and employability. *Vocations and Learning*, *3*, 257-263. https://doi.org/10.1007/ s12186-010-9044-3

- Harun, D., Che' Din, N., Rasdi, H. F. M., Shamsuddin, K. (2019). Employment Experiences among Young Malaysian Adult with learning Disabilities. *International Journal of Environmental Research and Public Health*, 17(0), 1-15.
- Hazlina, M., Ali, A. (2018). Experts' Consensus to Identify Elements of Career Management Competencies in Work-Based Learning (WBL) Program Using Fuzzy Delphi Analysis. *iJET*, Vol. 14, No. 20, 73-86.
- Herlambang, H., Fitri, A. D., Mukminin, A., Muhaimin, M., Hidayat, M., Elfiani, E., Shafira, N. N. A., Puspasari, A., Tarawifa, S., Salam, A. A., Yaakob, M. F. M., Habibi, A. (2021). Quality assurance for sustainable higher education: Structural equation modelling. *Sustainability (Switzerland)*, 13(9).
- Heusdens, W. T., Bakker, A., Baartman, L. K. J., & De Bruijn, E. (2016). Contextualising vocational knowledge: A theoretical framework and illustrations from culinary education. *Vocations and Learning*, *9*, 151-165. https://doi. org/10.1007/s12186-015-9145-0
- Isa, M. U., Kamin, Y. B., Salihu, Y. I., Shuaibu, H., Cledumas, A. M. (2020). Enhancing employability skills of woodwork technology education students through project-based learning at colleges of education (technical) in Nigeria. *Universal Journal of Educational Research*, 8(9A), 31-40.
- Jamaludin, K. A., Alias, N., DeWitt, D., Ibrahim, M. M. (2020). Technical communication pedagogical model (TCPM) for Malaysian vocational colleges. *Humanities and Social Sciences Communications*, 7(1).
- Jason, T., & Gary, M. (2017). Enterprise education: Towards a framework for effective engagement with the learners of today. *Journal of Management Development*, 1-16.
- Kelly, A., Bennett, D., Giridharan, B., Rosenwax, L. (2020). Postdegree intentions of female international undergraduate students studying in Malaysia: A qualitative study. *Journal of International Students*, 10(1), 145-158.
- Ling, W. N., & Kui-Ling, E. L. (2019). Study abroad and behavioural changes: The case of Malaysian learners of Japanese. *Journal Kajian Malaysia*, 37(2), 75-94.
- Liu, X., Peng, M. Y. P., Anser, M. K., Chong, W. L., Lin, B. (2020). Key Teacher Attitudes for Sustainable Development of Student Employability by Social Cognitive Career Theory: The Mediating Roles of Self-Efficacy and Problem-Based Learning. *Frontiers in Psychology*, 11(0), 1-12.
- Ministry of Education Malaysia. (2013). *Malaysia education blueprint 2013-2025*. https://www.moe.gov.my/menumedia/media-cetak/penerbitan/dasar/1207-malaysia-education-blueprint-2013-2025/file
- Zuber, M. A. M., Hussin, M., Norman, M. H., Kasavan, S. (2020). The Employability Skills among Students of Public Higher Education Institution in Malaysia. *Malaysian Journal of Society and Space*, 16(1), 36-45.
- Mohamed, H., Puad, M. H. M., Rashid, A. M., Jamaluddin, R. (2021). Workplace Skills and Teacher Competency from Culinary Arts Students' Perspectives. *Pertanika Journal of Social Science and Humanities*, 29(1),107-125.
- Ab Malik, N. M. A., Shahimi, S., Ismail, M. A., & Shafiai, M. H. (2020). Faktor Penyebab Penyisihan Sosial dalam Kalangan Masyarakat berdasarkan Sorotan Karya Bersistematik dan Keperluan Analisis Lanjut daripada Perspektif Islam. *Jurnal Islamiyyat*.
- Noah, J. B., & Aziz, A. B. A. (2020). A case study on the development of soft skills among TESL graduates in a university. *Universal Journal of Educational Research*, 8(10), 4610-4617.

- Noorhayati, N. M., Mohamed, M., Nor A. M., Abdullah, R. (2018). Career Consultation as An Intervention Strategy in Alleviating Family's Mental Health: A Case Study on Students with Disabilities. *Asia Pacific Journal of Educators and Education*, Vol. 33, 47–55.
- Okoli, C. (2015). A Guide to Conducting a Standalone Systematic Literature Review. Communications of the Association for Information Systems: 37: 879-910
- Olojuolawe, S. R. & Fadila, N. B. M. A. (2019). Determination of employability skills required by electrical technology students in colleges of education in Nigeria. *International Journal of Engineering Education*, 1(1), 57-66.
- Omar, M. K., Zahar, F. N., Rashid, A. M. (2020). Knowledge, skills, and attitudes as predictors in determining teachers' competency in Malaysian TVET institutions. *Universal Journal of Educational Research*, 8(3), 95-104.
- Puad, M. H. M. (2015). The role of employability skills training programs in the workforce of Malaysia (Doctoral dissertation). Purdue University.
- Rozmel, A. L., Othman, Z., Ismail, K. H. (2017). E.X.P.E.R.T. Role Play Technique for Workplace Readiness. *The Southeast Asian Journal of English Language Studies*, 24(1), 128 144.
- Shafrill, H. A. M., Krauss, S. E., & Samsuddin, S. F. (2018). A Systematc review on Asian's Farmers' adaptation practices towards climate change. *Science of the Total Environment*: 683-695
- Siti Hajar, H., & Shukri, S. (2021). Students' perception to integrate education 4.0 in science program. *Multidisciplinary Journal for Education Social and Technological Sciences*, 8(1), 45-57.
- Siti Raba'ah, H., Le, K. K., Musa, S. N. S. (2021). The mediating role of career decision self-efficacy on the relationship of career emotional intelligence and self-esteem with career adaptability among university students. *International Journal of Adolescence and Youth*, 26(1), 83-93.
- Syamimi, T., Abdullah, N., Noor, N. M. (2018). Spoken Metadiscourse in Malaysian ESL Job Interviews. *Journal of Language Studies*, 18(3), 135-152.
- Tang, K. N. (2019). Beyond employability: Embedding soft skills in higher education. *The Turkish Online Journal of Educational Technology*, 18(2), 1-9.
- 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 and Training*, 61(5), 590-604.
- Xiao, Y., & Watson, M. (2019). Guidance on Conducting a Systematic Literature Review. Journal of Planning Education and Research 39(1): 93–112.
- Zulkifli, N. N., Halim, N. D. A., Yahaya, N., van der Meijden, H., Zaid, N. M., Rashid, A. H. A., Hashim, S. (2021). Online Reciprocal Peer Tutoring Approach in Facebook: Measuring Students' Critical Thinking. *International Journal of Emerging Technologies in Learning*, 16(23), 16-28.