

Factors Affecting Graduates' Employability Skills: Quantitative Study on Employees in Brunei

Nur Sobirah Binti Mohammad Sulaimi

Asia Pacific University of Technology and Innovation

Patrick Han Kok Siew

Asia Pacific University of Technology and Innovation

patrick.han@apu.edu.my

Abstract

This research attempts to examine the factors that affect graduates' employability skills. The researcher has identified five factors that have impact on graduates' employability in this research, which are 'Career Development Learning', 'Experience', 'Degree Subject Knowledge, Skills & Understanding', 'Generic Skills' and 'Emotional Intelligence'. This research has adopted a quantitative method and used probability sampling as the data collection method. The targeted population of this research is employees in Brunei Darussalam, who has at least 1 year of working experience. A total of 153 respondents have participated in the research through a questionnaire that has been distributed online. After all data has been collected, the data is computed and analysed through Statistical Package for Social Science (SPSS) version 28.0. The research has found that all of the independent variables have a significant relationship with graduates' employability through the outcome of the Pearson's correlation analysis. The hypotheses formed in this research were also tested. The research was concluded with academic and managerial implications, limitations and recommendations for future research to further explore and improve the quality of this study

Keywords: *Employability, Experience, Knowledge, Career, Graduates*

1.0 Introduction

Upon graduation, students may have learnt and acquired some technical and soft skills that are most of the time related to their field of study. They may have thought that just equipping with the technical skills and knowledge that have gained from their studies alone is enough for them to get any jobs as long as they put their mind on it. However, from the perspective of the employers, they must be able to perform their job excellently in the technical part as well as having competencies like team player, problem solving abilities and interpersonal skills. Also, qualifications, knowledge, personal attributes, skills – soft and hard and competencies play an important role in graduates' employability (Pheko & Molefhe, 2016).

According to Hoh et al. (2018), graduates would be able to perform more efficiently and productively in their selected profession if they have a wider range of skills, competencies, and

experience. Thus, it is crucial to address the topic of graduates' employability skills in the light of major changes in the labour market. Brunei, the focus site of this study, is a developing country that is located on the north coast of Borneo Island in Southeast Asia. The country is divided into two parts by the East Malaysian state of Sarawak. As of 2021, the country had a total population of 440, 715 people (Department of Economic Planning and Statistics, 2022b). About 72.3% of the population stays in Brunei-Muara (Department of Economic Planning and Statistics, 2022b) which is where the capital city, Bandar Seri Begawan is located. The Department of Economic Planning and Statistics Brunei (2022a) reported that the unemployed rate in the year of 2021 in Brunei is 4.9% (10,956 persons), where about 39.7% were those aged between 18 – 24 years and 41.8% aged between 25 – 35 years. The highest share of the unemployed was those who have attained secondary education level with 59.3% (6,500 persons) and followed by tertiary education with 17.7% (1,942 persons). More than half (56.4%) of the unemployed were seeking employment for more than 12 months. The government of Brunei has been making some efforts to lower the unemployment rate among graduates. In order to prepare unemployed graduates for the industry, the Manpower Policy and Planning Unit of the Energy and Industry Department (Wong, 2017) has created an apprenticeship programme called i-Ready that is primarily focused on improving employability and marketability, in collaboration with businesses and companies in Brunei.

The programme gives graduates the chance to overcome unemployment caused by a lack of experience in a real working environment. Prior to the establishment of the programme, a survey on job openings in Brunei that requires at least a degree and above was taken by the Manpower Policy and Planning Unit. The result was at least 50% of the openings require three years of working experience (Wong, 2017). Othman (2021) reported that out of 5,000 i-Ready candidates, 1,500 of them manage to secure full-time employment through the programme, which is consider a small amount of percentage of the candidates have a successful career. To date, more than 800 private companies have joined the programme to serve as employers and mentors to the i-Ready candidates (Othman, 2021).

The current problem is that employers protested that graduates lack of employability skills are the reasons why it is not easy for them to get employed. To tackle this problem, the researcher will explore the importance of employability skills from the perspective of the employees who have at least 1 year working experience. The researcher will identify what employers regard to be the best skills and the factors that may affect graduates the eligibility to be employed.

1.1 Statement of Problem

Education plays a vital role in supplying and providing the labor market with an educated labor force for the growth of a country's economy. While the labor market shall in turn convey the information on the types of qualification expected from the education system (Hoh et al., 2018). The objective of higher education institutions (HEI) is to ensure graduates employability in the labor market. The development of graduates' employability can thus be achieved through HEI, because for the graduates, employability is their main priority and concern. However, it can be unclear to the fresh graduates what kind of skills are required for their careers and how they can develop those skills through diverse experiences – either from internship or school activities. Thus, to improve graduates' employability, HEI shall work with employers to prepare students to fit in the labour market, so that their skills and demands from the employers and higher education institutions responsibilities are aligned. This study will help explore the role of HEI in filling in the skill gap for graduates from the perspective of employees and managers.

According to the finding of a study done by Kalei (2016), 82% of the employers agreed that the graduates lacked employability skills and 60% of graduates agreed with this statement. The study has found there was a skill gap between what employers expect graduates to possess and what the graduates actually possessed. Nadarajah (2021) also discovered in her study there is a discrepancy between graduates' employability abilities and those needed on the labour market. A study by Nesaratnam (2018) has agreed that employers need to play a more active part in developing graduates' employability, instead of putting the pressure on HEI. The same study also confirmed that the employers' perspective from the graduate point of view that soft skills are an important and significant factor to graduate employability. As this is an ongoing process with the uncertainty in labour market, the author would like to further explore the impact of providing graduates with training upon employment would further enhance the employability skills of the graduates. The constant change in labor needs in a country has caused the graduates to be unsuccessful in securing employment because of the lack of skills that are needed in the labor markets. From the finding of Abas & Imam (2016), not all kinds of employability skills are applicable to employees to succeed at work. Those who have competencies in specific employability skills will put them in a better position to advance in their career. Few reasons of unemployment among the graduates have been identified by Cheong & Lawrey (2009) for instances – 'Do not have relevant work 11 skills', 'Employers prefer foreign workers' and 'No appropriate/relevant jobs.'

For university students, entering the employment world can be intimidating and at the same time exciting. However, their main concern is to be able to get a job and start working as soon as they graduate. There is a lack of research to determine how employability might be specifically defined for graduate students (Chhinzer & Russo, 2018). Thus, this study will assist the academic institutions and the government to plan and design employability skills modules to better help the graduates be prepared and be equipped with the skills that can help them better fit in the labor market. Therefore, the outcome of this study shall help the graduates to equip themselves with the competencies and factors that will guarantee employability and help them navigate better in the employment world.

Though there are various research or studies have been conducted on the perspective of employers (Matsouka & Mihail, 2016; Zaheer et al., 2020; Hosain et al., 2021) and/or employees (Shivoro et al., 2018; Abas & Imam, 2016; Singh & Singh, 2008), there are none of them was based on Brunei. The perspective of graduates in Brunei is under researched and thus, it is critical to conduct this study from the perspective of Bruneian employees so that the research can be useful for other academics in the future to further explore and improve the study. Most studies (Fahimirad et al., 2019; Hosain et al., 2021; Jackson, 2012) focus on generic soft skills such as leadership, communication, teamwork and problem solving as the factor that is affecting graduates' employability skills. There is a lack of research on other factors or dimensions such as emotional intelligence, experience and career development learning. Thus, this study is necessary to be conducted to uncover such other factors or dimensions that have a positive relationship with employability skills through the perspective of the graduates.

2.0 Literature Review

2.1 Graduate Employability

The term employability has been broadly defined as a collection of skills, attributes and characteristics that employers expect from workers (Chhinzer & Russo, 2018). Hoh et al. (2018) has defined employability skills as ‘multi-faceted’ characteristic of the individual, who must strive to obtain the skills and attributes he/she deems necessary in the job market’. In addition, Kenayathulla et al. (2019) has referred employability skills as ‘the basic academic, personal and teamwork skills that employers expect from their workers, which are expected to be developed by the educational system’. Rehman (2014) defines employability as ‘the enhanced capacity to secure and maintain employment’. Dacre Pool & Sewell (2007) has defined employability as ‘having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose, secure and retain occupations in which they can be satisfied and successful’. On the other hand, graduates are the people who have completed a degree successfully at a university and have received a certificate upon completion as proof (Collins, 2022).

Graduate employability can be summed up as the set of skills and abilities that graduates can acquire to succeed in the job market and in their careers (Chen, 2017; Hosain et al., 2021). Yorke (2006) has defined graduate employability as ‘a set of achievements – skills, understanding and 18 personal attributes – take make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce the community and the economy.’ Matsouka & Mihail (2016) has similarly defined graduate employability as what Yorke (2006) has describe. Basically, it addresses the identification of the right mix of skills, abilities, attitudes and personal qualities that can improve and enhance graduate employment opportunities (Santos, 2019). It is clear that graduates need employability skills to strive in the labour market by acquiring the essential skills and abilities, which are anticipated to have been developed during their studies to satisfy the desired requirements of employers.

As much as employability is a critical issue for both government and HEI, from the perspective of the graduates, employability has become a more urgent matter because the cost of studies for most students are increasing in most countries (Clarke, 2017), be that those who studied at national, local, private, or oversea university level. Most students may have to take loans to pay for their studies. After all, one of the main reasons why students enrolled into HEI is to increase their employment opportunities (Saunders & Zuzel, 2010). Thus, it is important for graduates especially to get a job as soon as they are finished with their studies. But with the unpredictable trends in the labour market due to advancement of technologies or economy activity in a country, the graduates are forced to be in a state where they are prepared to be employed with the skills that are relevant to the market needs. Hence, graduates must possess employability skills that may be applied to a variety of work situations, not just focusing on retaining and gaining knowledge and skills specific to their field of work.

Dacre Pool & Sewell (2007) has come up with an employability conceptual model from the perspective of students. Thus, this study will adapt the five components – career development learning, experience, degree subject knowledge, skills & understanding, generic skills and emotional intelligence as the factors that can affect graduates’ employability.

2.2 Career Development Learning

In order to have the best opportunity of getting jobs where graduates can be successful and satisfied, it is crucial that they undergo career development learning (Dacre Pool & Sewell, 2007). According to Watts (2006), career development learning is focusing on assisting students in acquiring the knowledge, concepts, skills and attitudes that will enable them to manage their careers, or their lifelong advancement in study and employment.

According to the DOTS model by Law & Watts (1977, cited from Dacre Pool & Sewell, 2007), career development learning should involve activities that increase graduates' self-awareness, allow them to evaluate their interests and passions seriously – something that motivate them and that suit their personalities. They must also learn how to effectively promote themselves to potential employers, conduct market research to determine what opportunities are available in the job market and finally make thoughtful career decisions. All of these activities should be developed early during their college or university year, so that by the time they graduate, they already have ideas constructed on how they want their career life to be.

Bridgstock et al. (2009) define career development learning as the acquisition of skills that are necessary for managing and developing a profession over the course of a person's life. It is based on a continuing process of authentic learning that increases one's understanding of the workplace and of oneself. In this study, the researcher also emphasis on the importance of HEI as a medium to integrate career development learning skills into courses from the beginning; first year of university, with a continuous input and feedback from faculties, industry, career staffs and students.

2.3 Experience

Work experience is one of the dimensions that employers value greatly in graduates. Anas & Hamzah (2017) stated that working experience is crucial for employers. Employability skills can be built through students' active engagement in extracurricular activities (Watts, 2006). Dacre Pool & Sewell (2007) shared in their research that experience can enhance graduates' level of employability – from their life experience and work experience that they have gain as a part of their course requirement before graduating or carried out on a voluntary basis or experience gained from part-time work. McMurray et al. (2016) stated that work placements are not just a crucial link between graduates and the labour market, but it is also an opportunity for the graduates to improve and develop their individual employability.

HEI have spent a lot of money on developing and enhancing students' employability skills (Silva et al., 2015). The most common forms of how businesses or employers engage with HEI are by providing work placements or internship and career advice or motivational talks to students (CBI, 2021). Another study by Tomlinson (2012) on graduates' employability and debates over the future of work, shared that a growing number of graduates are using internship programmes to improve their employability qualities – which is driven by their desire to 'stand out' from the larger graduate population. Thus, the reason why HEI pushed their students towards internship is because the likelihood for students to secure an employment is high compared to those who does not have the internship experience. Once again, it is realized that experience is crucial in finding meaningful employment.

Study by Nesaratnam (2018) has defined internship experience as a systematic experience that allows graduates to apply their theoretical education to practical, hands-on situations. The

researcher will apply this definition of internship experience as the conceptual definition of experience for this study.

2.4 Degree Subject Knowledge, Skills & Understanding

According to Dacre Pool (2017), the primary reasons for students enrolling in HEI is to study a particular subject in-dept and earn a degree, which should improve their chances of finding employment. According to Anas & Hamzah (2017), ‘Students are motivated to continue their studies in higher education is due to the subject specific course, to earn academic qualifications and credentials and eventually land a job.’ It is critical to understand that employers will evaluate graduates based on how successfully they completed their degree programme (Dacre Pool & Sewell, 2007), possibly because this is one of how they measure graduates’ employability from their side as this is something that is visible to them during the interview phase. Subject knowledge, application and ability are the formal qualifications that represent graduates’ values (CBI, 2021).

2.5 Generic Skills

Bridgstock (2009) defined generic skills as the skills that are required for job performance and are adaptable to a variety of work settings. The skills included are such as working with technology, communication skills, teamwork and etc. Another term used in literature review for generic skills is soft skills, key skills or core competencies. According to Virtanen & Tynjala (2018), generic skills are used in education, working life and society.

To remain competitive, employers need a diverse set of knowledge and skills from their workforce (CBI, 2021). 69% of employers said that soft skills and behaviors were the most important factors they consider when hiring graduates (CBI, 2021). Findings from research done by McMurray et al. (2016), employers would recruit graduates that have transferrable skills such as trustworthiness, reliability, motivation, communication skills and a willingness to learn. Another finding from a study by Wilton (2014) the list of graduate competencies expected from employers are strong work ethic, computer literacy, willingness & ability to learn & to ask question, confidence, proactivity, problem-solving ability, time-management and communication skills. Selvadurai et al. (2012) has identified five generic skills from their study, namely planning and problem solving, retrieve and handle information, communication and presentation, social development and interaction and lastly, individual traits and attributes.

The government often gives students the opportunity to develop their generic competencies by assigning them a variety of tasks to do during their academic careers (Fahimirad et al., 2019). For instance, in the setting of university, generic skills have either been taught as separate courses such as presentation skills and communication skills or have been integrated into other subjects such as information retrieval course as part of research component (Virtanen & Tynjala, 2018).

2.6 Emotional Intelligence

Mayer et al. (2004) has defined emotional intelligence as ‘...the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth.’ It has been proposed that people with high emotional intelligence can use

their emotions to direct their thoughts and behavior, as well as comprehend their own and other's feelings with great accuracy.

Dacre Pool & Sewell (2007) shared in his study that a graduate must developed emotional intelligence competencies to fully reach their employability potential. A study by Anas & Hamzah (2017) has stated that with a strong foundation in emotion management, the student will develop their emotional intelligence and be constantly inspired to improve their skills in order to be prepared for the working world. The researchers also added that if students have a good foundation of emotion management, they will be able to refine their emotional intelligence and be continually motivated to enhance skills as preparation for the working environment.

2.7 Theories

According to Sweetland (1996), Human Capital Theory suggested that individuals and society profit economically from investments in people. Schultz (1971), which is one of the earliest researchers that studies on the theoretical framework of Human Capital Theory, stated that education has become one of the prime human capital investments through the researcher analysis. Schultz (1971) also added that education is said to aid in the enhancement of health and nutrition – which are two other types of human capital investments.

The Human Capital Theory also argues that education promotes individual productivity, which improves job performance (Cai, 2012). This suggested that education provides employability skills that are important to job performance. The more educated the people are, the more successful they will be in the market labor. Hence, the more the country invests in education and training, the more it helps its people, especially the graduates, in acquiring skills that may be valuable to the employers. Suleman (2017) has shared the central concept of Human Capital Theory is that individuals invest in their education and training to acquire a variety of skills that may be rewarded by employers.

Marginson (2015) has also stated that Human Capital Theory has established a relationship between higher education and work. The said researcher added that the combination of education as well as the value of an individual can be interpreted as the factors that determine the earnings of an educated labor in a country. This is the reason why employers are willing to pay more for skilled and educated workers. Marginson (2015) argues that from this view of Human Capital Theory, rather than the social background of the graduates or labor demand, higher education affects the position of the graduates in the market.

It is evident that Human Capital Theory does show the importance of producing employable graduates for the growth of economy in a country. Thus, it is important for the government, especially policy makers as well as HEI, to adjust their requirements and allocate funds to increase the education sector in the country as well as the employment rates. Hence, it can help increase the country's economy and may lower the rate of unemployment in a country.

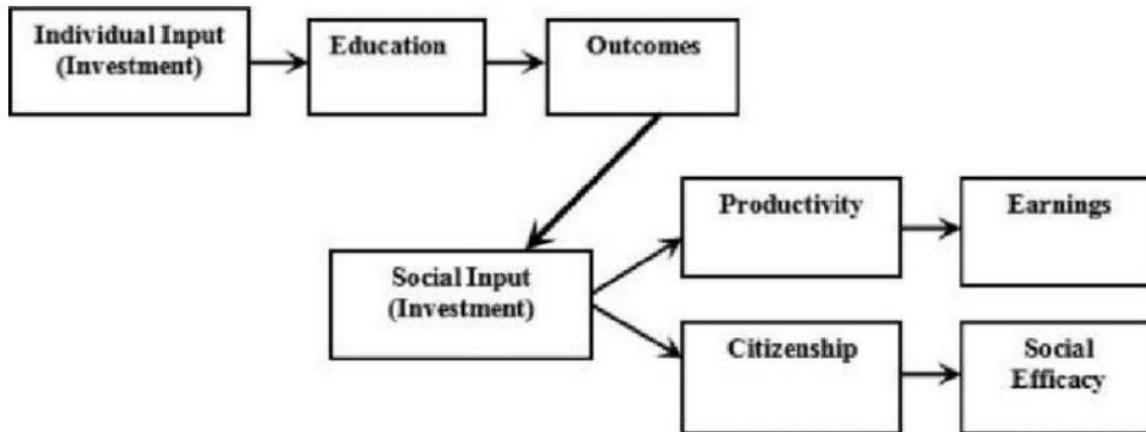


Figure 1: Human Capital Theory Framework. (Source: Ahmed et al., 2017)

2.8 Relationship between Career Development Learning and Graduate Employability

Past studies have examined the relationship between graduates' employability with career development learning. Bridgstock et al. (2019) found that career development learning has a positive impact on graduate employability. The researcher also added that early exposure to career development learning in degree programmes helps students create realistic identities and increases their grasp of potential job paths. Students' engagement with the coursework of the programme also increases as they begin to see the potential outcomes of their degree and the relevance of what they are learning. Therefore, students need to identify their strengths and weaknesses, whether they have the capabilities required by the employers to add value through their work and to navigate their careers.

CBI's (2021) Education & Skills Survey has found that poor careers advice and lack of awareness among learners about different routes to work as one of the main drivers of skills gaps in the current market. This emphasizes the significance of improving career advice and guidance in university and creating a stronger tie between the market world and HEI.

About a third of employers that participated in McMurray et al. (2016) research study has stated that graduates lacked the skills to obtain employment which includes poor CVs writing or presentation, not doing their research on the company they are applying to work for and not doing well in the interview. Another study from Wilton (2014) has found that graduates' presentation of their 'self' through CV and cover letter is a dimension of employability that are controllable by graduates, where HEI can aid their students through coaching or giving tips on this matter easily during their study year. Most of the studies showed a positive influence of career development learning on graduates' employability. Hypothesis 1 is presented as follows:

H1 There is a significant relationship between Career Development Learning and Graduate Employability.

2.9 Relationship between Experience and Graduate Employability

According to Chen (2017), there is a positive relationship between graduates' employability with academic activities, student club activities and internship. There are many cases when employers have hired graduates because of work placement (McMurray et al., 2016). Often,

work placement would lead graduates to employment offers. Therefore, it is important for graduates to find the opportunities to develop their employability through relevant work experience.

According to Zaheer et al. (2020), it was acknowledged that core competency development takes place in the workplace rather than in the university. Therefore, he concluded that lack of industrial experience may be one of the factors in graduates' inability to apply for jobs, which creates a vicious cycle in which they lack the desirable competencies employers anticipated from graduates.

Qenani et al. (2014) examine the relationship of perceived employability and internship experience through a questionnaire distributed to students from two different colleges in the United States. The study has found that almost half of the students responded that they gained work experience through internship. Additionally, it was reported that the internship experience helped students feel more confident about their employability. Findings from Matsouka & Mihail (2016) on their study, activities including internships and voluntary work give students the chance to develop the soft skills that are required by companies.

Employers from a research study done by McMurray et al. (2016) were asked about the most important factors employers consider when recruiting graduates. The study reported that personal attitude, employability skills, relevant work experience, degree result & degree subject were what the employers valued the most when they recruit graduates. The finding of this study is similar to CBI's 2012 Education and Skills Survey findings – that employability skills and relevant work experience were important factors in recruiting graduates. The employers also shared that work experience was seen to enhance soft skills, boost confidence, create more well-rounded graduates and strengthen links to the job market. One of the employers explained that graduates “need more practical experience than theory, first-hand experience and exposure leads to more realistic expectations”. It is evident that experience has an influence on graduate employability. Hypothesis 2 is suggested as below:

H2 There is a significant relationship between Experience and Graduate Employability

2.10 Relationship between Degree Subject Knowledge, Skills & Understanding and Graduate Employability

According to Anas & Hamzah (2017), choosing the right course programme may enhance graduates' competitiveness in their chosen occupation. This statement indicates that graduate's employability would increase if they chose a job that is relevant to their degree subject knowledge.

The result of findings from Chhinzer & Russo (2018) indicate that there is a positive correlation between academic achievement and employer perceptions of graduate student employability. The researchers of this study have added that employers relied on the GPA or exam results as a proxy for students' ability in performing job. However, as the employers become more familiar with employees, the effect of GPA is weakened – they may rely on it, but not entirely on GPA itself to employ graduates. The researcher concluded that the impact of GPA on employability may change depending on how long a person has worked for the company. Not only that, from the findings of this study, the researcher has found that employers consider subject-specific knowledge when defining graduates' employability.

In the CBI's (2021) Education & Skills Survey on employers' demand for skills – it is stated that 41% of the employers need people with intermediate level skills, such as Higher National Diploma in the industry. 43% of the employers demanded high level skills, such as bachelor's degrees. The need for such skills is expected to grow over the coming years (CBI, 2021). The survey also found that the lack of candidates with appropriate industry relevant qualifications (50%) is one of the main drivers of skills gaps. Dacre Pool (2017) stated that just by having degree subject knowledge, skills and understanding alone are unlikely to guarantee graduates jobs in which they would be satisfied and successful. However, the dimension of degree subject knowledge, skills and understanding is an important element that employers would usually look into when they are recruiting applicants. Therefore, in light of majority of studies that have shown a positive influence of degree subject knowledge, skills and understanding on graduate employability. Hypothesis 3 is proposed as follows:

H3 There is a significant relationship between Degree Subject Knowledge, Skills & Understanding and Graduate Employability.

2.11 Relationship between Generic Skills and Graduate Employability

Generally, graduates are aware of the importance of generic skills in developing their employability skills. From research review paper done by Fahimirad et al. (2019), graduates believe that their experience from internship and from the activities in their coursework has improved their generic skills. Thus, for them, regardless of those experiences, generic skills would still have a positive consequence on their future perspectives and development. The finding from a study by Matsouka & Mihail (2016) has a similar outcome from their graduates' participants, where the graduates believe that the academic environment provides them with the soft skills they need and activities such as internship and volunteering during their course of study give them an opportunity to acquire those soft skills that are needed by employers.

Virtanen & Tynjala (2018) study has shown that lack of generic skills negatively affects graduate employability based on the result of their interview sessions with students and industry executives. The researchers also added that from the business perspective, it is worrying that graduates have lack of knowledge of generic skills as well as the possession of high -level generic skills such as critical thinking, innovation and teamwork. The researchers also shared one their interview with one of the manufacturing industry executives that the company prefers to employ graduates with generic skills in addition to the technical skills they have acquired during their study year. The participants of the study recommend HEI to use active learning and effective teaching techniques that can help students enhance the learning of generic skills through effective interaction and discussion, collaborations, problem solving and teamwork.

In the CBI's (2021) Education & Skills Survey, it was found that there was an increase in the needs for people with other workplace skills – that are not linked to qualification, for instance, problem solving and negotiation. Thus, as stated in previous studies, generic skills have an influence on graduate employability. Hypothesis 4 is presented as follows:

H4 There is a significant relationship between Generic Skills and Graduate Employability.

2.12 Relationship between Emotional Intelligence and Graduate Employability

From a study by Chhinzer & Russo (2018) with their findings after interviewing employers, the employers view graduate's failure to respond to criticism or feedback as a notable weakness. Hence, it can be interpreted that employers do not value graduates who cannot control their emotional intelligence. Another study by Matsouka & Mihail (2016) has found that emotional intelligence is a very crucial skills to have in a job because people with high emotional intelligence are able to collaborate effectively in teams, able to adapt to change and are flexible.

According to a study by Osunsan et al. (2020), the researcher has investigated the relationship of emotional intelligence and employability of undergraduates at Kampala International, Uganda. Five key elements, which are self-awareness, handling emotions, motivation, empathy and social skills, have been used to investigate the emotional intelligence of the research participants. The result shows there is a positive relationship between emotional intelligence and graduate employability. The study was in line with the findings of the study done by Pathak & Shankar (2018), Coetzee & Beukes (2010) and Dacre Pool & Sewell (2007). Therefore, in light of the majority of the studies have shown a positive influence of emotional intelligence on graduate employability, Hypothesis 5 is suggested as follows:

H5 There is a significant relationship between Emotional Intelligence and Graduate Employability.

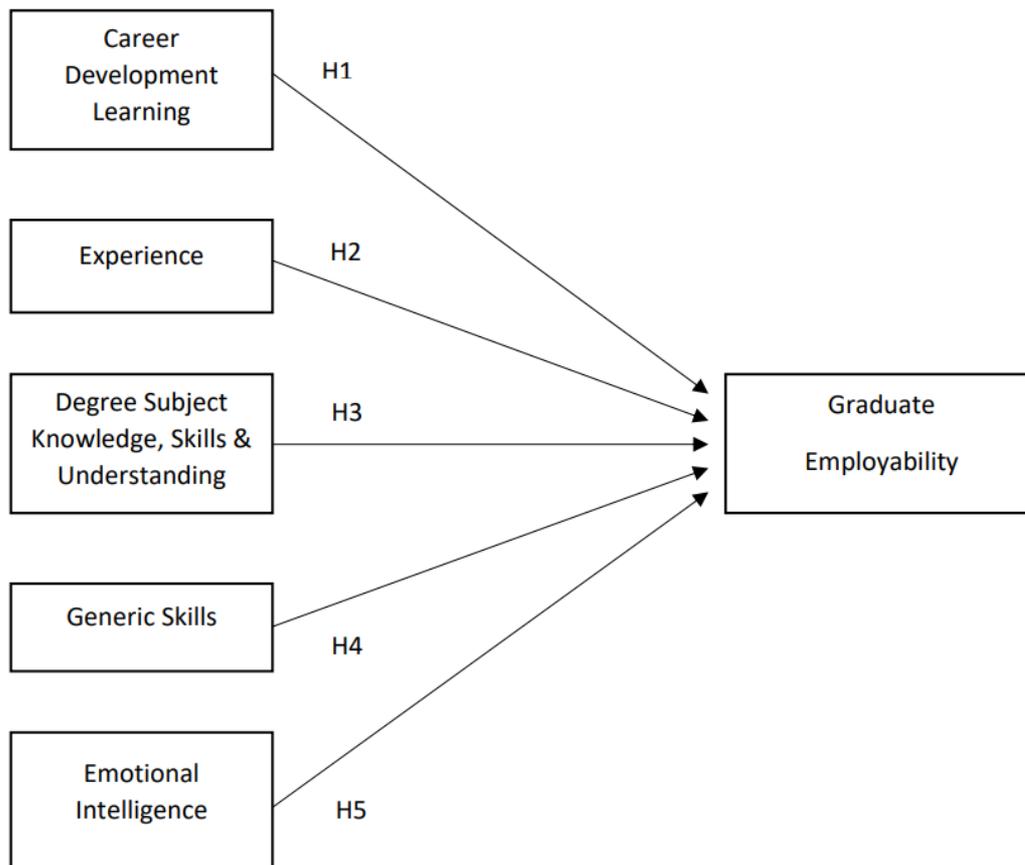


Figure 2: Research Framework – Factors Affecting Graduates' Employability Skills: Quantitative Study on Employees in Brunei.

3.0 Research Methodology

A deductive research approach was implemented in this study. The research is approached by theory, where the hypotheses will be derived. Data is collected to test the research hypotheses. The researcher uses the gathered data to analyse the hypotheses to conclude whether the data derived supports or rejects the hypotheses. A deductive approach is usually associated with a survey strategy. It is a popular strategy in business and management research (Saunders et al., 2019). This study collected data through questionnaires survey. As this study uses probability sampling, the survey strategy allows the researcher to produce results that are statistically representative of the entire population at a lower cost than gathering data on the entire population (Saunders et al., 2019) within a limited timeframe.

4.0 Data Analysis and Interpretation

The data collected through the questionnaire that were distributed online will be analysed by SPSS to examine the relationship between Graduates Employability and the five independent variables which are Career Development Learning, Experience, Degree Subject Knowledge, Skills & Understanding, Generic Skills and Emotional Intelligence. The outcome of the data will be summarised and presented in tables and figures for easy interpretation.

4.1 Descriptive Analysis of Respondents Demographic Profile

The questionnaire has been distributed online through Google Form to an estimated 138 employees with at least 1 year of working experience. The researcher managed to obtain 153 respondents, which is sufficient to conduct the research as per calculated by G*Power sample size calculator. The demographic profile that represents the respondents is included in Section A of the questionnaire. The items included are Gender, Age range, Educational Level and Length of Working Experience.

4.1.1 Gender

The Table 1 below showed that there were 113 female (73.9%), and 40 male (26.1%) has participated in the survey. The proportion of female respondents is higher than male respondents.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	113	73.9	73.9	73.9
	Male	40	26.1	26.1	100.0
	Total	153	100.0	100.0	

Table 1: Distribution of respondents' gender group

4.1.2 Age

The age group was divided into 6 categories: 24 and below, 25 – 29, 30 – 34, 35 – 39 and 40 and above. Table 2 below portray the frequency of each age group. The majority of the respondents are aged between 25 to 29 years old, with 52.5% (80 respondents). The second

highest is those aged 24 years and below, with 19.6% (30 respondents). Closely behind is followed by the age group of 40 years and above, with 13.7% (21 respondents). The least are from the age group between 35 to 39 years old, which accounted only 3.3% (5 respondents).

		Age			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	24 and below	30	19.6	19.6	19.6
	25 - 29	80	52.3	52.3	71.9
	30 - 34	17	11.1	11.1	83.0
	35 - 39	5	3.3	3.3	86.3
	40 and above	21	13.7	13.7	100.0
	Total	153	100.0	100.0	

Table 2: Distribution of respondents' age group

4.1.3 Education

Table 3 below shows five categories of education levels: O' Level, A' Level, Degree, Master and PhD. Majority of the respondents are a degree holder with 64.7% (99 respondents) and the least are PhD holder with 1.3% (2 respondents). The second highest percentage is an O' Level holder with 12.4% (19 respondents). The third highest with 11.8% (18 respondents) is Master holder, followed with 9.8% are from A' Level background (15 respondents).

		Education			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	A' Level	15	9.8	9.8	9.8
	Degree	99	64.7	64.7	74.5
	Master	18	11.8	11.8	86.3
	O' Level	19	12.4	12.4	98.7
	PhD	2	1.3	1.3	100.0
	Total	153	100.0	100.0	

Table 3: Educational level of the respondents

4.1.4 Length of Working Experience

It can be seen from Table 4 and Figure 6, the length of working experience is classified into five groups, which are 1 – 3 years, 4 – 6 years, 7 – 9 years, 10 – 12 years and 13 & above. A total of 58.8% (90 respondents) have been working from 1 to 3 years, which is the highest number of respondents among the groups. Followed by those working from 4 to 6 years with 18.3% (28 respondents) and 15.7% (24 respondents) of the respondents have a working experience of 13 years and above. The remaining 7 and 4 respondents have been working for 7 to 9 years (4.6%) and 10 to 12 years (2.6%), respectively.

		Length			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 - 3	90	58.8	58.8	58.8
	10 - 12	4	2.6	2.6	61.4
	13 and above	24	15.7	15.7	77.1
	4 - 6	28	18.3	18.3	95.4
	7 - 9	7	4.6	4.6	100.0
	Total	153	100.0	100.0	

Table 4: The length of respondents' working experience.

4.2 Normality Test Analysis

Based on Table 5, the skewness and kurtosis value of each variable has been observed. The skewness value of Career Development Learning is -0.748, while kurtosis value is 1.015. Experience skewness is -0.649 and kurtosis value is 0.283. For Degree Subject Knowledge, Skills & Understanding the value of skewness is -0.527, while the kurtosis value is 0.230. The skewness for Generic Skills is -0.756 and the kurtosis value is 0.695. Next, the skewness value for Emotional Intelligence is -0.728, while the kurtosis value is 0.51. Lastly, for Graduates Employability, the skewness value is -0.572 and the kurtosis value is 0.916. As shown, the range for the skewness values is between -0.756 and -0.527, while the range for kurtosis values is between 0.051 and 1.015. This shows that the variables are normally distributed as the skewness of the variables in this study fall under the acceptable range of -2 and +2 and the kurtosis value falls within -7 and +7.

	Descriptive Statistics								
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
CareeraTotal	153	1.25	5.00	3.6487	.69030	-.748	.196	1.015	.390
ExperienceTotal	153	1.50	5.00	3.9265	.73106	-.649	.196	.283	.390
DegreeTotal	153	2.00	5.00	3.9297	.62727	-.527	.196	.230	.390
GenericTotal	153	2.00	5.00	4.1912	.60137	-.756	.196	.695	.390
EmotionalTotal	153	2.50	5.00	4.3219	.58957	-.728	.196	.051	.390
GraduatesTotal	153	1.00	5.00	3.9020	.74958	-.572	.196	.916	.390
Valid N (listwise)	153								

Table 5: Descriptive statistics of each variable.

4.3 Reliability Test

Reliability tests were carried out to test the compatibility, reliability and validity of each item in the dependent and independent variables by conducted a Cronbach's Alpha test. According to Pallant (2016), the accepted values for Cronbach Alpha is should be above 0.7 and the preferred value is above 0.8.

Variables	Cronbach's Alpha	Number of Items
Career Development Learning (IV1)	0.699	4
Experience (IV2)	0.860	4
Degree Subject Knowledge, Skills & Understanding (IV3)	0.701	4
Generic Skills (IV4)	0.796	4
Emotional Intelligence (IV5)	0.853	4
Graduates Employability (DV)	0.807	4

Table 6: Reliability Test - Cronbach's Alpha Test

Based on the results shown on Table 6 above, there are total of 4 items being used to measure each variable. It can be seen that the first independent variable, namely Career Development Learning has a Cronbach's Alpha value of 0.699 – which is close to the minimum acceptable value for reliability test, the second independent variable namely Experience has a value of 0.860, for the third independent variable namely Degree Subject Knowledge, Skills & Understanding is 0.701, for the fourth independent variable namely Generic Skills is 0.796 and lastly, the fifth independent variable namely Emotional Intelligence is 0.853. As for the dependent variable which is Graduate Employability, the value is 0.807. All of the variables fall within the acceptable range of Cronbach's Alpha value, which means that the scale used to measure the variables are reliable and significant.

4.4 Pearson's Correlation Findings

Pearson Correlation is used to test the significance of bivariate relationships between the variables. It is especially useful to investigate the strength of the relationship between the independent and dependent variables. A perfectly positive correlation will be indicated with 1, whereas a perfectly negative correlation will be indicated with -1 (Pallant, 2016). Table 7 below is showing the results of Pearson Correlation test between the variables.

		Correlations					
		Career Total	Experience Total	Degree Total	Generic Total	Emotional Total	Graduates Total
GraduatesTotal	Pearson Correlation	.336**	.387**	.402**	.372*	.413**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	
	N	153	153	153	153	153	153

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7: Pearson's Correlation Test

As seen from Table 7 above, it is clear that all independent variable has a positive correlation with Graduates Employability. Emotional Intelligence has the highest score with correlation coefficient of 0.413. Whereas the least strong relationship with Graduates Employability is

Career Development Learning with correlation coefficient of 0.336, which indicates that there is a moderate positive relationship between the two variables. All of the independent variables have a significant threshold of less than 0.001, which indicates the relationship between independent and dependent variable are significant.

4.5 Multiple Linear Regression Analysis

4.5.1 Model Summary

Table 8 is showing the model summary for this research. Looking at the table, the R square value is 0.302, which indicates that 30.2% of Graduates Employability can be explained by all 5 independent variables. However, the remaining 69.8% represent that can be explained by other factors that were uncontrollable and were not discussed in the research.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.550 ^a	.302	.278	.62310

a. Predictors: (Constant), EmotionalTotal, CareerTotal, ExperienceTotal, DegreeTotal, GenericTotal

b. Dependent Variable: GraduatesTotal

Table 8: R Square value

4.5.2 ANOVA Analysis

Table 9 is showing the ANOVA analysis for this research. The overall regression for all 5 independent variables is statistically significant and has an impact with Graduates Employability, as the p value is less than 0.05.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.696	5	4.939	12.722	<.001 ^b
	Residual	57.074	147	.388		
	Total	81.770	152			

a. Dependent Variable: GraduatesTotal

b. Predictors: (Constant), EmotionalTotal, CareerTotal, ExperienceTotal, DegreeTotal, GenericTotal

Table 9: ANOVA Analysis

4.5.3 Coefficients

Table 10 shows the summary of regression analysis for Graduates Employability. The p value for Career Development Learning and Experience are 0.020 and 0.051 respectively, which

indicates that the two has significant influence on Graduates Employability. Meanwhile, Degree Subject Knowledge, Skills & Understanding has a p value of 0.087, which indicates that there is no significant influence on Graduates Employability. Moreover, the p value for Generic Skills is at 0.063, and for Emotional Intelligence is 0.107. From this result, these two independent variables; Generic Skills and Emotional Intelligence, have no significant influence on Graduates Employability.

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.004	.504		.008	.993
	CareerTotal	.215	.091	.178	2.356	.020
	ExperienceTotal	.167	.085	.161	1.972	.050
	DegreeTotal	.184	.107	.146	1.720	.087
	GenericTotal	.215	.115	.163	1.871	.063
	EmotionalTotal	.188	.116	.147	1.623	.107

a. Dependent Variable: GraduatesTotal

Table 10: Coefficients

4.6 Hypothesis Analysis

Hypothesis	Statement	Significance (p value)	Decision
H1	There is a significant relationship between Career Development Learning and Graduate Employability.	0.020	Accept (p < 0.05)
H2	There is a significant relationship between Experience and Graduate Employability.	0.050	Accept (p < 0.05)
H3	There is a significant relationship between Degree Subject Knowledge, Skills & Understanding and Graduate Employability.	0.087	Reject (p > 0.05)
H4	There is a significant relationship between Generic Skills and Graduate Employability.	0.063	Reject (p > 0.05)
H5	There is a significant relationship between Emotional Intelligence and Graduate Employability.	0.107	Reject (p > 0.05)

5.0 Conclusion and Recommendation

The findings of this study highlight the complex relationships between various factors and graduates' employability skills. Career Development Learning (CDL) demonstrated the strongest and most significant relationship with employability, supported by prior research (e.g., Bridgstock et al., 2009; Ho et al., 2022). CDL programs help graduates navigate the labor market, develop career pathways, and build networks, making them crucial for enhancing employability during university years.

Experience also showed a significant relationship with employability, albeit weaker compared to CDL. Consistent with Zaheer et al. (2020) and Nesaratnam (2018), internships and practical exposure were found to bridge the gap between theoretical knowledge and practical application, equipping graduates with valuable skills for workplace adaptation.

Degree Subject Knowledge, Skills, and Understanding (DSK) exhibited a moderate positive relationship with employability but was not statistically significant. This outcome may stem from the varied educational backgrounds of respondents, with those at pre-degree levels lacking subject-specific expertise compared to higher qualifications like Master's or PhDs. Consistent with Chhinzer & Russo (2018) and Chesters (2020), subject-specific knowledge is more relevant to specialized roles and depends on job and employer requirements.

Generic Skills and Emotional Intelligence (EI) both lacked significant statistical relationships with employability in this study. However, Generic Skills, such as critical thinking, leadership, and communication, were noted as valuable attributes that are challenging to measure prior to employment. Emotional Intelligence, while moderately linked to employability, aligns with research by Chand et al. (2019) and Aziz & Pangil (2017), which emphasize its mediating role in enhancing soft skills and employer satisfaction.

5.1 Implications

The findings of this study contribute to the growing understanding of factors influencing graduates' employability skills, offering valuable insights for solution providers, researchers, academic institutions, and employers.

For academic institutions, the results highlight the importance of career development learning and experiential opportunities in enhancing employability. Institutions should integrate these elements early, beginning with pre-degree levels (e.g., O' Level and A' Level) through activities like workplace interactions, site visits, and field trips. Curriculum enhancements may include skill-building workshops on creating CVs, conducting mock job interviews, and fostering soft skills. For higher-level education (Degree, Master's, and PhD), compulsory courses on soft skills like critical thinking, leadership, entrepreneurship, and professional development can be introduced. Collaborations with industry experts will ensure that the skills taught remain aligned with current labor market demands.

For employers, this research underscores their critical role in fostering employability. Employers can engage in talent management initiatives to complement academic efforts, such as implementing structured mentoring programs. These mentor-mentee arrangements, guided by well-defined human resource policies, can support fresh graduates in their transition to the

workforce. Such programs not only enhance graduates' confidence and readiness but also promote smoother onboarding and productivity in the workplace.

5.2 Recommendations for Future Research

It is recommended that future research to increase the scope of the research to investigate the mediating factors that might have an influence on Graduates Employability, such as self-efficacy and self-confidence. Hence, the results of the study will be more reliable as the mediating factors can explain the relationship between the dependent and independent variable better.

It is also recommended to increase the sample size, as future researchers could attain a better and in-depth analysis into how the five independent variables influence the Graduates Employability Skills of employees in Brunei.

Upon addressing the limitation of the scope of the research, it is better for the future researcher to opt a mixed method to investigate the perspective of graduates' employability from employers too. It would be better if future researcher to have Human Resource Managers as the respondents to attain a precise analysis, as they work closely in managing, hiring and selecting fresh graduates as new hires.

6.0 Reference

- Abas, M. C., & Imam, O. A. (2016). Graduates' competence on employability skills and job performance. *International Journal of Evaluation and Research in Education*, 5(2), 119–125.
- Anas, T. M., & Hamzah, H. (2017). Employers' perceptions of graduates' generic skills development: A case study in Malaysia. *Journal of Education and Work*, 30(2), 93–102.
- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31–44.
- Bridgstock, R., Grant-Iramu, M., & McAlpine, A. (2019). Integrating career development learning into curriculum: Collaboration with the industry. *Journal of Higher Education Policy and Management*, 41(1), 1–16.
- CBI. (2021). *Education and skills survey 2021: Delivering skills for the new world of work*.
- Chen, T. T. (2017). Students' perceptions of employability skills acquired in higher education. *Education and Training*, 59(5), 452–467.
- Chhinzer, N., & Russo, A. M. (2018). An exploration of employer perceptions of graduate student employability. *Education and Training*, 60(1), 104–120.
- Clarke, M. (2017). Rethinking graduate employability: The role of capital, individual attributes, and context. *Studies in Higher Education*, 43(11), 1923–1937.
- Dacre Pool, L., & Sewell, P. (2007). The key to employability: Developing a practical model of graduate employability. *Education and Training*, 49(4), 277–289.

- Department of Economic Planning and Statistics, Brunei. (2022a). *Labour force survey 2021*.
- Department of Economic Planning and Statistics, Brunei. (2022b). *Brunei population and housing census 2021*.
- Fahimirad, M., et al. (2019). Generic skills development and employability for graduates in Malaysian higher education. *Education and Training*, 61(3), 312–327.
- Hoh, W. L., et al. (2018). Exploring employers' perspectives on graduate employability in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 275–285.
- Jackson, D. (2012). Enhancing employability through work-integrated learning in undergraduate degrees. *Journal of Higher Education Policy and Management*, 34(2), 95–110.
- Kalei, G. (2016). Skill gaps: A barrier to graduates' employability. *International Journal of Education and Development*, 3(5), 144–155.
- Kenayathulla, H. B., et al. (2019). The role of generic skills in graduate employability. *Asia-Pacific Journal of Cooperative Education*, 20(4), 283–297.
- Matsouka, K., & Mihail, D. (2016). Graduates' employability: What do employers expect? *Education and Training*, 58(1), 112–120.
- McMurray, S., et al. (2016). Employer demands from graduates: Key attributes and implications for higher education. *Journal of Higher Education Policy and Management*, 38(5), 524–538.
- Mayer, J. D., et al. (2004). Emotional intelligence as a standard intelligence. *Journal of Personality and Social Psychology*, 86(1), 96–111.
- Nadarajah, M. (2021). Enhancing graduate employability in the changing economy. *International Journal of Education Development*, 4(3), 95–108.
- Nesaratnam, S. (2018). Internships and their role in graduate employability. *International Journal of Training and Development*, 22(1), 50–65.
- Pathak, S., & Shankar, R. (2018). Emotional intelligence and graduate employability. *Journal of Education and Work*, 31(3), 259–276.
- Rehman, S. U. (2014). Graduate employability: A conceptual framework. *International Journal of Education and Training*, 10(2), 83–94.
- Santos, A. (2019). Key employability attributes and skills for graduates. *Education and Training*, 61(4), 398–414.
- Saunders, M., et al. (2019). *Research methods for business students* (8th ed.). Pearson.
- Schultz, T. W. (1971). *Investment in human capital: The role of education and of research*. Free Press.

- Selvadurai, S., et al. (2012). Employability skills: Generic skills development and employability of graduates. *Asian Social Science*, 8(16), 162–170.
- Shivoro, R., et al. (2018). Generic skills for employability: Perspectives from students and employers. *Journal of Education and Work*, 31(6), 495–509.
- Suleman, F. (2017). The employability skills of higher education graduates: Insights into conceptual frameworks and policy making. *Higher Education*, 73(5), 701–717.
- Tomlinson, M. (2012). Graduate employability: A review of the debate and policy development. *Higher Education Research & Development*, 31(1), 1–13.
- Virtanen, A., & Tynjala, P. (2018). Factors affecting graduate employability in Finland. *Education and Training*, 60(1), 112–125.
- Watts, A. G. (2006). Career development learning in higher education. *International Journal of Training and Development*, 10(3), 1–16.
- Wilton, N. (2014). Employability skills in higher education: The student perspective. *Studies in Higher Education*, 39(4), 500–520.
- Wong, J. (2017). Tackling graduate unemployment in Brunei: The role of i-Ready program. *Journal of Education Development*, 15(1), 33–41.
- Yorke, M. (2006). Employability in higher education: What it is – What it is not. *Learning and Employability Series*, 1(1), 8–14.
- Zaheer, A., et al. (2020). Core competencies for graduate employability in Pakistan. *Education and Training*, 62(3), 226–242.

For instructions on how to order reprints of this article, please visit our website:
<https://ejbm.apu.edu.my/> ©Asia Pacific University of Technology and Innovation