# UNDERGRADUATES AND EMPLOYABILITY SKILLS NEEDED FOR NEW ENTRY JOBS

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## ABSTRACT

*The phenomenon of graduate underemployment and unemployment has become a major discussion among academics as well as involving policy issues in many developing and developed economies (Calvo and Garcia, 2021; Mgaiwa, 2021; Suleman, 2018; Succi and Canovi, 2020; Romgens et al, 2020).). This paper explores the significance of employability skills perceived by undergraduate students and the impacts of various learning methods used by lecturers in imparting the knowledge and skills needed during their entry-level recruitments in the job market. Data was collected using 5 Likert scale and was analysed using the SPSS (ver. 26) software. Data presented in this study is the descriptive analysis which shows that the skills and educational methods are perceived as most important and helpful by the undergraduate students for them to increase their employability skills. Our study found that the students perceived communication skills - with a mean of 4.43 with a standard deviation of 0.671 - as the most essential skills needed when they are being recruited for a job. They also highly regard the importance of CV writing and Interview support as factors that can contribute to the enhancement of their employability chances. The students also perceived industrial training - with a mean of 4.29 with a standard deviation of 0.747- as the most effective educational method to prepare them for the workforce. This is aligned with Tanius (2015) who stated that higher learning institutions must ensure that the students are well-equipped with employability skills and are exposed to industries through industrial training. Among the recommendations highlighted by the respondents include providing a longer duration for Industrial Training compared to the current one that the majority of the students are expected to do, which is between 7 to 12 weeks only. Lastly, this study has provided the groundwork information needed in policy-making arena concerning teaching methods and employability skills required for undergraduate students. Moving forward, local higher education institutions may need to revise and update their current system to achieve the necessary employability skills to eradicate youth unemployment.*

Keywords: Employability skills; undergraduates' perception; new entry jobs; higher education institutions; human resource management.

## INTRODUCTION

Labour market is one of the driving forces of quality of education, which attributes to international recognition of qualifications and education. For the purpose of quality education and training policy, the labour market utilised real scenarios in the workplace as a place to learn. The pressure of global competition connotes that graduates need to offer an employer more than academic skills traditionally represented by the subject and degree class. The universities should plan to support graduates in developing the skills of employability, which represent graduates' work readiness. Skills such as communication, problem solving, decision making, analytical and critical thinking, synthesizing information, teamwork, interpersonal and continuous learning are some of the employability skill attributes required by graduates in entering the workforce, as well as being a prerequisite for professional recognition. UNESCO Bangkok with the support of Japanese Funds-in-Trust and UNESCO Jakarta coordinated a study on the employability of university graduates in selected countries in Asia. The study aimed to analyse the factors that have an impact on graduate employability and to identify policies and strategies that have been put in place by universities to prepare and train their graduates to meet the demands of the workplace. The main findings of the employability concept in Asia is refers to a wide range of attributes and competencies that enable the job seekers to gain and maintain employment such as, but not limited to, the following: (1) communication skills (2) logical, analytical and problem solve skills (3) personality, confidence and integrity (4) flexibility and adaptability (5) innovation and creativity and (6) team spirit. These skill groups vary among countries in Asia.

The phenomenon of graduate underemployment and unemployment has become a policy issue in many developing and developed economies (Galvo and Garcia, 2021). In order to focus on strengthening graduate employability, there should be a one supply side approach in tackling graduate underemployment and unemployment. Consequently, some universities, if not all, have been increasingly adopting employability as a credible fourth mission, in addition to teaching, research, and community service (Presti, 2019). When talking about graduate employability, most agree that it broadly comprises of knowledge, skills, behaviours, and attributes that enable a graduate to get a job, stay on a job, do well on a job, find another job if necessary, and progress in their chosen career (Van Harten et al, 2022). In this study terms such as generic skills, soft skills, 21st century skills, and employability skills are used interchangeably. There is now a growing realisation that having a degree with good grades and technical knowledge (discipline-specific knowledge) is not enough for new graduates to succeed in today's dynamic labour markets (Scott and Willison, 2021).

Furthermore, graduate employability is seen as a complex, dynamic, and multidimensional construct that includes both subjective and objective elements (De Vos et al, 2021). Developing graduate employability is multipronged endeavour involving multiple stakeholders, such as students, higher education institutions (HEIs), academics, career services, employers, employers' associations, government agencies, NGOs, parents, and etc (Clarke, 2018). An example of a graduate who has excellent academic grades but has poor interpersonal, teamwork, critical thinking, and communication skills is unlikely to be successful in their first graduate-level job. Graduates need to develop soft/generic/employability skills needed to stand out and navigate inevitable

challenges associated with transiting from school into the world of work, and to progress in their chosen careers (Scott and Willison, 2021). Hence, in order to understand what skills are needed for undergraduates in preparing them for the workplace environment, academics need to identify these skills and embed them in the teaching and learning activities during their undergraduate education.

Moreover, with rapid technological change, digitization, and globalisation that changed the structure of today's workplace, it forces students and teachers to be updated with the current trends and teaching and learning activities. Technologies that did not exist barely a decade ago are increasingly changing the nature of jobs, work practices, and skills requirements today (World Bank, 2019). The current trends include technologies such as artificial intelligence, robotics, 3D printing, big data, the Internet of things, machine learning, drone technologies, nanotechnology, renewable energy technologies, and biotechnology are increasingly becoming mainstream in the workplace. In the process, these technologies are destroying old jobs as well as creating new ones (World Bank, 2019). New technologies have also changed the skill composition required to perform the remaining jobs, often moving them towards more skill-intensity (De Vos et al, 2021).

Moreover, the students' views and perception on their employability are considered crucial, since they are the main stakeholders who are directly impacted by their higher education learning experiences (Tymon, 2013). There is now significant research which suggest that students often have a blurred understanding of what graduate employability is, what skills are needed by employers for entry-level positions, and how to enhance their career prospects during their studies at university (Dolce et al, 2020).

Consequently, there could also be the case where the students may not always avail themselves of university-wide opportunities that may exist to enhance their employability profile while studying at university. There could be an assumed underlying reason for them not partaking in the opportunities provided during their university years. For such assumption, Garcia-Aracil et al (2018) argued for the need to explore students' perception of their preparedness for transition to the world of work. Ergun and Sesen (2021) took note of the fact that there has been limited empirical research on students' perception of their employability. Andrewartha and Harvey (2017) observed that students' views and perceptions have largely been ignored in the employability arena. Academic researchers have not pursued research on students' views with the same vigour as they have done on employers' views (Higdon, 2016).

Locally, there has been very little research done on graduate employability in Brunei Darussalam. Though discussed widely in many public forums, there has been no systematic study of university students' employability. For this reason, this exploratory study was conducted to fill this gap. This study explored the significant of employability skills perceived as important by undergraduate students in a local university which they think are needed during their entry-level recruitments in the job market. This study also explored what the impact of various learning methods used by lecturers in imparting the knowledge and skills to the undergraduate students, so they are better equipped upon finishing their undergraduate studies. For these two reasons, this paper will explain the employability skills that undergraduates perceived as important based on their study experience. It will also help academics to identify the most helpful and beneficial teaching methods that can improve the students' readiness to enter the job market.

The rest of the paper discusses the literature review in Section 2 followed by the methodology adopted to collect the data before reporting the findings and analysing the data in Section 3. The major findings of this study are outlined in Section 4. Finally, Section 5 discusses our findings and concludes the research.

**LITERATURE REVIEW**

*Graduate (Un)employability*

The phenomenon of graduate underemployment and unemployment has become a policy issue in many developing and developed economies (Calvo and Garcia 2021). One supply side approach to tackling graduate underemployment and unemployment has been a focus on strengthening graduate employability. Consequently, employability has increasingly been adopted by some universities as a credible fourth mission, in addition to teaching, research, and community service (Presti, 2019). Graduate employability broadly comprises of knowledge, skills, behaviours, and attributes that enables a graduate to get a job, stay on a job, do well on a job, find another job if necessary, and progress in their chosen career (Van Harten et al. 2022). In this study, terms such as generic skills, soft skills, 21st century skills, and employability skills are used interchangeably.

Furthermore, there is a gap between the graduate job skills and the skills needed in the workplace; it has become an obstacle for graduates in their journey into employment. The workforce in the 21st century not only requires graduates with high academic qualifications as represented by the courses but also equipped with a number of skills and attributes. Further, workers are expected to have additional sets of skills. Employability skills is considered the one missing link between education and training and the world of work. As mentioned earlier, as the main stakeholders who are impacted directly by their higher education learning experiences, the students' views and perception are considered crucial (Tymon 2013). Recent research suggest that students often have a blurred understanding of what graduate employability is, what skills are needed by employers for entry-level positions, and how to enhance their career prospects during their studies at university (Dolce et al. 2020). Students often fail to link their learning experiences at university to future careers (Lock and Kelly 2020).

In Brunei, the nation has seen a decline in unemployment (based on the Labour Force Survey 2021 by the Department of Economic Planning and Statistics JPES), from 7.3 percent in 2020 to 4.9 percent in 2021. The International Monetary Fund (IMF) 2019 country report indicated that Brunei has one of the highest youth unemployment rate among ASEAN nations. The IMF report stated that unemployment has increased to 9.3 percent in 2017 from 6.9 percent in 2014.[1] According to the Global Least and

Stressful Cities Ranking, Brunei has the second highest unemployment (6.74) rate amongst Asian cities. The issues raised are on mismatched skills and irrelevant qualifications. Employers say that they are having trouble finding qualified candidates due to shortage of skilled employees in a given area, which is why many companies find it difficult to recruit. There is a need, in addition to highlighting the importance of providing local workers with skills frameworks and training which will enable them to be prepared for industry by way of appropriate mindsets, to address skills gaps or competencies. According to Krieg et al (1995), the changing nature of the industries in today's world require graduates to acquire new sets of skills to survive economically, politically, and socially. Graduates are expected to have skills that can be applied to all situations be it for employment or as a responsible citizen in general. Raybould et al (2005) emphasized that the skills required by employers vary and are dependent on the type of job role to be carried out within the organisation. Adapting, decreasing costs, increasing productivity, new markets for products and services are now the priorities of today's employers. As a result, workers in the industrial sector need to demonstrate teamwork and problem-solving skills as well as their ability to cope with routine processes. They should have the capacity to adopt decisions, take responsibility for their actions and communicate with efficiency. In short, the most important requirement for today's workers is their ability to master a wide range of general skills. (ACCI-BCA, 2002).

Apart from skills, Siti Fahmawati and Dr Siti Rozaidah of UBD in their seminal work *'addressing issues of unemployment in Brunei where the mismatch between employers' expectations and employees' aspirations'* stated that most young people seek prestigious jobs and there seems to be a risk-aversion attitude among them. Most young people in Brunei aspire to acquire jobs that are in the professional, managerial, or technical sector, and they have less preference for manual work such as construction and farming. Too much reliance on government jobs has created a culture of risk aversion towards employability among youth. A study by Low et al. (2013) on the mindset of young Bruneians towards entrepreneurship revealed that in a survey of 1051 youths, only 19% wanted to become entrepreneurs whereas 67% preferred to work as government employees. The youth lacking employability skills has further aggravated the situation. By acquiring and securing a government post, the youths are assured of stability in finance, even a little, and 'keeping their job'.

### Technological and Globalisation Impact on Employability

Rapid technological change, digitization, and globalization are changing the structure of today's workplace. Technologies that did not exist barely a decade ago are increasingly changing the nature of jobs, work practices, and skills requirements today (World Bank, 2019). Technologies such as artificial intelligence, robotics, big data, the Internet of things, machine learning, drone technologies, nanotechnology, renewable energy technologies, and biotechnology are increasingly becoming mainstream in the workplace. In the process, these technologies are destroying old jobs as well as creating new ones (World Bank, 2019). These technologies are to replace workers and therefore workers have to adapt to skills that are related to technology.

New technologies have also changed the skill composition required to perform the remaining jobs, often moving them towards more skill-intensity (De Vos et al., 2021). Consequently, the "lifecycle of competencies needed for successful performance in the job is shortening rapidly" (De Vos et al., 2021, p. 11). Rapid technological change and equally rapid knowledge obsolescence have meant that workers must continuously reskill and upskill to retain their employability (Deloitte, 2020). Additionally, the global trends towards massification of higher education have meant that more and more graduates are competing for fewer jobs, reducing the currency of a first degree, as well as increasing the competition in graduate labour markets (Pinto and He, 2019). Increasingly, new graduates are entering graduate labour markets that are very competitive, congested, dynamic, precarious, turbulent, and unpredictable (Lock and Kelly, 2020). In addition, more and more new graduates are entering non-graduate and recently graduated jobs (i.e., clerical and administrative jobs in banks (tellers), customer services, marketing, etc.), which are linked to wide-spread underemployment and problematic long-term career development trajectories (Osseiran, 2020).

Developing graduate employability is a multipronged endeavour involving multiple stakeholders, such as students, higher education institutions (HEIs), academics, career services, employers, employers' associations, government agencies, NGOs, parents, etc. (Clarke 2018). Despite this diffused responsibility, however, the literature generally seems to assign responsibility for employability to the individual student in the first instance, and higher education institutions (HEIs) in the second instance (Cheng et al. 2021). There is now significant research which suggested that students often have a blurred understanding of what graduate employability is, what skills are needed by employers for entry-level positions, and how to enhance their career prospects during their studies at university (Dolce et al. 2020). Students often fail to link their learning experiences at university to future careers (Lock and Kelly 2020). However, if the higher education institution is mostly responsible for graduate employability, there is deficient in this notion. How far can it provide or maximize practical/job-related skills to its students with the limited tools, technology, and knowledge available? Yet, the higher education institution is the nearest a student could possibly get to learn skills for his employment, except through industrial training.

### Industrial Training as a Factor Contribution

In preparing undergraduate students to experience the real working world, industrial training is an important method being used to bring theory and practical experience together. Tovey (2001) stated that industrial training benefits both students and industries. Industrial training benefits industries, such as inexpensive sources of competent assistance and highly motivates present employees (Coco, 2000). Most jobs are available to be filled, however, the graduates lack the skills to obtain and keep the job. Tanius (2015) stated that it is the duty of high learning institutions to ensure that the students are well-equipped with employability skills and are exposed to industries through industrial training. Tanius (2015) also studied the perception of 187 industrial supervisors on the 307 business students' performances and their employment opportunities during the industrial training. The study found that the industrial supervisors were satisfied with the performance of the business students' who excelled in the areas of punctuality, honesty, teamwork, and relations with colleagues. However, the study also indicated that the student lacked important skills such

as job-related skills and the ability to identify and formulate job problems, efficiency in completing tasks, product knowledge, and knowledge of current development related to task/job and leadership. It demonstrated that the students excelled in theoretical skills, however weak in their practical skills. The study concluded that universities and employers have the responsibility to increase students' employability skills and employment opportunities (Tanius, 2015). It is also the responsibility of the high learning institution to ensure the particular student be placed in a workplace that is related to his field so that he can perform well.

Further, Koontz et al (2006) stated that industrial training assists in removing deficiencies in employees particularly caused by a lack of ability rather than a lack of motivation to perform and the individuals involved have the aptitude and motivation needed to learn to excel in the job. Drucker (2003) highlighted the purpose of industrial training is to increase productivity and quality, to promote versatility and adaptability to new methods, to reduce the number of accidents, to reduce labour turnover, to increase job satisfaction displaying itself in lower labour turn-over and less absenteeism and to increase efficiency. A major component of human resource development system is industry training itself. Onyike (2003) stated that industrial training is one of the fundamental operative functions of human resource management.

However, whilst rewarding for excellent work by students may be a good idea, the industrial training programme may only work if there is a sense of responsibility and accountability instilled in the students. These two factors are imperative to achieve high quality work and that students understand the expectations - whether set by the particular industry or being self-employed. By doing so, the students will be aware of the necessary qualities that are needed to overcome deficiencies such as stated by Koontz et al. Further, by subjugating employees with salary or benefits, the employers are expected to increased costs.[1] The company may have expanded its investments into producing productive, competent and high quality workers.

In another spectrum, Finchma (2009) provides an integrative framework for all the variables that influence the design and delivery of training. The framework outlines in detail the pre-training and during-training conditions that may influence learning and facilitate the transfer of skills after training. According to Flippo (2009), a systematic approach to industrial training consists of planned programmes aimed at improving the ability and performance in individual, group or organizational levels. The scope of training initiatives may include operator, technical, sales, customer service and various levels of leadership training. Improvements in performance, improving staff, competences, promoting their employability, resolving problems and orienting new employees are some of the valid reasons for training (Hastings, 2009).

The effectiveness of employee training also brings benefits in terms of better profitability, more positive attitudes toward a profit orientation, increasing employees' knowledge and competences as well as improving the morale within the workforce. For individuals, training improves their ability to make good decisions and effective solving of problems; it allows them to understand motivating variables like recognition, achievement, growth, responsibility, and advancement so that they can take operational action for the purpose of boosting self-confidence and development. In addition, training improves communication between groups and individuals; facilitates orientation for new employees and those taking new jobs through transfer or promotion; provides information on equal opportunity and affirmative action; provides information on other government laws and administrative policies; and improves interpersonal skills.

According to Ile (2003), there is a link between training and good performance but the direction is difficult to identify. However, training and development of staff is found to be relevant in better performing companies. The difficulty in identifying the correlations between training and performance is attributed to the determination of changes in performance. Measuring knowledge acquired is easy to determine. However, to measure skills and attitude development requires over a long time period and needs to be carried out by those working with the candidate, to evaluate how the delegate performed before and after the training.

In the study conducted by Adaeze et al (2015), their findings concluded that the industrial training organisations enhances effectiveness of individuals involved and industrial training in organisations leads to job satisfaction of employees. They also concluded that industrial training has a positive effect on self-employment and empowerment. They also recommended firstly, the management of any organization to provide enough training facilities for the training of their employees and at the same time change worn out ones. By doing so, this will help facilitate the learning process of workers. Secondly, the government should encourage training and development by building well-equipped training centres in the country where organisations that do not have training centres can send their workers for a training course. Thirdly, the management should try as much as possible to provide employees with conducive atmosphere necessary for effective work performance so that after undergoing a training course, they will come back to a conducive working atmosphere to put what they have learnt in practice. Additionally, management should encourage their workers to attend training course by rewarding or compensating those that attended. This reward may come in the form of increment in salary, increment in fringe benefits, promotion, giving employees more responsibilities etc. This will make other employees in the company to show interest in those training course and at the same time take part in them. And lastly, management should also extend the duration of training courses for their employees. This will help to facilitate proper knowledge and skill acquisition for the trainees (Adaeze et al, 2015).

*Unemployment Issues in Brunei*

The International Monetary Fund (IMF) 2019 country report indicated that Brunei has one of the highest youth unemployment rates among ASEAN nations. The IMF report stated that unemployment has increased to 9.3 percent in 2017 from 6.9 percent in

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[1] Ekwochi Eucharia Adaeze and Orga C. Christopher (2015), Effects of Industrial Training on Self Employment and Economic Empowerment in Nigeria. World Journal of Management and Behavioural Studies 3(3): 62-68, 2015
https://idosi.org/wjmbs/3(3)15/2.pdf

2014 (https://theaseanpost.com/article/bruneis-youth-facing-unemployment). According to the Global Least and Stressful Cities Ranking, Brunei has the second highest unemployment (6.74) rate amongst Asian cities. Mismatched skills and irrelevant qualifications were among the issues raised that contributed to the high percentage of unemployment. However, a study conducted by lecturers from UBD stated that the majority of young people seek prestigious jobs and there seems to be a risk-aversion attitude among them. Most young people aspire to acquire jobs that are in the professional, managerial or technical sector, and they have less preference for manual work such as construction and farming.

Furthermore, too much reliance on government jobs has also created a culture of risk aversion towards employability among youth. A study by Low et al. (2013) on the mindset of young Bruneians towards entrepreneurship revealed that in a survey of 1051 youths, he found that only 19 percent wanted to become entrepreneurs whereas 67 preferred to work as government employees (Low et al, 2013). The youth lacking employability skills has further aggravated the situation. Employers say that they are having trouble finding qualified candidates due to shortage of skilled employees in each area, which is why many companies find it difficult to recruit. (https://theaseanpost.com/article/bruneis-youth-facing-unemployment).

According to Krieg et al (1995), the changing nature of the industries in today's world require graduates to acquire new sets of skills to survive economically, politically, and socially. Graduates are expected to have skills that can be applied to all situations be it for employment or as a responsible citizen in general. This was emphasised by Raybould et al (2005) that the skills required by employers vary and are dependent on the type of job role to be carried out within the organisation.

Additionally, employers nowadays prioritise decreasing costs, adapting to new work environment, on top of increasing productivity and entering and competing in new markets for products and services. As a result, workers in the industrial sector need to demonstrate teamwork and problem-solving skills as well as their ability to cope with routine processes. In line with this notion, graduates should have the capacity to adopt decisions, take responsibility for their actions and communicate with efficiency. In short, the most important requirement for today's workers is their ability to master a wide range of general skills (ACCI-BCA, 2002).

Based on the past literature, it proves that there is a need to highlight the importance of providing local workers with skills frameworks and training which will enable them to be prepared for industry through changing appropriate mindsets and address skills gaps or competencies. Competency frameworks and various training programmes including apprenticeship programmes such as iReady have been developed catering for all individuals with varying academic qualification levels as a starting point to support their professional and skill development to make them more employable and marketable (https://borneobulletin.com.bn/industry-ready-with-the-right-mindset/). However, there has been a decline in unemployment in the country based on the current unemployment situation analysis gathered from the Labour Force Survey 2021 statistics provided by the Department of Economic Planning and Statistics. The data presented that there has been a decline to 4.9 percent in 2021 from 7.3 percent in 2020. This shows that Brunei has the capacity to reduce its unemployment rate through several initiatives and understanding of what skills are needed to equip undergraduate students for the working world.

## METHODOLOGY

The research design adopted an exploratory descriptive research methodology from Rosenberg et al. (2012) by using a mixed method of quantitative and qualitative approach. In this study, we administered questionnaires to all undergraduate students at one local public university in Brunei. The different items in the questionnaires were derived from the various literature reviewed by conducting documentary analysis on various secondary sources, such as journal papers, books, and articles found in various internet databases.

The questionnaire had five major sections: demographic data; perceived employability, skills and attributes which include academic skills; personal management skills and teamwork skills; educational methods; and suggestions to improve the students' employability skill. There was a total of 11 questions with subsets including one open-ended question for qualitative analysis.

### *Research Sample*

The whole population of undergraduate students were selected as respondents for this study. The purpose behind this selection is - according to Fatimahwati Musa and Rozaidah Idris (2020) - among the rising global unemployment, the number of it being among youth is higher than among adults. Inevitably, the issues of first employment would certainly pre-occupy the students' thoughts at any stage of their degree program. Therefore, the selected sample were approximately around 1400 undergraduate students, as of April 2023, who were in their Semester 2 of study in the academic year of 2022/2023. However, the completed questionnaire returned and gathered only amounted to 1305 sets.

### *Research Instruments*

For this study, the research instruments used in the questionnaire were tick box questions for the demographic section, 5-likert scale questions for all main sections of data and one comment section for qualitative analysis. The method of 5-likert scales is common in collecting data from large samples because of its accuracy for data analysis and less time consuming for the respondents. The Likert scale helps in ranking data as ordinal scale (Brown, 2011) which would be used here in the descriptive analysis. Ordinal scale means 'order' and its data is quantitative which occur from least to most, but the interval difference is unidentifiable to specific values. So, ordinal scale is used as a comparison measurement to better understand the variables as greater or lesser and identify their ranks in the form of mean. The Likert scales used are the agreements (Strongly disagree, Disagree,

Neutral, Agree and Strongly Agree), likelihood (Very Unlikely, Unlikely, Fairly Likely, Likely and Highly Likely), Importance (Not Important at all, Not Important, Fairly Important, Important and Very Important) and Helpfulness (Not helpful at all, Not Helpful, fairly Helpful, Helpful and Very Helpful) from the least to most respectively.

The questionnaire was also translated in Malay Language to make full use of the students' first language in better comprehension of the questions asked. The distribution of hardcopy questionnaires gave the researchers an advantage in collecting the data in a short period of time. This also gave control to the researcher in maximizing students' responses by distributing hardcopies in physical classes during lecture periods through the students' representatives and lecturers contacted prior to disseminating the questionnaires. The data was considered as a primary resource collected from the 1305 undergraduate students and was analysed in SPSS and Excel.

*Data Collection*
The duration for data collection was reduced to 3 weeks instead of 7 weeks due to the limitation of time available. The data collection period was in the last week of March until the end of the second week of April 2023 before the inter-semester break commenced.

*Data Analysis*
The analysis tool used for analysing the quantitative data was Statistical Package for the Social Sciences (SPSS version 26). The qualitative data was analysed in Microsoft Excel. The sections discussed in the analysis chapter of this study would be from Section C, D and E which analysed the data for subsection heading Perceived Employability, Skills and Attributes and the Educational Methods.

The qualitative data were transcribed into an Excel sheet, then coded, and grouped according to common themes. The themes were then represented in percentages and simultaneously illustrated in a pie chart in subsection 4. The quantitative data is analysed using descriptive data of mean and one way ANOVA in SPSS. The mean would indicate the average response for overall data. Since the questionnaire used 5-likert scales, the numerical mean would tell the extent of the students' perceptions overall. The ANOVA stands for 'Analysis of Variance' which is used to determine whether there are any significant differences statistically between the means of three or more groups, which in this case, between faculties. This is to show whether there were significant gaps or differences between faculties or not.

The questions constructed in section C were asking the undergraduate students whether their university provided the following support such as Access to Local employers, Access to International employers, Curriculum vitae or Resume-writing support, Interview technique support and Information and advice regarding employment through alumni engagement. This section also asked the students' perception of the likelihood of employment for graduates from various types of institutions listed. The listed institutions were the Local public universities, Local private universities, Local public university colleges, Local private university colleges, international branch campuses in Malaysia and foreign universities outside Brunei. These two questions are meant to aid in investigating the significance of employability skills perceived as important by undergraduate students in a local university which are presumed to be needed during their entry-level recruitments in the job market.

While in the next two sections D and E, the questions asked the students their perception of the importance of having knowledge or skills that meet the needs and interests of companies and also asking the students which educational methods that they perceived as most helpful. The data collected from these two sections would instantiate the impact of various learning methods used by lecturers in imparting the knowledge and skills to the undergraduate students to better equip them upon finishing their undergraduate studies. The methods listed in section E will be further discussed in the findings, analysis, and discussion part.

## FINDINGS, ANALYSIS AND DISCUSSION

For this paper, we would just concentrate on the findings that is related to Educational Methods. Table 4.13 below shows the mean for 7 items in section E of the questionnaire which asked the students' perception of which educational methods are helpful in facilitating/enabling them in acquiring employability skills. The listed Educational methods are Lectures; Assignments; Pre-graduation employment; Industrial Training; Group Case Study; Guest speakers from industry; In-class Presentations; Reading materials assigned by lecturers; Examinations/Tests/Quizzes; University Career Week; Job Fairs/Workshops; and Industrial Visits. The Likert scale used is Helpfulness and termed as Not helpful at all, Not Helpful, Fairly Helpful, Helpful and Very Helpful from the least to most respectively. From the data, we found that the mean for Lectures is 3.93 with standard deviation 0.769. The mean for Assignments is 3.84 with standard deviation 0.855. The mean for Pre-Graduation employment is 4.08 with standard deviation 0.8. The mean for Industrial training is 4.29 with standard deviation 0.747. The mean for Group Case Study is 3.86 with standard deviation of 0.865. The mean for Inviting Guest Speaker from Industry is 3.63 with standard deviation 0.868. The mean for In-Class presentations is 3.78 with standard deviation 0.88. The mean for Reading Materials is 3.74 with standard deviation 0.86. The mean for Examinations or Tests or Quizzes is 3.5 with standard deviation 0.973. The mean for Career Week is 3.69 with standard deviation of 0.877. The mean for Job fairs and Workshop is 3.85 with standard deviation 0.857. The mean for Industrial Visits is 4.07 with standard deviation 0.845.

**Table 4.13: Mean for 7 items in Section E**

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| EMLectures | 1305 | 3.93 | 0.769 | 0.021 | 3.89 | 3.97 | 2 | 5 |
| EMAssignments | 1305 | 3.84 | 0.855 | 0.024 | 3.79 | 3.88 | 1 | 5 |
| EMPreGradJob | 1304 | 4.08 | 0.800 | 0.022 | 4.04 | 4.12 | 1 | 5 |
| EMIndustrial Training | 1302 | 4.29 | 0.747 | 0.021 | 4.25 | 4.33 | 0 | 5 |
| EMGroupCaseStudy | 1302 | 3.86 | 0.865 | 0.024 | 3.82 | 3.91 | 1 | 5 |
| EMGuestSpeaker | 1305 | 3.63 | 0.868 | 0.024 | 3.58 | 3.67 | 0 | 5 |
| EMClassPresentation | 1305 | 3.78 | 0.880 | 0.024 | 3.73 | 3.83 | 0 | 5 |
| EMReadingMaterials | 1304 | 3.74 | 0.860 | 0.024 | 3.69 | 3.79 | 1 | 5 |
| EMExamTestQuiz | 1305 | 3.50 | 0.973 | 0.027 | 3.45 | 3.56 | 0 | 5 |
| EMCareerWeek | 1303 | 3.69 | 0.877 | 0.024 | 3.64 | 3.74 | 1 | 5 |
| EMJobFairWorkshops | 1304 | 3.85 | 0.857 | 0.024 | 3.80 | 3.90 | 0 | 5 |
| EMIndustrialVisits | 1304 | 4.07 | 0.845 | 0.023 | 4.02 | 4.11 | 0 | 5 |

The highlighted rows show the top 3 ranked mean from questionnaire section E question 10. The highest mean shows a figure of 4.29 where it is in between 'Helpful' and 'Very Helpful' in scale. This shows that they chose close to 'Very Helpful' for Industrial Training which indicates that in the students' perspectives, educational methods in the form of Industrial Training would help facilitate and enable them to acquire employability skills.

Table 4.13 presents the results of the survey regarding students' perceptions of the helpfulness of various educational methods in facilitating the acquisition of employability skills. This section explores the effectiveness of different teaching approaches in preparing students for the job market. The listed Educational methods are Lectures; Assignments; Pre-graduation employment; Industrial Training; Group Case Study; Guest speakers from industry; In-class Presentations; Reading materials assigned by lecturers; Examinations/Tests/Quizzes; University Career Week; Job Fairs/Workshops; and Industrial Visits. The Likert scale used is Helpfulness and termed as "Not helpful at all", "Not Helpful", "fairly Helpful", "Helpful" and "Very Helpful" from the least to most respectively. The analysis for the results are as follow:

- **Lectures (EMLectures):**

    Students consider lectures to be fairly helpful (3.93), indicating that this traditional teaching method is perceived as beneficial. The standard deviation of 0.769 suggests that there is a moderate level of agreement among respondents regarding its helpfulness.

- **Assignments (EMAssignments):**

    Assignments are also perceived as fairly helpful (3.84) by students. The standard deviation of 0.855 suggests that opinions about assignments' helpfulness vary moderately among respondents.

- **Pre-graduation Employment (EMPreGradJob):**

    Students find pre-graduation employment to be helpful (4.08) in acquiring employability skills. The standard deviation of 0.800 indicates a moderate level of agreement among respondents.

- **Industrial Training (EMIndustrialTraining):**

Industrial Training receives a high rating (4.29), indicating that students perceive it as close to "Very Helpful." The low standard deviation of 0.747 suggests strong agreement among respondents regarding its effectiveness.

- **Group Case Study (EMGroupCaseStudy):**

Group Case Study is considered fairly helpful (3.86) by students. The standard deviation of 0.865 suggests that opinions about its helpfulness vary moderately among respondents.

- **Guest Speaker (EMGuestSpeaker):**

Inviting guest speakers from industry is perceived as fairly helpful (3.63). The standard deviation of 0.868 indicates a moderate level of agreement among respondents.

- **In-class Presentations (EMClassPresentation):**

In-class presentations are considered fairly helpful (3.78) in acquiring employability skills. The standard deviation of 0.880 suggests that opinions about their helpfulness vary moderately among respondents.

- **Reading Materials (EMReadingMaterials):**

Reading materials assigned by lecturers are perceived as fairly helpful (3.74). The standard deviation of 0.860 indicates a moderate level of agreement among respondents.

- **Examinations/Tests/Quizzes (EMExamTestQuiz):**

Examinations, tests, and quizzes are considered fairly helpful (3.50), but opinions about their helpfulness vary widely among respondents, as indicated by the high standard deviation of 0.973.

- **University Career Week (EMCareerWeek):**

University Career Week is viewed as fairly helpful (3.69) in acquiring employability skills. The standard deviation of 0.877 suggests that opinions about its helpfulness vary moderately among respondents.

- **Job Fairs/Workshops (EMJobFairWorkshops):**

Job Fairs and Workshops are perceived as fairly helpful (3.85). The standard deviation of 0.857 indicates a moderate level of agreement among respondents.

- **Industrial Visits (EMIndustrialVisits):**

Industrial Visits are considered helpful (4.07) in acquiring employability skills. The standard deviation of 0.845 suggests a moderate level of agreement among respondents.

Based on these results, it is found that students generally find a variety of educational methods to be helpful, with Industrial Training being rated as particularly effective. The results show that students highly value Industrial Training and Pre-graduation Employment as effective methods for acquiring employability skills. The scale allows UNISSA to understand the perceived helpfulness of these methods in preparing students for the job market.

*Qualitative Findings: Question 11*

The figure below shows the common theme from the students' opinions and recommendations for the administrators to consider in order to improve the employability of the students.

**Figure 4.1 Common themes from Question 11**
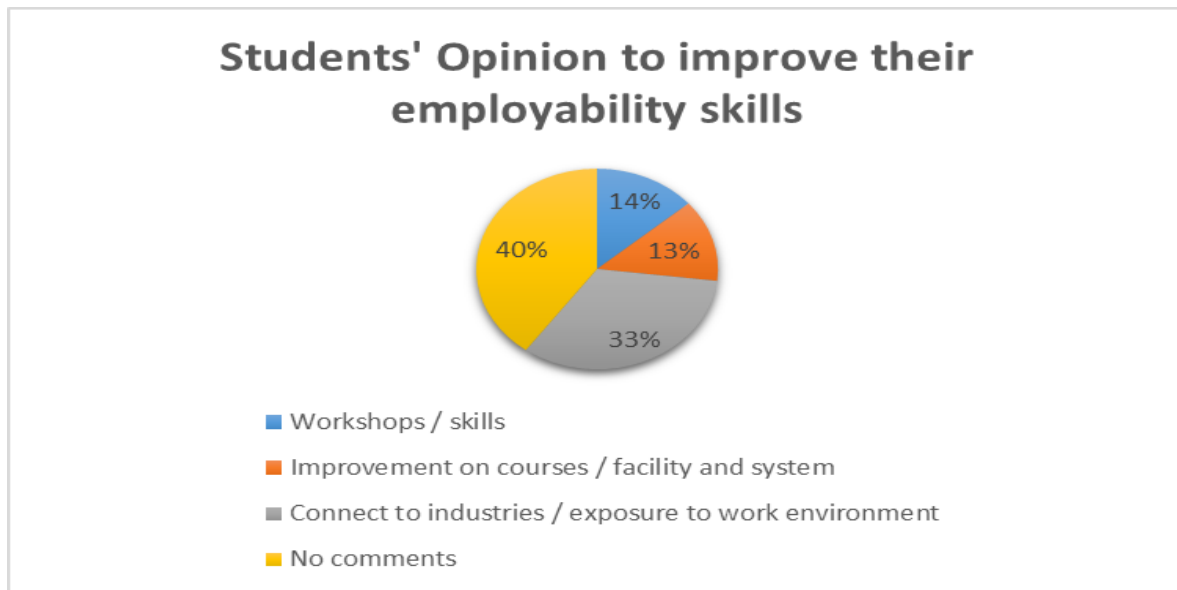


There are 4 common themes identified from the open-ended Question 11. One of the recommendations is to conduct more workshops that can enhance the students' skills which weigh 14% of the total responses. While 13 % of the responses recommended improvement on the course outline and/or facility and system within the university. 33% of the respondents suggested having a longer period of Industrial training to connect them to industries and have exposure to work environments. The remaining 40% of the respondents have no comments or suggestions.

The analysis of responses from open-ended Question 11 revealed four prevalent themes. Approximately 14% of respondents suggested the need for more workshops aimed at enhancing students' skills. Additionally, about 13% of the feedback recommended improvements in the course outline and university facilities and systems. A significant 33% of respondents expressed a desire for extended periods of industrial training to better connect with industries and gain exposure to real work environments. Notably, 40% of respondents did not provide any specific comments or suggestions on this matter.

**DISCUSSIONS**

The primary goal of this study is to evaluate the significance of employability skills, as perceived by undergraduate students, especially in the context of their prospects in the entry-level job market. To achieve this objective, the research delves into the specific types of employability skills that students regard as paramount when they are in the process of seeking entry-level positions. The results, as presented in Table 4.6, indicate that students place a high level of importance on CV support and Interview support as factors contributing to the enhancement of their employability. Additionally, Table 4.10 demonstrates that students view soft skills, such as effective **communication, knowledge, and values**, as nearly reaching the status of being "Very Important" in fulfilling the requirements and preferences of prospective employers.

The second objective of this study revolves around examining the potential impacts of diverse teaching methods employed by instructors in imparting knowledge and skills to undergraduate students. This objective is framed by inquiries into the types of educational approaches that students consider most crucial when preparing for entry-level job opportunities in the labor market. As revealed in Table 4.13, students have leaned towards deeming Industrial Training as "Very Helpful." This suggests that, from the perspective of students, educational methods such as Industrial Training play a pivotal role in facilitating the acquisition of employability skills. The top three skills perceived as highly beneficial for securing employment by students in this study include pre-graduation employment, Industrial Training, and Industrial visits.

*Qualitative Analysis: LI, workshops,*

The last part of the questionnaire was designed to collect any recommendation that can be used for the university's administration to consider in order to improve the employability of the students. Since this question poses an open-end style, the data collected were divided into three major themes. The first theme was circled around skills development and the second theme was identified as practical skill development and the last theme was theoretical skills development.

For the first theme, skills development was selected because majority of the respondents indicated that they want the university to conduct more workshops related to interviews and resume writing that can enhance their employability skills. This accounts for 14% of the total respondents. This finding resonates with the quantitative data collected whereby the respondents highly regard

that CV support and interview support are considered as important factors that can contribute to the enhancement of their employability.

The second theme identified was on practical skill development whereby 33% of the respondents suggested having a longer period of Industrial training to better equip them with the experience, exposure and building network and connection with the relevant industries. This recommendation aligns with the data above where respondents deemed Industrial Training as a 'very helpful' component in facilitating the acquisition of employability skills. Since the majority of the respondents do have industrial training as part of their program structure, however, only one faculty provides a 20-week duration for their students while the other programs only offer between 7 -12 weeks of industrial training duration.

Lastly, the final theme identified based on the recommendations posed was theoretical skill development. About 13% of the respondents suggested for the improvement on the course outline and/or facility and system within the university. Since the recommendation was simply just suggestions and recommendation with no further explanation as to how and what, we have decided to take the recommendation as face value that as of the time being, the university has adopted a new way to provide a better course outline format called OBE. This could be an indication that the university is also thinking of moving forward to improve the work processes by conducting various workshop related to improving the teaching and learning activities.

It is noted that the remaining 40% of the respondents have no comments or suggestions.

## CONCLUSION

### *Findings Summary*

The main objective of this study was initially to find out the undergraduate students' perception on what employability skills that they identified to be most important when they are being recruited for entry-level positions in the job market. Taking into consideration that the respondents of this study were from the undergraduate students including students who are taking their diploma studies, we managed to gather an extensive data that was interpreted both quantitatively and qualitatively.

Based on these findings, it was imperative in capturing the undergraduate students' views about their employability chances at the time of graduation. Through this study, we can conclude that the undergraduate students perceived that the industrial training as an educational method of study has a high impact towards their employability in the workplace. This is due to the fact that through industrial training, they are able to build network, learn to put their theories into practice, experience the working environment and hence sharpen their soft skills to prepare them for the real working world post-graduation.

Furthermore, these undergraduates also perceived that CV writing and interview skills training, or workshop can help them prepare themselves better in facing the working world once they graduate. This is imperative for lecturers and academics because these findings prove that these workshops can be and should be incorporated into the syllabus because these are viewed as important by the undergraduate students.

### *Implications of the Research Findings*

By finding out the perception and perspectives of the students on what they gathered to be an important aspect and skills needed for them to be employed, this study has filled the gap of identifying the most highly regarded employability skills. From this study, higher education institutions can better plan their teaching and learning activities around how to cater and improve the skills needed for the students to equip themselves in preparing them for any entry-level recruitments in the job market.

### *Recommendations for future studies*

This study focused on the students' perspectives only who are currently in their undergraduate programs. It is recommended for future study to explore the perspectives of the lecturers and the employers to get the holistic view and perspectives of employability skills that are deemed important for the students to prepare them for the working world.

### *Research Limitations*

The limitations that the researchers encountered during the study was the delayed approval from the authority which shortened the data collection period from 7 weeks to 3 weeks. This was mitigated by the cooperation of the students' representatives to collect and distribute the questionnaires to their course mates and then, gathered back at a proposed time and meet point. Secondly, (a small / insignificant) number of students could not participate in the questionnaires due to 2 main reasons: language barrier and absence and/or unreachable. Those who experienced language barriers were international students who could only speak Arabic only, however, there were only Malay and English mediums for this questionnaire.

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