

Technical And Vocational Education and Training (TVET) Factors to The Employability of Asnaf Group in Perlis

Abdul Ghafur Hanafi^{1*}, Mohd Fitri Mansor², Wan Azani Mustafa³, Hanis Hazwani Ahmad⁴

1,4 Faculty of Business and Management Science, Kolej Universiti Islam Perlis (KUIPs)
²Faculty of Business and Communication, Universiti Malaysia Perlis (UniMAP)
²Faculty of Electrical Engineering & Technology, Universiti Malaysia Perlis, UniCITI Alam Campus, Sungai Chuchuh, 02100 Padang Besar, Perlis, Malaysia

ABSTRACT

The importance of TVET in Malaysian education is aimed at employment and the main emphasis on practices in the industry in producing a competent workforce in specific fields, meeting the needs of the industry, and contributing to the growth of the country's economy. Even so, the interactions between TVET and the asnaf group in shaping employability have long been controversial, hampered partly by a lack of empirical evidence. This study highlights the view to make TVET an opportunity preamble for the job security of the asnaf group through an in-depth literature review. Several pieces of evidence have been identified that have paved the way to help the asnaf group in securing the labor market through the role that will be played by the authorities, including the private sector. Overall, we conclude that the importance of empowering TVET to the asnaf group is in line with the upcoming industrial revolution and the use of technology in our daily lives. The authority should introduce a policy to assist asnaf aligns with the industry's needs. This policy will create opportunities for the asnaf group to be independent and competent to work at every opportunity given based on their respective educational backgrounds and skills.

Keywords: employability, skills, attitudes, knowledge, asnaf, TVET

1. INTRODUCTION

Due to the impact of external and internal forces of change and technological advancement, many employers expect the "ready-made" workforce to fulfil the job vacancies in their organisation. A "Ready-made" workforce refers to potential candidates equipped with the knowledge and skills to perform the job in an organisation. This scenario creates the need for a skilled workforce to be competent and competitive in the labour workforce [1]. Responding to this situation, the Malaysian government has encouraged many educational institutions in Malaysia to integrate Technical and Vocational Education and Training (TVET) into the education programs. It is because TVET is recognised pertinent program to prepare the youths, students, or graduates with technical and vocational skills and a professional workforce that allow them to engage in the labour market. Therefore, as stated by Venesa [2], 20 full-fledged Malaysian public universities and 38 private universities have been established to ensure the Malaysia education agendas related to the TVET are successful in the country.

^{*}Correspondence: ghafur@kuips.edu.my

On top of that, in a turbulent economic situation, the role of educational institutions is not only preparing and producing students or graduates in the specific area of job specialisation. They also need to develop and train their employability skills which are very high in demand in the 21st Century and IR 4.0 [3]. Having TVET in the system, the students or youths that went through the education or training programs are required to achieve a standard of competency determined by the Malaysian Qualification Accreditation (MQA) [10]. This agency has developed a code of practice based on industry-leading players' perspectives in the market. The difference between traditional academic education and the TVET framework is that in conventional academic education, the quality of the students refers to the Cumulative Grade Point Average (CGPA). Nevertheless, in the TVET system, the students are expected to be competent during the internship to be awarded a good result. For instance, during the internship program, the students will be assessed by the supervisor or instructor from the external party, i.e. industry that needs to be involved in the internship process [4]. During the process, the external industry supervisor will evaluate the students to determine the training and skill acquired by the trainee, whether practical or otherwise. As evidenced by past studies conducted by several researchers emphasised that instructors or supervisors from the industry play a pertinent role as moderators in the evaluation of students' performance and in motivating employees to achieve an organisation Key Performance Indicator [5,6,8]. Consistent with the study by Obuobisa-Darko [9], a supervisor's engagement with the employees or trainees contributes to positive emotions resulting in an optimistic, energetic, increased job focus and willingness to work for organisational development. However, the relationship between students and teachers is only about helping students to determine their direction, apart from the students themselves who are more inclined to the field they are interested in [7].

Because of the above, to develop students or youths' competencies and effectiveness that suit IR 4.0, the MQA provides several elements as a guideline to the students' or youths' evaluation during the internship program that the supervisor or instructor needs to focus on [10]. Five elements contribute to graduate employability and form Malaysia's core TVET evaluation program. Among the elements are knowledge and understanding, cognitive skills, and functional work skills focusing on practical skills, interpersonal skills, communication skills, digital skills, numeracy skills, leadership, autonomy, and responsibility. The fourth element is personal and entrepreneurial skills, and the last is ethics and professionalism. Having accurate and compelling features and guidelines contributes to better competency and employability of the students or trainees [11]. All these positive elements and traits are necessary to the candidates, including marginalising a group of workforces, i.e. Asnaf, to be employed by the organisation. These elements will ensure they possess unique traits and technical skills compared to other labour market candidates. As supported by Salleh et al. [12], a flexible workforce with advanced technical skills and well-developed employability skills, i.e. critical thinking, creativity, problem solving, and analytical skills, are critically needed by the industry for them to face business challenges. They conclude that the workforce with good employability skills possessed knowledge, skills, abilities, behavior, and other characteristics. This skill is not only for obtaining employment but also for fulfilling its potential and enabling them to contribute to the successful direction of organisations required to perform the tasks and succeed in their profession [13]. Therefore, based on the above recommendation, this study will further explore employability skills, which are skills, attitudes or behavior, and knowledge among the asnaf in Perlis.

Despite the above scenarios, at the same time, many employers complain that one of the unemployment issues among recent graduates or youth includes the workforce from postsecondary and tertiary learning institutions are still lacking in terms of employability skills or generic skills required by the industries [14]. Similarly, [15] claims that many graduates or youths are unemployed due to a mismatch between what graduates or youths learned during their studies in institutions and what industries requirement. This issue will be more critical with the current education and training sectors facing challenges in responding to the skill demand and economic changes. Subsequently, contribute to the situation where graduates or youths complete their studies without the required skills to perform and succeed in the workplace. This situation will be more vulnerable, especially during the Covid-19 pandemic, where many teachings and learning processes are conducted via online platforms, and some hands-on teaching and learning, such as via labs, cannot be implemented. Thus, these contribute to the gap between employment demand and youth quality, leading to unemployment issues. In addition, some mismatch skills occur from the individual career choices in the mismatch between study field and employment preferences. The problem will arise when the individual cannot apply the field-specific skills acquired at the institution. Unfortunately, employers do not consider those skills. Affect from that these gaps defeat the purpose of having for that particular skills and abilities.

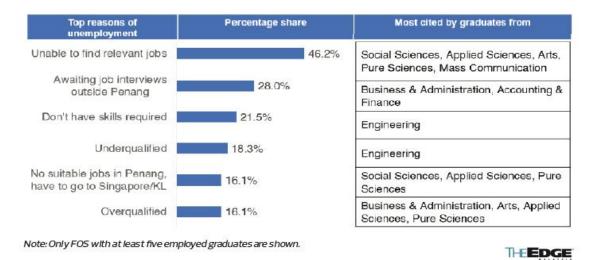


Figure 1. Reason for Unemployment (Source: The Edge Malaysia 2022) [16]

Figure 1 above explains the factors that cause the failure of graduates to acquire suitable jobs after leaving the universities. Among the causal factors are studied backgrounds such as pure and social science as well as art and mass communication that are less in demand from employers. Even so, no less than the graduates themselves, where the lack of skills in the required fields is why graduates do not get jobs. Here it can be seen that there is a strong correlation between why graduates do not get jobs and the ability of graduates to have specific skills. Furthermore, the issue is also one of the concern areas for the government due to the increased number of graduates or youths not aligning with the total number of jobs supply. It creates serious unemployment issues in the nation [17] and contributes to the imbalance between workplace

supply and demand [18]. In this situation, some graduates or youth workforce only managed to get jobs below their qualifications [19] The Department of Statistics Malaysia [33] revealed 162,000 unemployed graduates in 2018, an increase of 4.6 % from 2107 154,900 persons. This unemployed graduate statistic is expected to increase [20].

Because of the above scenario, it is very pertinent to conduct this study to identify the contributing factors towards employment, particularly to the asnaf in Perlis. The justification for conducting this study due to this study still needs to be improved. At the best level of researchers' knowledge, none of the studies explicitly investigates the critical factors contributing to the employability among asnaf in Perlis. Referring to the statistic from the Department of Statistics Malaysia [21] reported that the total population in Perlis from 2010 to 2020 show an increasing trend from 225,630 to 284,885. The majority of the population aged between 15 to 64 years, from 67.5% in 2010, increased to 71.1% in 2020. From that percentage, the majority of the age proposition contributes from the youth group can be considered the majority of the workforce in the labour market. However, the workforce participation rate in Perlis is only 63.8% in the year 2021. The statistics for absolute poverty incidence by states in Malaysia, Perlis, indicate an increasing trend from 3.9% to 9.9% for 2019 and 2020, respectively [22].

Therefore, based on the above situation, it is essential to conduct this study to investigate the contributing factors towards employability among asnaf in Perlis. Even though numerous determinants can contribute to employability among youth, this study focuses on the three core elements, i.e. skills, attitude, and knowledge of the asnaf. Integrating these three core elements will serve long-term effects for the asnaf to have better job opportunities. Again, these elements are essential to the TVET graduates, leading them to success in their respective fields of expertise [23]. Consistent with the researchers, Aliyu et al. [13] and Saleh et al. [12] explained that employability skills refer to the knowledge, skills, ability, behaviour, attitude, and other characteristics that are not only to obtain employability. These characteristics are also crucial for the candidates to fulfil their potential and contribute to the success of organisational strategic directions. It is because an individual need to perform the roles and competencies in their profession.

In short, this study is organised into several sections. First, the introduction whereby the study explores the TVET scenario in Malaysia, followed by its issues, the statistics related to workforce employment, and absolute poverty incidence in Perlis. Second, the discussion proceeds to review past studies related to the skills, attitudes, and knowledge toward the career. Third, the discussion and findings of the study. Finally, a conclusion will be adduced in the study.

2. LITERATURE REVIEW

To understand the topic of discussion more clearly, some things that are felt to be important in this study are commented on more comprehensively and in detail in the highlights of the work. This move will allow the reader to delve into this study's wishes and intentions through the literature's description.

2.1 Graduate Employability

One of the pre-conditions of higher education is to develop entrepreneurs and employable graduates who can assist their specific companies, society, and the country in general via their devotion and inventive talents. As we cannot expect all the graduates to be independent entrepreneurs, we may reasonably presume that majority of the graduates in a nation would hunt for acceptable entry-level positions according to their knowledge, abilities, and prior performance. Governments and worldwide rankings regularly use the employment rate of graduates as a performance metric to assess the worth of higher education [24].

In general, graduate employability is the collection of various skills and talents that a graduate can acquire to land a suitable job and advance in their career [35]. Graduate job seekers with these skills and abilities are better equipped to satisfy the demands of employers and adjust to changes in the labour market. In terms of talents and abilities, it is a comprehensive package that will help with future job growth. Based on the current published research, works that primarily started in the 1990s can be separated into two categories. The first one comes from the perspective of employment performance and contends that employability is a combination of multiple factors, including both internal and external ones. The external factors include the state of the labour market, including labour demand and supply, as well as personal knowledge and skills related to the job, such as technical and teamwork skills.

The second set of skills and capabilities may be regarded from the perspective of personal ability, which believes graduate employability to be the result of individual ability and is a collection of competitive skills and abilities that assist graduates in obtaining jobs and developing [36]. As a result, graduate employability is a comprehensive set of abilities that may help graduates advance in their careers [38]. A group like this encompasses a variety of talents, knowledge, and personality qualities [39]. Graduate employability comprises primary personal and social attributes, leadership skills, communication skills (CS), and teamwork skills as a type of individual ability. However, the most recent studies have emphasised that graduate employability is a type of "soft skill" required to obtain jobs and achieve career success [37].

2.2 Lack of Opportunities

In the case of late bloomers, lack of options to pursue alternative education such as TVET may significantly affect education level and work position. From the standpoint of social inclusion, the three key variables affecting an individual's social inclusion are poverty, unemployment, and poor educational attainment [40]. Pereira et al. [38] add that lesser levels of education tend to correspond with insufficient earnings, resulting in stigmatisation and alienation from civil society.

Additionally, Leach et al. [26] state that one crucial aspect of social inclusion is the enhancement of well-being through involvement in employment and work life. Because a person with higher occupational status is frequently accorded a higher status in society [27, 40]. In this context, offering TVET education as an alternative academic route may cultivate social inclusion by providing a realistic means for late bloomers to achieve higher incomes, thereby reducing the

sense of social alienation. Evans and Niemeyer [28], who assert that TVET serves as an alternative solution to foster social inclusion and to combat youth social disengagement, bolster this claim. They emphasise that simply creating jobs will not be enough, as dead-end positions might be. Therefore, they suggested providing fundamental and proper skills in the form of TVET to achieve actual economic and social returns. TVET can be essential in economic growth and poverty alleviation [29].

2.3 Technical Skills

Technical skill (TS) refers to the skills connected to studying and gaining various tools and procedures such as software, computer, and IT. In a contemporary competitive environment, such abilities are vital due to the quick changes in embracing IT and the Internet. Furthermore, an individual is required to be competent in utilising different software, but such abilities vary according to the nature of the tasks. Mansour and Dean [41] suggest that companies demand employees to have both TS and soft or non-TS. O'Shea et al. [42] discovered that TS, such as IT skills, may only slightly affect OGE and do not have a substantial effect. In a recent study in Bangladesh, Hossain et al. [30] revealed that soft skills and TS are positively connected to employability, consistent with earlier findings. They proposed developing more technically proficient graduates, particularly in a Bangladeshi employment market where the labour supply is ample, but trained individuals are few. On the other hand, El Mansour et al, [41] demonstrated that the qualities such as ICT and TS had no significant connection with OGE.

2.4 Communication Skills

Communication skill (CS) primarily refers to the capacity to communicate with others successfully by transmitting and receiving the intended message. You can do it in person, online, or by mail. Effective communication and engagement may increase efficiency by reducing perceptual bias, time, and effort. Nusrat et al. [32] researched the graduate employability variables for the manufacturing business and discovered that employers attach considerable value to CS, problem-solving abilities, collaboration skills, and personal attributes. They claimed that the graduates also need to stress leadership, entrepreneurial, technological, and informational skills. Another study by Hamid et al. [43] on the factors affecting the employability skills of management students revealed four factors. The elements are analytical skills & selfunderstanding, general management & work culture, leadership & problem-solving ability, and communication. These factors significantly impact the employability skills of management graduates. A recent study by Okolie et al. [40] revealed that soft skills comprising communication skills, interpersonal skills, and problem-solving abilities boost the employability of students/graduates. Tholen [36] who looked into the connection between graduates' soft skill qualities and job status among students at the university, offered the exact opposite opinion. They discovered that the traits tested (knowledge, ICT skills, TS, problem-solving, CS, teamwork, leadership, professionalism, and ethics) have no meaningful link with the job status of the graduates.

2.5 Teamwork & Problem-Solving Skills

Teamwork refers to the interpersonal ability of a person who can work well with others and fulfil their responsibilities as a team member. On the other hand, problem-solving talent means efficiently addressing an actual or simulated problem. A candidate must have effective teamwork and problem-solving skills (TPSS). Numerous types of research revealed that these two qualities are vital for a graduate to secure anticipated employment. Gowsalya and Kumar [31] discovered that TPSS could significantly improve the possibility of a graduate becoming hired. Nazron et al. [44] validated such findings and found that TPSS can enhance the job status among the students at University Malaysia Sabah (UMS) (UMS). Nusrat and Sultana [32] researched the influence of soft skills on the sustainable employment of business graduates in Bangladesh. They concluded that soft skills, including TPSS, may, in fact, not only aid in acquiring a job but also sustain it for longer.

3. DISCUSSION AND RECOMMENDATION

In discussing marketability, some literature evidence must be seen to prove the study's validity and the presentation of research views. According to a report issued by the Statistic Malaysia 2021[33] department, the group that is majority of contributors to the job market are those in the age bracket between 20-40 years. It is common knowledge that this age is very productive in human life. However, according to the study, educational background and field of study play a role in accepting an individual in the labour market. Fields of education related to individual skills are well received by the labour market. In contrast, educational backgrounds related to social and pure science and general studies are less popular among employers. Students who graduate in this field have difficulty finding suitable jobs according to their educational background.

Every human being is born in various circumstances. Some are born into wealthy families and have the opportunity to get the best education from the best institutions to secure preferred jobs later. For this group, education and employment are not directly related to the chosen career. They can only choose to study in the field of art, for example, and, when they graduate, work in a family business that has nothing to do with the domain they choose while at the higher institution.

However, some are less fortunate to be born into low-income families. Not only to continue studying but to continue living is a very bitter challenge for them. These people are in dire need of help and belong to the asnaf group and need to be helped to change their standard of living to remove them from the disadvantaged group. These people need high individual skills to earn sustenance in daily work and change their social status. This mastery includes the interpersonal skill of a person who can work well with others and fulfil their responsibilities as a team member. This skill is necessary because emotional intelligence, such as interacting skills, is crucial in a career. On the other hand, problem-solving talent means efficiently addressing an actual or simulated problem. A candidate must have effective teamwork and problem-solving skills.

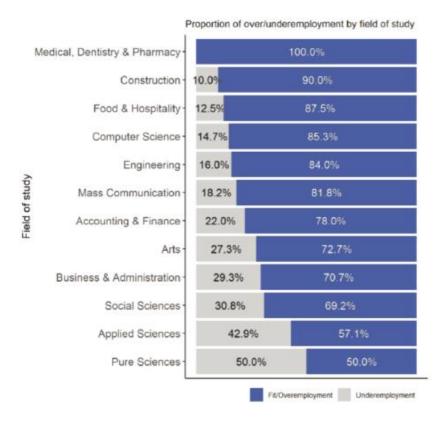


Figure 2. Graduate Under Employment by Field Of Study Source: The Edge Malaysia August 2022. [16]

Figure 2 above clearly shows that job sectors with work skills, such as medicine, construction, and engineering, are prominent among employers. From this static, it is clear that TVET needs to be applied to students at the school and university levels. The solution to this topic of discussion is to use TVET learning for the asnaf group, who unfortunately do not want to continue with higher education. Technical and vocational education and training (TVET) comprise education, training, and skills development relating to a wide range of occupational fields, production, services, and livelihoods. Yet, the main objective of TVET is to train youths and adults alike, preparing them for the labour market. With technical revolution and innovations in science and technology, labour market needs have significantly evolved. New challenges must be met to match the education proposed with vocational demands.

TVET is vital for the asnafs since they cannot afford to enter the higher education mainstream system further. It has the potential for asnaf to transform themselves into increasing their economic standard and offer employment for the teeming unemployed youth. The Ministries of Education, Employment and Labor Relations, Youth and Sports, and Food and Agriculture are the key government institutions responsible for growing that education segment.

However, there are also challenges of TVET. Among them is the lack of industry experience for many TVET teachers. Providing industry experience to TVET teachers is also a challenge to the TVET education system to prepare the asnaf group for the job market. TVET institutions cannot hire

trainers from the industry as their fees are much higher. Often, TVET institutions have to hire graduates of the Government teacher training institution.

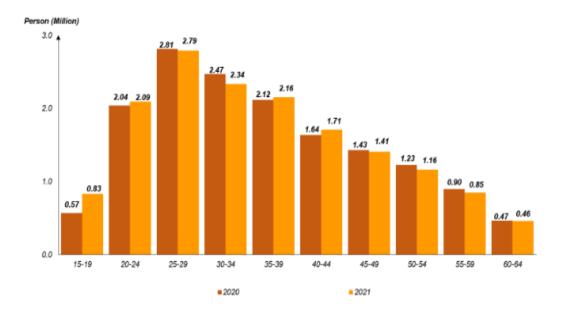


Figure 3. Labour force by age group, Malaysia, 2020 and 2021 Source: Labour Force Survey Report, Malaysia, 2021[34]

Figure 3 above illustrates the age range contributing to Malaysia's labour market. While figure 2 earlier depicts the statistics that prove that the TVET field is no less critical to the labour market. In Malaysia's pursuit of the dream of IR 4.0, the provision of highly skilled labour is essential. It is deplorable that the asnaf group is marginalised in providing these highly skilled job opportunities. This asnaf group, if given the right opportunity and assisted, will contribute to the skilled labour market that Malaysia desperately needs.

Here are some suggestions to improve the employability of asnaf in Malaysia. According to the literature survey led to three critical suggestions for improving graduate employment:

3.1 Improving Job-Skill Relevance

A unified database should be developed to allow job seekers among asnaf to identify suitable initiatives. This database can also reduce duplication and ensure the efficiency of resources, making it easier for those who want to sponsor the asnaf group who want to find their job. This initiative can be done either by the state religious department that looks after the welfare of asnaf or in collaboration with interested private parties.

Apart from that, the method of Career counselling and handholding initiatives for asnaf, who has difficulty finding a job. They should be guided from various angles so that those who are

interested in hiring them are interested and can find out what expertise they have in line with their chosen job.

Apprenticeship programs targeting hard-to-fill critical positions that help fill the skills gap are also seen to be able to open job opportunities for the asnaf group. By holding this apprentice program, those who need workers can train the asnaf group, the job field they need, by matching individual abilities with the required job expertise.

A skilled monitoring committee system and an implementing unit for skill and re-skilling initiatives were also developed. This committee is very relevant where continuous and periodic monitoring can be done to ensure the effectiveness of all planned systems in addition to being a check and balance to this asnaf employability program.

3.2 Preparing A Future-Ready Workforce

Religious authorities who look after the welfare of asnaf should establish partnerships with companies and industry partners to narrow the skills gap. A collaboration between the department that takes care of the asnaf and the industry should be signed to identify areas of need in offering suitable job opportunities to the asnaf group in need of work.

This matter can be implemented by collaborating with industry and associations, and companies should be offered the chance to contribute to industry advisory panels (IAP) in module development. Owners or representatives from industries such as the Chamber of Commerce or manufacturers' associations should be invited to join this AIP. These people have the expertise and extensive knowledge of human resource needs.

Meanwhile, synergistic platforms and avenues should be established for companies to access IHL's target talent pool by allowing more public-private research partnerships. An understanding of mutually agreed shared labs and expertise should be established. Specific discussions on purchasing expensive types of equipment should come under the collaboration. And industry-initiated research projects which benefit both parties to increase patenting also can be considered.

3.3 Improving institutional roles

Training programs and recruitment initiatives should be promoted regularly in institutions of higher learning (IHLs). A searchable and interactive functional job portal, real-time career advice, and relevant training programs should be incorporated into the portal to make it accessible to employers, students, and alums.

Qualified career advisers should be recruited to build a career-ready talent pipeline for asnafs from the secondary school until tertiary education. The career services websites of selected universities or TVET providers should be assessed based on the services and support provided on the portal. This move will help the asnafs reach out for job opportunities according to their skills and potential.

University-industry collaboration should be enhanced in curriculum content design, teaching and learning process, and career advisory suited to the asnafs group. Lecturers' teaching methods should be innovative, focusing on student-centered learning and periodical assessment

by students, peers, and industry suitable with the condition of the asnaf group. An in-depth study must also be constructed to examine the core of these matters.

4. CONCLUSION

We all believe that even the asnaf have their nature. They are a 'special interest group'. A case of poverty occurs when a person or family cannot obtain the resources needed to meet their basic needs even though resources are not limited and the people around them usually live well. Cases of poverty may be produced by sudden job loss, inability to work, or injury or illness, and may also be unsupportive access to education. Although it may seem like a personal cause at first glance, it is a common social issue because it cannot happen in a society that provides an economic safety net to its residents.

Education and training are the fundamental solution that needs to be distributed to this asnaf group. Therefore, access to education in terms of qualifications and funding is necessary for them. Providing job opportunities through TVET is considered very suitable for this group of asnaf. It can prepare them for the labour market and be ready to change better and towards social security ideal for their lives.

For us, give as much as you can, not receive as much as you can. In our sustenance, there is other people's sustenance that we need to share for mutual well-being. This study was prepared based on the awareness that many asnaf groups do not meet the qualifications and economic factors (poverty) to start a new life through participation in training and employment. Our only hope is to ensure that those groups have the opportunity to achieve social and economic well-being for the sake of mutual prosperity.

ACKNOWLEDGEMENT

This research was supported by the Faizuddin Centre of Educational Excellence (FCoEE) through the Short-Term Research Grant Scheme (STG). Our sincere thanks to the staff of FCoEE, RIMC KUIPs, and Kolej University Islam Perlis (KUIPs) for the monetary and other assistance propelling us towards the finishing line. We also like to express our utmost gratitude to all parties, directly or indirectly, for completing the study.

Reference

- [1] Wan Abdullah, W.D., Mohd Salleh, K., Sulaiman N.L, Kamarrudin, M. Employability Skills in the TVET Trainer Training Program: The perception Between Experienced Trainers and Novices Trainers. vol **14**, issue 1 (2022) pp. 150-157
- [2] Venesa, D. Demand for TVET grads to increase (2019). Retrieved from https://www.thestar.com.my/metro/metro-news/2019/08/28
- [3] Ministry of Education. Graduate Employability (2019). Retrieved from https://www.moe.gov.my/en/tvet

- [4] Zaipah, I., Qistina, N. A., Rahmah, M. Y., Yahya, B., & Safarin, M. N. Penilaian Pembelajaran Berasaskan Kompetensi Dalam Pendidikan Teknik Dan Vokasional. International Seminar on Technical and Vocational Education. (2014) pp. 4-56.
- [5] ILMIA. Jobs, Salaries and Vacancies 2017. Institute of Labour Market Information and Analysis (ILMIA). (2018) pp. 4.
- [6] Wu, X., Lyu, Y., Kwan, H. K., & Zhai, H. (2019). The impact of mentoring quality on protégés' organization-based self-esteem and proactive behavior: The moderating role of traditionality. Human Resource Management. vol 58, issue 4 (2019), pp. 417–430.
- [7] Al Asefer, Marwa Mohammed Abdulameer, and Noor Saadah Zainal Abidin. "University Programs As Tools For Graduates' employability From Employers' perspectives: A Review Of Academic Literature."
- [8] Orgambídez, A., & Almeida, H. Supervisor support and affective organizational commitment: The mediator role of work engagement. Western Journal of Nursing Research. vol 42, issue 2 (2019) pp. 1-15
- [9] Obuobisa-Darko, T. Leaders' behaviour as a determinant of employee performance in Ghana: The mediating role of employee engagement. Public Organization Review. vol 20, issue 3 (2020) pp. 597–611.
- [10] Malaysian Qualifying Agency, and Jabatan Pembangunan Kemahiran. Code of Practice for TVET Programme Accreditation. (2019) pp. 74.
- [11] Ismail, A., & Hassan, R. "Issues and challenges of technical and vocational education & training in malaysia for knowledge worker driven," in Proceeding National Conference on Engineering Technology. (2013), pp 12-22.
- [12] Salleh, K. M. & Sulaiman, N. L. (2017). Human resource competencies and human resource roles in organization practice. International Journal of Applied Business and Economic Research. vol **15**, issue 4 (2017) pp. 377-385.
- [13] Aliyu, M., Idris, A. M., Abdullahi, A. K., & Abdulrahman, M. E. (2016, November). "Competencies Needed by Automobile Technology Teachers towards the Development of ICT for Teaching-learning Purposes" in Proceedings of the International Conference on Information and Communication Technology and its Application (ICTA 2016). Held at School of Information and Communication Technology Complex, FUT, Minna. 28th–30th November, 2016. Pp. 11–16.
- [14] Hossain, M. I., Yagamaran, K. S. A., Afrin, T., Limon, N., Nasiruzzaman, M., & Karim, A. M. Factors influencing unemployment among fresh graduates: A case study in Klang Valley, Malaysia. International Journal of Academic Research in Business and Social Science., vol 8, issue 9 (2018) pp. 1494-1507.
- [15] Zinser, R. Developing career and employability skills: A US case study. Education+ Training. vol **45**, issue 7 pp. 402-410.
- "My Say: What makes graduates employable the case in Penang," The Edge Markets, Aug. 23, 2022. [Online]. Available: http://www.theedgemarkets.com/article/my-say-what-makes-graduates-employable-%E2%80%94-case-penang. [Accessed: Oct. 30, 2022]
- [17] Azmi, I. A. G., Hashim, R. C., & Yusoff, Y. M. (2018). The employability skills of Malaysian university students. International Journal of Modern Trends in Social Sciences, vol 1, issue 3 (2018), pp. 01–14.

- [18] Ministry of Finance. Employability for Malaysians (2020). Retrieved from http://www1.treasury.gov.my/index.php/ms/
- [19] Salina, D., Nurazariah, A., Noraina Mazuin, S., & Jegatheesan, R. Enhancing university business curriculum using importance-performance approach: A case study of business management faculty of a university in Malaysia. International Journal of Educational Management. vol **25**, issue 6 (2011) pp. 1-21.
- [20] Ismail, J., Tamby Chik, C. Hemdi, M.A (2020). TVET Graduate Employability: Mismatching Traits Between Supply and Demand. TVET Graduate Employability: Mismatching Traits Between Supply and Demand. International Journal of Academic Research in Business and Social Sciences. vol 11, issue 13, pp. 223–243.
- [21] Department of Statistics, Malaysia Perlis (DOSM) 2022. Retrieved from https://www.mohr.gov.my/ebook/istat_bil2_2022/Statistik%20bil%202_2022.pdf
- [22] Ministry of Human Resource Malaysia. Statistik Pekerjaan & Peburuhan siri 32 bil 2/2022 Jun 2022. Kementerian Sumber Manusia. Retrieved from https://www.mohr.gov.my/ebook/istat_bil2_2022/Statistik%20bil%202_2022.pdf
- [23] Nugraha, H.D., Vesitara Kencanasari, R.A., Komari, R.N. and Kasda. Employability Skills in Technical Vocational Education and Training (TVET). Innovation of Vocational Technology Education. vol XVI, issue 1 (2020) pp. 1-10
- [24] Teichler, Ulrich. "Higher education and the world of work." Conceptual frameworks (2009).
- [25] Atkinson, Anthony B., Eric Marlier, and Brian Nolan. "Indicators and targets for social inclusion in the European Union." JCMS: Journal of Common Market Studies 42, no. 1 (2004): 47-75.
- [26] Leach, Liana S., Peter Butterworth, Lyndall Strazdins, Bryan Rodgers, Dorothy H. Broom, and Sarah C. Olesen. "The limitations of employment as a tool for social inclusion." BMC Public Health 10, no. 1 (2010): 1-13.
- [27] Richardson, John G., and E. R. Mahoney. "The perceived social status of husbands and wives in dual-work families as a function of achieved and derived occupational status." Sex Roles 7, no. 12 (1981): 1189-1198.
- [28] Evans, Karen, and Beatrix Niemeyer. "Re-enter and reconnect-but whose problem is it?." In Reconnection, pp. 1-28. Springer, Dordrecht, 2004.
- [29] "NFP and Niche," Nuffic. [Online]. Available: https://www.nuffic.nl/en/subjects/global-development/nfp-and-niche. [Accessed: 30-Dec-2022].
- [30] Hosain, Md Sajjad, Mohitul Ameen Ahmed Mustafi, and Tania Parvin. "Factors affecting the employability of private university graduates: an exploratory study on Bangladeshi employers." PSU Research Review ahead-of-print (2021).
- [31] Gowsalya, G., and M. Kumar. "Employability skill: A literature review." International Journal of Advance Research in Computer Science and Management Studies 3, no. 3 (2015).
- [32] Nusrat, Mansura, and Nafia Sultana. "Soft skills for sustainable employment of business graduates of Bangladesh." Higher Education, Skills and Work-Based Learning (2019).

- [33] "Department of Statistics Malaysia Official Portal," Department of Statistics Malaysia Official Portal, Apr. 2022. [Online]. Available: https://www.dosm.gov.my/v1/index.php. [Accessed: Oct. 30, 2022]
- [34] Workforce & Employment Statistic Report, 2022, Ministry of Human Resource Malaysia, 2022.
- [35] Chen, Yong. "Graduate employability: The perspective of social network learning." Eurasia Journal of Mathematics, Science and Technology Education 13, no. 6 (2017): 2567-2580.
- [36] Tholen, Gerbrand. "Graduate employability and educational context: a comparison between Great Britain and the Netherlands." British Educational Research Journal 40, no. 1 (2014): 1-17.
- [37] Evangelista, Alyssa Mae A., Pamela Alexandria G. Gaurino, Nicole C. Mangilit, and Donnie Y. Saludes. "Knowledge, Skills, and Attitudes of Optometrists as Basis for Employability from Employers' Perception." *Journal of Optometry, Eye and Health Research* 4, no. 1 (2022): 10-10.
- [38] Pereira, Elisabeth T., Madalena Vilas-Boas, and Cátia FC Rebelo. "University curricula and employability: The stakeholders' views for a future agenda." Industry and higher education 34, no. 5 (2020): 321-329.
- [39] Ismail, Affero, and Razali Hassan. "Issues and challenges of technical and vocational education & training in Malaysia for knowledge worker driven." In National Conference on Engineering Technology, pp. 1-11. 2013.
- [40] Okolie, Ugochukwu C., Elisha N. Elom, Paul A. Igwe, Chinyere A. Nwajiuba, Michael O. Binuomote, and Ntasiobi Igu. "How TVET teachers foster employability skills: insights from developing countries." International Journal of Training Research 18, no. 3 (2020): 231-249.
- [41] El Mansour, Bassou, and Jason C. Dean. "Employability skills as perceived by employers and university faculty in the fields of human resource development (HRD) for entry level graduate jobs." Journal of Human Resource and Sustainability Studies 4, no. 01 (2016): 39.
- [42] O'Shea, Michelle Anne, Dorothea Bowyer, and Gina Ghalayini. "Future Proofing Tomorrow's Accounting Graduates: Skills, Knowledge and Employability." Australasian Accounting, Business and Finance Journal 16, no. 3 (2022): 55-72.
- [43] Hamid, Zainab, Muhammad Muzamil, and Shawkat Ahmad Shah. "Strategic human resource management." In Research Anthology on Human Resource Practices for the Modern Workforce, pp. 1-16. IGI Global, 2022.
- [44] Nazron, Muhammad Ariff, Beatrice Lim, and Janice LH Nga. "Soft skills attributes and graduate employability: A case in Universiti Malaysia Sabah." Malaysian Journal of Business and Economics (MJBE) (2017).