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Soft Skills and Graduate Employability: Evidence from Malaysian Tracer Study

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ABSTRACT

Recent trends in graduate employment have raised concerns among higher education providers and other stakeholders. Issues concerning the soft skills gap have been constantly raised so that industries and universities can adopt various initiatives to address this situation. In addition, employment has shifted from production to service, increasing the importance of soft skills. This study aims to map graduates' soft skills and employment status after graduation. The Ministry of Higher Education repository was used to select 100,413 first-degree graduates who had completed their studies. Logistic regression analysis created the graduate employability predictive model, which yielded a 77% accuracy. The findings show that 85.5% of graduates were employed during data collection. The predictive model suggests that graduate employability status is affected by factors such as gender, family income, the field of study, MUET, CGPA, internship, entrepreneurship course, working experience, communication skills, analytical skills, teamwork, positive values, and general knowledge.

Keywords: Employability, graduate, higher education, logistic regression, soft skills

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INTRODUCTION

Graduate employability remains a major concern for all stakeholders, including graduates, higher education providers, industry representatives, and policymakers. The mismatch between graduate and employer expectations focuses on the skill gap, job mismatch, and expected salary. Mismatches in higher education create

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barriers for fresh graduates to be employed by industry, making the transition from campus life to the labour market difficult for some. On the other hand, some industries in the labour market require work-ready graduates with employability skills to thrive and meet industry demand.

Malaysia's Economic Outlook 2021 reported that the graduate unemployment rate remained stable between 2001 and 2019, ranging from 3.1% to 4.0%. However, the mismatch rate increased from less than 15% to more than 25% during the same period. Malaysia had an unemployment rate of 3.3% in February 2020, a marginal increase from 3.2% the previous month (Department of Statistics Malaysia, 2020). There has never been a detailed study of this increase, such as unemployment by education level.

According to the Malaysia Education Blueprint 2015–2025 (Higher Education), Malaysia aspires to raise the employability rate of fresh graduates from 75% to more than 80% by 2025 (Ministry of Higher Education [MOHE], 2020). Employability is defined as "a set of achievements—skills, understandings and personal attributes—that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy" (Yorke, 2006, p.8). Yunus (2007) defined employability as an individual's ability to fit into a specific job or have attitudes that allow them to be employed. In short, employability is the ability to get a job and a career in the market by demonstrating skills that allow employers to hire candidates with a degree of performance and confidence.

The labour market has placed a high value on graduates' hard skills gained through university courses. Standardised achievement tests, such as CGPA, categorise graduates as employed or unemployed. However, as the market has shifted from a production to a service-oriented economy, the value of soft skills such as communication, leadership, problem-solving and critical thinking has increased. This study attempts to map graduates' soft skills and employment status after graduation to understand how soft skills affect employability. The findings can help policymakers in higher education identify graduates who lack these skills and suggest ways to improve them.

LITERATURE REVIEW

It is critical first to understand the factors that influence graduate employability to address the issue more effectively. According to Nagaraj et al. (2014), tertiary education achievement allows new employees to stay longer in the workplace, contributing to better human capital. On the other hand, Seng (2018) asserted that most fresh graduates prefer lower-paying jobs, with 49.4% of public university graduates earning less than RM2000 per month, which is below the expected income for bachelor's degree graduates.

According to Ibrahim and Mistree (2019), academic knowledge is no longer sufficient in today's challenging

economic environment; students must also learn employability skills to improve their employment prospects. Teng (2019) contended that universities must incorporate soft skills into their curricula to improve graduate job readiness. According to Succi and Canovi (2020), students should polish their soft skills to adapt to a changing labour market and improve their employability because employers value soft skills over other skills that may be ineffective or deemed unnecessary. Juhdi et al. (2007) claimed that communication skills, English proficiency, information and communication technologies (ICT) skills, the ability to work in a team, leadership skills, interpersonal skills, problem-solving skills, and the ability to adapt to different situations are critical for graduates to be employed. Their research also found that while many graduates have strong technical skills, many lack soft skills. For example, graduates may struggle to complete their tasks at work if they lack adequate communication skills. Due to the skills required for job seekers, the government has taken several approaches to address the issue of graduates' lower competitiveness by providing more skills-oriented programmes to increase their soft skills to meet employer demands. It aligns with intending to produce skilled graduates who can meet the needs of employers who value practical skills over academic achievements.

Individual entrepreneurial orientation positively and significantly impacts perceived employability, including innovativeness and proactivity (Koe, 2019). Risk-taking characteristics, on the other hand, do not affect perceived employability. Therefore, graduates should instead be encouraged to cultivate an entrepreneurial mindset to become job creators and entrepreneurs. In a study of Malaysian graduates, Jamaludin et al. (2019) emphasised the importance of entrepreneurial skills, encompassing basic skills, thinking skills, personal qualities, workplace competencies, and entrepreneurship. However, according to their findings, graduates frequently lack decision-making and leadership skills, which concerns some employers.

Regarding English proficiency, most Malaysian universities accept SPM (secondary school level) and Malaysia University Entry Test (MUET) results as entry requirements for any degree level. Other English tests, such as TOEFL, IELTS, and TPE, are used to assess English proficiency among Malaysian graduates at higher-educational institutions. According to Nafi (2011), English proficiency at the SPM and MUET levels is important in determining graduate employability. From a business standpoint, Ting et al. (2017) discovered that most employers prefer to hire employees with strong communication skills. In short, good communication skills can lead to more job opportunities and career advancement.

Graduate academic achievement and qualifications are significant factors in graduate employability (He et al., 2021). Pinto and Ramalheira (2017) highlighted the significance of academic achievement and extracurricular activities in obtaining employment. On the other hand, Hossain et al. (2018) discovered that employers

place a higher value on theoretical and practical skills than on grades. The 2016 Canadian Census of Population reported that seven out of ten engineering and computer and information science graduates have highly sought-after skills, while most biological sciences graduates work in science and technology (Statistics Canada, 2017). Due to the advancement of technology and innovation, students majoring in ICT have a higher employability rate than those majoring in humanities, arts and social sciences, journalism, and information (Organization for Economic Co-operation and Development [OECD], 2017). Razak et al. (2014) discovered that social sciences, business, and law graduates are disproportionately unemployed, despite the number of graduates entering the job market in these fields being relatively high year after year.

The World Employment and Social Outlook—Trends 2020 reported that female labour force participation in 2020 was moderate at 49% worldwide, while male labour force participation was around 74%. According to the report, gender stereotypes that emphasise women's primary caregivers and men's roles as sole breadwinners remain deeply embedded in some regions (International Labour Organization [ILO], 2020). Jayasingha and Suraweera (2020) found that graduate employability is influenced by gender, professional qualifications, English proficiency, training and experience, and soft skills. This study supports Piad's (2016) findings that gender is one of the most important predictors of graduate employability. Another factor identified as important in determining graduate employability is an internship or work experience. Graduates can benefit from their training experience by gaining exposure and practising their skills in a real-world setting. According to Passaretta and Triventi (2015), graduates with work experience throughout tertiary education have a higher employment rate after graduation. Other factors, such as family income, are not investigated, but according to Hossain et al. (2018), graduates from lower-income households have a higher unemployment rate.

Understanding the factors influencing graduates' successful transition into the labour market is critical to understanding the mismatch between industry and higher education institutions. This study aims to identify the significant factors influencing the employability of fresh graduates in Malaysia to provide some insights for future graduates to understand better the factors required while seeking a job appropriate for their educational level. The findings will be useful evidence in addressing the problem of fresh graduates being overqualified for certain jobs and ensuring that employers can recruit graduates with the skills required by their respective industries to thrive in the knowledge-based economy of the 21st century.

METHODOLOGY

Logistic Regression

The probability of graduates being employed or unemployed must be classified to understand the employment situation

among graduates. Logistic regression or logit analysis is only appropriate for two-class or binary classification. The popularity of logistic regression stems from its robustness and ease of interpretation. The dependent variable of logistic regression has two outcomes: 0 denotes "unemployed", and 1 denotes "employed." The logistic regression has the following assumptions: (1) the dependent variable is dichotomous, (2) the dependent variable and independent variable have a linear relationship, (3) the data is free of outliers, and (4) the independent variables are not multicollinear. Furthermore, probability and odds are interrelated. Probability is the ratio of the number of outcomes to the total number of possible outcomes, while odds is the ratio between two outcomes. Probability ranges from 0 to 1, whereas odds range from 0 to infinity. The formula for probability *P* and odds are as follows:

$$P = \frac{\text{Number of outcomes}}{\text{Total number of possible outcomes}},$$

$$0 \leq P \leq 1$$

$$Odds = \frac{P(x)}{1 - P(x)}, 0 \leq \text{Odd} \leq \infty$$

An odds ratio is the ratio of two odds. It is a statistic that assesses the strength of a relationship between two events. An odds ratio of less than 1 has a negative logit value, while an odds ratio greater than 1 has a positive logit value. For example, an odds ratio of 1 (corresponding to the probability of 0.5) has a logit value of 0. An odds ratio of less than 1 negatively affects the predictor variable, while an odds ratio greater than 1 implies a positive relationship when the predictor variable increases by a unit. The formula for the odds ratio is as follows:

$$Odds\ Ratio = \frac{Odds(A)}{Odds(B)} = exp^{\beta}$$

Logit is the natural log of odds, which is linear in independent variables and parameters. Positive logit indicates that the odds favour the event, while negative logit indicates that the odds are against an event occurring. The formula of the estimated logit model is as follows:

$$ln\left(\frac{P(Y=1)}{1-P(Y=1)}\right) = \beta_o + \hat{\beta}_1 x_1 + \hat{\beta}_2 x_2 + \hat{\beta}_3 x_3 + \cdots + \hat{\beta}_n x_n$$

where the probability of *Y* is

$$P(Y=1) = \frac{e^x}{1+e^x}$$

Logistic regression determines whether a given data instance belongs to class 0 or 1. The goodness-of-fit of the model must be measured before it can be built. Some tests used to determine how well a model fits the data are the likelihood ratio, McFadden's R^2, Nagelkerke's R^2, confusion matrix, and receiver operating characteristic (ROC) curve.

Data partitioning was implemented prior to model development in this study. Data partitioning is splitting data into two sets: training and testing. A training set is used to explore the data features and create

a model, while a testing set measures the developed model's overall performance (accuracy). Data partitioning is often used when dealing with large or high-volume datasets, and the ratio of the training set to the testing set is frequently higher.

Source of Data

This study used secondary data[1] from the Ministry of Higher Education Malaysia's 2019 Graduate Tracer Study, which focused on public and private higher education institutions in Malaysia. The questionnaire was made available online for graduates to complete as part of their graduation requirements. A total of 100,413 first-degree graduates were selected for the study. The probability of graduates being employed (1) or unemployed (0) must be quantified to understand the graduate employment situation. Table 1 lists the variables used in the analysis. The data was divided into two sets at a 70:30 ratio, with 70% of the data going into the training set and the remaining 30% going into the testing set. According to Nguyen et al. (2021, p.15), this ratio gives the best results in terms of predictive model ability.

[1] This data was obtained in January 2020, with permission from Seksyen Data, Bahagian Perancangan dan Penyelidikan Dasar, Kementerian Pengajian Tinggi, for the sole purpose of research.

Table 1
Variables of interest in the study

Variable	Classification	Description
Gender	(1) Male (2) Female	Gender of the graduate
Family income	(1) ≤ RM500 (2) RM501–RM1000 (3) RM1001–RM1500 (4) RM1501–RM2000 (5) RM2001–RM2500 (6) RM2501–RM3000 (7) RM3001–RM5000 (8) > RM5000	Graduate total family monthly income as the socioeconomic level
Field of study	(1) Art & Social Sciences (2) Sciences (3) Technical (4) ITC[1] (5) Education	Graduate's field of study.
MUET	(1) Band 1 (2) Band 2 (3) Band 3 (4) Band 4 (5) Band 5 (6) Band 6 (7) Others	The Malaysia University English Test (MUET) measured English proficiency level.
CGPA	Scale from 2.00 (lowest) to 4.00 (highest)	The graduate academic performance was measured using Cumulative Grade Point Average (CGPA).

[1] Information Technology & Communication

Table 1 *(continue)*

Variable	Classification	Description
Internship	(1) Yes (2) No	Whether the graduate had attended the internship/ industrial training.
Entrepreneur	(1) Yes (2) No	Whether the graduate had attended the entrepreneurship course.
Work during study	(1) Yes (2) No	Whether the graduate had worked part-time or full-time during their study.
Communication skills	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their abilities in communication skills acquired during study time.
Creative and Critical thinking	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their abilities in creative and critical thinking skills acquired during study time.
Problem-solving skills	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their abilities in problem-solving skills acquired during study time.
Analytical skills	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their abilities in analytical skills acquired during study time.
Teamwork	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their teamwork or group work abilities during study time.
Positive Value	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their practice of positive values during study time.
General knowledge	Score from 1 (Not satisfied at all) to 5 (Extremely satisfied)	Graduate satisfaction level on their exposure to general knowledge and current issues acquired during study time.
Employment status	(1) Employed (0) Unemployed	Graduate employment status at the time of the data collection.

RESULTS

As shown in Table 2, most (85.5%) of fresh graduates were employed by graduation day, about six months after they finished their studies, while only 14.5% were unemployed.

Table 3 summarises the demographics of the graduates in the 2019 Graduate Tracer Study. Male graduates account for 37.9% of the study's participants, while female graduates account for 62.1%. Regarding family income, more than half of the graduates come from families earning less than RM3000 per month. Most graduates (51.1%) received degrees in art and social sciences, with 21.6% and 14.3% receiving degrees in technical and sciences, respectively. Regarding English proficiency, 37.7% received a Band 3 in MUET, while only 0.03% received a Band 6. Also, 22.6% of graduates used English proficiency tests other than MUET. 46% of graduates have prior work experience, and 87.1% have completed an internship or industrial training programme during their studies. Only 19.6% of the graduates enrolled in entrepreneurship courses during their studies.

Table 2
Distribution of graduate employability status

	Frequency	%
Employed	85851	*85.5*
Unemployed	14562	*14.5*
Total	100413	*100.0*

Table 3
Descriptive statistics for categorical variables

Variable	%	Variable	%
Gender		**MUET**	
Male	*37.9*	Band 1	*2.4*
Female	*62.1*	Band 2	*17.2*
		Band 3	*37.7*
Total family monthly income		Band 4	*16.1*
Less than RM500	*4.7*	Band 5	*4.0*
RM501 to RM1000	*9.2*	Band 6	*0.03*
RM1001 to RM1500	*11.7*	Others	*22.6*
RM1501 to RM2000	*11.0*		
RM2001 to RM2500	*10.2*	**Work while studying**	
RM2501 to RM3000	*11.9*	Yes	*46.0*
RM3001 to RM5000	*22.1*	No	*54.0*
More than RM5000	*19.2*		
		Industrial training	
Field of study		Yes	*87.1*
Art & Social Science	*51.1*	No	*12.9*
Science	*14.3*		
Technical	*21.6*	**Entrepreneurship course**	
ITC	*8.9*	Yes	*19.6*
Education	*4.1*	No	*80.4*
Total	*100.0*	Total	*100.0*

Table 4 shows the descriptive statistics for continuous variables. Most graduates earned a CGPA of between 2.00 and 4.00, with an average of 3.23. The graduate's perceived ability to work in a team or group has the highest average soft skills score of 4.31, followed by the inculcation and practice of positive values, with an average score of 4.28. According to the results, most graduates were satisfied with their soft skills level.

The predictive model was built using binary logistic regression to identify the significant factors that map to graduate employability. Table 5 shows that 13 of the 15 predictor variables are statistically significant in predicting graduate employability status. According to the predictive model, factors such as gender, family income, the field of study, MUET, CGPA, internship, entrepreneurship course, working experience, communication skills, analytical skills, teamwork, positive values, and general knowledge all play a role in graduate employability status. Graduates with higher confidence, teamwork ability, and problem-solving skills were more employable, as evidenced by odds ratios greater than 1. Other soft skills, such as creative and critical thinking,

Table 4
Descriptive statistics for continuous variables

Variable	Min	Max	Mean	Std. Deviation
CGPA	2	4	3.23	0.401
Communication skills	1	5	4.05	0.720
Creative and critical thinking	1	5	4.06	0.710
Problem-solving skills	1	5	4.10	0.692
Analytical skills	1	5	4.09	0.700
Teamwork	1	5	4.31	0.683
Positive values	1	5	4.28	0.689
General knowledge	1	5	4.11	0.737

Table 5
Coefficient summary statistics

	Odds Ratio	Estimate	Std. error	z value	Pr (>|z|)	
(Intercept)	1.789	0.582	0.052	11.128	9.15E-29	***
Female	1.070	0.067	0.009	7.098	1.27E-12	***
RM501–RM1000	0.968	-0.032	0.021	-1.539	0.124	
RM1001–RM1500	0.763	-0.270	0.021	-13.038	7.42E-39	***
RM1501–RM2000	0.663	-0.411	0.021	-19.424	4.82E-84	***
RM2001–RM2500	0.583	-0.539	0.022	-24.567	2.85E-133	***
RM2051–RM3000	0.569	-0.564	0.021	-26.454	3.27E-154	***
RM3001–RM5000	0.491	-0.712	0.020	-35.410	1.21E-274	***
> RM5000	0.454	-0.790	0.021	-37.602	0.000	***
Science	1.223	0.202	0.013	16.106	2.33E-58	***
Technical	0.902	-0.103	0.012	-8.772	1.76E-18	***
ICT	0.701	-0.355	0.017	-20.441	7.15E-93	***
Education	0.577	-0.550	0.019	-28.937	4.08E-184	***
Band 2	0.738	-0.303	0.019	-15.707	1.36E-55	***
Band 3	0.677	-0.390	0.019	-20.506	1,92E-93	***
Band 4	0.630	-0.462	0.022	-20.814	3.24E-96	***
Band 5	0.515	-0.663	0.042	-15.962	3.24E-57	***
Band 6	0.319	-1.143	0.304	-3.763	0.00017	***
Others	0.725	-0.322	0.020	-16.098	2.64E-58	***
CGPA	0.694	-0.365	0.011	-33.018	4.51E-239	***
No Internship	0.532	-0.631	0.014	-45.729	0.000	***
No Entrepreneur course	0.939	-0.063	0.011	-5.650	1.61E-08	***
Not working during study	1.694	0.527	0.009	58.572	0.000	***
Communication skills	0.851	-0.162	0.008	-19.106	2.27E-81	***
Creative and critical thinking	0.982	-0.018	0.012	-1.543	0.123	
Problem-solving skills	1.010	0.010	0.013	0.812	0.417	

Table 5 *(continue)*

	Odds Ratio	Estimate	Std. error	z value	Pr (>|z|)	
Analytical skills	0.941	-0.060	0.010	-6.354	2.10E-10	***
Teamwork	1.143	0.134	0.011	12.397	2.70E-35	***
Positive values	1.261	0.232	0.011	20.371	3.01E-92	***
General knowledge	0.854	-0.157	0.009	-17.211	2.20E-66	***

Note: Significant Code: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' '

analytical skills, general knowledge, and communication skills, have an odds of less than 1, indicating that they contribute less to graduates' employability. Even if some skills contribute less to employability, having these skills is still critical for graduates.

The odds ratio indicates that female graduates were more likely to be employed than male graduates. Graduates from higher-income families were more employable than graduates from lower-income families. Science graduates were also 1.22 times more likely to be employed than arts and social sciences graduates. Regarding working experience, graduates who did not complete internships or enrol in entrepreneurship courses were less likely to be employed. Surprisingly, the odds ratio shows that graduates with no working experience were 1.69 times more likely to be employed than those with working experience.

Table 6 displays the results of four tests used to assess the goodness-of-fit of the model used in this study. The model is statistically significant as the observed difference in goodness-of-fit with likelihood ratio *p*-value is 0.000. However, the model has low predictive power as most coefficients of determination (R^2) values are on the low side. The confusion matrix in Table 7 depicts the model's performance in predicting the target variables based on the testing set. The model correctly predicts 77% of the observations. For example, employed graduates were correctly predicted under the employed category with a sensitivity of 99.9%. In comparison, only 0.4% of unemployed graduates were correctly predicted as being unemployed, which often refers to the model's specificity.

Table 6
The model's goodness-of-fit statistics

	Statistics
Likelihood Ratio	0.000
McFadden's R^2	0.055
Cox and Snell R^2	0.058
Nagelkerke's R^2	0.088

Table 7
Confusion Matrix

Observed	Predicted		Percent Correct
	Employed	Unemployed	
Employed	10961	12	99.9%
Unemployed	32824	12	0.4%
Percent Correct	77.0%	50.0%	77.0%

Another predictive model used in this study is the ROC curve, which is generated by plotting the true-positive rate against the false-positive rate at various threshold settings. Figure 1 displays the ROC curve that indicates the trade-off between the rate at which employed graduates were correctly predicted against the rate at which unemployed graduates were incorrectly predicted. The area under the curve (AUC) of this ROC curve is 0.658, indicating that the model adequately discriminates between the two target variable categories since the AUC value is between 0.6 and 0.7 (Yang & Berdine, 2017).

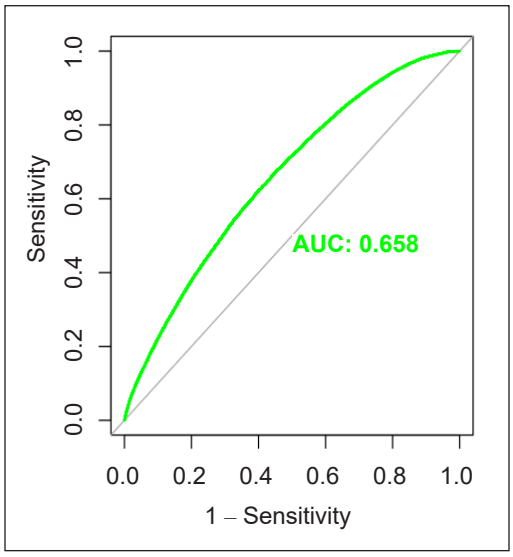

Figure 1. ROC curve

DISCUSSION

Most graduates were employed (85.5%), which is higher than the Ministry of Higher Education's target of 75% stated in the Malaysia Education Blueprint 2015-2025 (Higher Education). However, some stakeholders aspire for a higher percentage of graduate employability of more than 80% by 2025.

Logistic regression analysis maps the graduates' soft skills to their employment status. Positive values, teamwork, and problem-solving abilities have been identified as the most important soft skills contributing to employability. On the other hand, creative and critical thinking, analytical skills, general knowledge, and communication skills have a lower impact on employability. However, it does not imply that the skills with a low importance level are unnecessary, as the evaluation of the importance of these soft skills was based on the graduates' perception of the skills rather than their actual contribution to the workplace.

Rashid (2003) investigated the factors of employability from the employers' perspective and discovered that the reasons for low employability were a lack of English proficiency, self-confidence, critics, and innovation skills. On the other hand, Ting et al. (2017) discovered that employers will still hire graduates with average English proficiency if they have good communication skills. Furthermore, it shows that good communication skills increase employability. Therefore, graduates must equip themselves with soft skills to improve their employability. It is consistent with previous research indicating that soft skills are important in preparing graduates for the job market and increasing their employability or ability to be self-employed (Cheong et al., 2016; Hairi et al., 2011; Teng et al., 2019).

Working experience gained through internships and entrepreneurship courses is statistically significant to graduate employability. This finding is supported by previous research that found that work experience improves employability (Chavan & Carter, 2018; Passaretta & Triventi, 2015). Internships are the best way for graduates to learn and practice employability skills that cannot be learned in a classroom setting. This finding is consistent with previous research, which discovered that graduates who completed internships were better prepared and marketable to employers (Gault et al., 2010). As many graduates have entered the gig economy, there is a growing demand for graduates who have completed an entrepreneur course. It is because the entrepreneurship course equipped graduates with fundamental skills, critical thinking skills, personal qualities, and workplace competencies relevant to the local industry (Jamaludin, 2019). As measured by MUET, English proficiency is critical in increasing graduate employability, as supported by previous studies (Othman et al., 2018; Zainuddin et al., 2019). As measured by CGPA, academic performance influences graduates' employability, which is consistent with the study by He et al. (2021). Although academic performance is not the most important predictor of graduate employability, it is important in making a good impression on a potential employer.

IMPLICATIONS OF THE STUDY

In this study, the impact of soft skills on employability is based on graduates' perceptions of their soft skills rather than their actual level of soft skills. This data can be used as a proxy for how confident the graduates are in their soft skills. Based on the results, graduates who rate themselves as having positive values, teamwork, and problem-solving skills are more likely to be employed. It is worth noting that graduates who perceived they had excellent communication skills were less likely to be hired whilst many employers complained that our graduates lacked communication skills. This finding implies that future research should concentrate on actual abilities rather than perceived abilities.

The Malaysian government has made significant efforts to upskill graduates to ensure that the country can produce skilled workers to meet industry demand. The Malaysia Training Scheme Programme is one of the government's initiatives to ensure that graduates can upgrade their skills to supplement the knowledge gained during their degree, thereby addressing the skills gap. However, some skills are important but less likely to affect graduate employment. As a result, the programme should be reviewed regularly to ensure its effectiveness and meet industry demand.

It was discovered that internships and entrepreneurship courses positively correlate with employability. Most employability skills are gained directly through work experience. Therefore, it is suggested that higher education institutions make internships mandatory for first-year students to improve their human skills, professionalism, and knowledge.

Entrepreneurship courses should also be promoted to help graduates enter the labour market.

CONCLUSION

All stakeholders, particularly higher education institutions and the Ministry of Higher Education must aggressively develop a strategic roadmap to increase future graduates' readiness to align with labour market demand. This study provides insights into graduates' employability concerning their field of study and their ability to acquire industry-required skills. The findings can aid in developing intervention programmes to produce highly skilled workers, allowing fresh graduates to contribute to the country's economic growth.

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