# Skills Acquisition and Employability Among Arts and Social Sciences Interns in a Malaysian Public University

Mythili Monogaran<sup>a</sup>, Thirunaukarasu Subramaniam<sup>b</sup>

**Abstract:** *Many Malaysian employers feel that university curricula inadequately prepare* graduates for the realities of the job market. The present study attempts to rank skills acquisition among interns at a Malaysian public university and identify the gaps through skills gap and radar analyses. Respondents comprised students from an Arts and Social Sciences faculty in a Malaysian public university who had undergone internship as well as the employers who conducted trainings for them. Using a simple random sampling method, 164 students and 43 employers provided responses. The largest gap between employers' expectations and interns' performance is seen for 'values, attitudes and professionalism'. Employers tend to emphasise 'values, attitudes and professionalism' as an essential skill for employability. Positive qualities, such as having good work habits and attitudes, are valuable assets that need to be inculcated. Another skill that requires improvement is 'communication, leadership and team skills', as poor communication skills can become a serious obstacle for employability. This study provides insights from a dual perspective analysis through the identification of gaps between actual and expected intern performance. This information will be a valuable guideline in redesigning university modules to meet the demands of potential employers.

*Keywords:* Employability; Interns/internships; Employers; Skills gap; Graduate employability *JEL Classification:* J24, J62, J64

<sup>&</sup>lt;sup>a</sup> Department of Southeast Asian Studies, Faculty of Arts and Social Sciences, Universiti Malaya, 50603 Kuala Lumpur. *Email: mystic1884@hotmail.com*.

<sup>&</sup>lt;sup>b</sup> Corresponding author. Department of Southeast Asian Studies, Faculty of Arts and Social Sciences, Universiti Malaya, 50603 Kuala Lumpur. *Email: stkarasu@um.edu.my*, ORCID ID: 0000-0003-4334-8026.

#### 1. Introduction

The employment rate of a country plays an important role in determining its productivity and utilisation of human resources. Employment rates tend to fluctuate according to internal and external factors (Baron-Puda, 2017). Economic expansion leads to the creation of more job opportunities, while economic instability causes the unemployment rate to rise (Subramaniam & Baharumshah, 2011). Although most external factors like labour market and economic conditions are beyond the control of jobseekers, there are certain internal factors which can be manipulated to increase the chances of securing employment. Some of these internal factors include internship programmes and graduate quality. The general perception is that there is a mismatch between job market expectations and the quality of graduates in the Malaysian labour market. There is a widening gap between what higher education institutions (HEIs) produce and what the industry expects in terms of technical and soft skills, leading to unemployment challenges (D'Silva, 2020). As such, there is a necessity to specifically analyse this perception in relation to graduates from the field of Arts and Social Sciences, as they make up a large number of the unemployed graduates.

With the increasing number of private and public HEIs in Malaysia, student enrolment has increased tremendously. A recent statistic released revealed that around 5.36 million graduates were produced in 2020, an increase of 4.4% from 5.13 million in 2019. The number of graduates in the Malaysian labour force rose by 6.3% to 4.56 million persons in 2020, compared to 4.29 million in 2019. Meanwhile, graduates' labour force participation rate rose to 85% in 2020 compared to 83.5% in 2019 (Department of Statistics Malaysia, 2021), while the number of unemployed graduates increased to 4.4% in 2020 from 3.9% in 2019. Statistics from the Ministry of Higher Education Graduate Tracer Study (MOHE-GTS) shows that only 55.2% of 123,043 graduates from public universities managed to secure employment in 2018. Out of the 25% unemployed graduates, 35% were from Social Sciences faculties. The same study in 2019 also reported that 16.6% of the 23,505 unemployed graduates were from the Arts and Humanities, while 15% (14,676) of the 94,400 unemployed graduates were from the Social Sciences, Business and Law. This shows that unemployed graduates are largely from the arts, humanities and social sciences.

To address the problem of graduate unemployment, especially when it

involves mismatch, university curricula should focus on equipping students with the knowledge and skills needed in the workplace, while programmes should balance between theoretical and practical elements (Baron-Puda, 2017). Realising that theoretical knowledge alone will not prepare students to face the job market, many HEIs have included internship or industrial training as part of their curriculum. Pillai et al. (2012), for example, point out that industrial training has been made a compulsory component of more than 80% of the degree programmes at a premier Malaysian university and in most Arts and Humanities programmes. Internships expose students to real-life work situations to practise what they have learned, and ease the school-to-work transition (O'Higgins & Pinedo, 2018). The present study as such aims to evaluate the role of the internship programme and its effects on the employability of undergraduates, and uncover the gaps between interns' actual skills acquisition and employers' expectations from Arts and Social Sciences graduates. The dual perspective analysis will provide valuable insights on the skills that are lacking among these graduates.

# 2. Literature Review

# 2.1 Theoretical underpinnings

Two relevant theories considered are skill acquisition theory and human capital theory. Skill acquisition theory accounts for how people progress in learning a variety of skills, from initial learning to advanced proficiency, as well as skills studied, which include both cognitive and psychomotor skills in domains ranging from classroom learning to applications in sports and industry (DeKeyser, 2015). In the present context, skills acquired in the classroom are now being applied in real-life employment situations during internship. Even though this theory emphasises skill acquisition in the context of second language learning, it remains relevant, as all skills similar to language acquisition can be sharpened over time. The second theory that underlies skills acquisition is the motivation to reap a greater income in the future, as proposed by human capital theory (Becker, 1964; 1992). The accumulation of human capital takes place in three ways, namely formal schooling, on-the-job training and off-the-job training. In the present context, formal schooling plays an important role in acquisition of various employability skills.

Even though human capital theory points to the fact that knowledgeable and highly-skilled human capital contributes to the economic productivity of a nation, employability, skills shortage, and mismatch remain major human capital development issues in Malaysia (Economic Planning Unit, 2010; Fleming and Søborg, 2014). Skills mismatch occurs when education and training do not provide the skills demanded in the labour market, or when the economy does not create jobs that correspond to the skills of individuals (International Labour Organization, 2020). The MOHE-GTS done in 2017 revealed that a total of 669,200 or 20.7% of total graduate employment was found in non-graduate occupations, resulting in incidences of education mismatch (Darusaman, 2020). More recent studies also highlight inadequate employability skills and job mismatch as reasons for graduate unemployment (Kadir et al., 2020; Jamaludin et al., 2021).

# 2.2 Skills gap

The Malaysian government has taken active measures to identify the skills gap and employer perception among graduate employees. The majority of graduates were unemployed due to a lack of experience, poor attitude (Balakrishnan, 2017), poor English (Azmi et al., 2018; Britshi, 2019), poor communication skills (Devadason et al., 2010), or studies irrelevant to the job market (Azmi et al., 2018). According to the Malaysian Employers Federation Salary Survey 2016, more than 90% of employers indicated the need for graduates to improve their English proficiency to become more employable (MEF, 2016). For non-business graduates, entrepreneurial and business acumen deficiency is pointed out as reasons for poor employability (Mustapha & Greenan, 2002). With the opening of the Asean Free Trade Area (AFTA), entrepreneurial and business acumen, complemented by cross-cultural competence (Ilieva, 2012; Walsh, 2018), are among important skills required. Problem-solving skill is also lacking among Malaysian graduates (Azmi et al., 2018; Britshi, 2019) as well as graduates globally (QS Quacquarelli Symonds Ltd, 2018). This was identified as one of the important skills required among jobseekers (Society for Human Resource Management, 2019). In the United Kingdom (UK), Lyonette et al. (2017) find that employers highly value good communication and people management skills, alongside good technical skills, creativity and innovation.

#### 2.3 Internship and graduate employability

Previous surveys of graduate employers have established that a first degree is often viewed as necessary, but not sufficient. Likewise, good grades alone no longer ensure employment, as employers seek graduates with theoretical and practical skills (Hossain et al., 2018). In such situations, transferable skills are of greater significance (Harvey et al., 1997). Pereira et al. (2020) propose that improving the competencies and key skills required by industries can enhance graduate employability. To make higher education more relevant to labour market needs, it is essential to strengthen and extend the cooperation between universities and business entities (Baron-Puda, 2017). Strengthening university–industry collaboration (MEF, 2016; Ma'dan et al., 2020) in designing the curricula and study programmes ensures that the current needs of the job market and job trends are reflected in the courses offered by HEIs.

Work experience related to study is a valuable asset, as it displays positive association with employment outcomes (Centre for Higher Education Research and Information, 2002). Lowden et al. (2011) highlight that employers, students, graduates and HEI representatives value workbased learning (such as placements and internships) as particularly effective approaches to promote graduate employability. Lyonette et al. (2017), meanwhile, focusing on Arts, Humanities and Social Sciences graduates, found that the interviewees were very positive about the value of work placements in securing employment, preparing for work in terms of dealing with responsibility, shaping attitudes to work, developing self-confidence, as well as developing particular skills, such as client-facing and specialist ICT skills.

In recent years, most Malaysian public universities have generally incorporated internships or an industrial training component as part of their syllabus. Industrial training can help graduates gain practical experience and technical skills to be more "work ready" (Nazron et al., 2017) and ease the school-to-work transition. The benefits of internship programmes accrue not only to the interns, but also to the institutions and the training providers. For potential graduates, internship exposes them to real-life work environments before they enter the actual labour market. Internship amplifies practical experience (Holyoak, 2013; Ismail, 2018), as interns can put into practice classroom learning. Internships also allow one to build personal and professional relationships (Anjum, 2020) within a competitive work environment. For employers, the benefits are in the form of low-cost labour (Ismail, 2018). Employers also have the priority of choosing highperforming interns in their organisation. For institutions, internships increase the probability of finding employment after graduation (Ismail, 2018), a benefit often used as a marketing strategy among private and public HEIs. Often, graduate employability data is used to determine university ranking, the sustainability of programmes offered, deciding future student intakes, as well as the allocation of funds for various programmes offered by faculties worldwide. With these benefits accruing to all parties involved, it comes as no surprise that Malaysian public HEIs prioritise graduate employability.

Some of the reskilling and upskilling programmes in the country include the KPT-Career Advancement Programme (KPT-CAP), Teaching Factory Programme, Technical Vocational Education and Training (TVET) Transformation Programme, flexible and micro-credential programmes, as well as mobility programmes (Bernama, 2022). However, there is a growing concern over rising unemployment among Arts and Social Sciences graduates, as raised by employers, universities and the government (Zafira, 2017; Diana, 2017) due to poor acquisition of employability skills. The present study thus attempts to determine the appropriate skills needed by Arts and Social Sciences graduates (Azami et al., 2009; Md Shamsuri & Izzaidin, 2014) or graduates as a whole (MEF, 2016).

## 3. Research Methodology

The purpose of this study is to assess interns' employability skills from their perspective and that of their employers, as well as to determine the necessary skills sought by the latter. The present study is a quantitative inquiry employing questionnaire surveys. The questionnaires for interns and employers were developed based on the soft skills outlined in the *Malaysian Qualification Framework*. The agreement to develop this national qualification framework was made by all stakeholders in 2007, which led to the establishment of the Malaysian Qualifications Agency (MQA) Act 2007 as an overarching framework for all post-secondary qualifications (MQA, 2017).

Respondents consisted of students from the various departments of an Arts and Social Sciences faculty in a Malaysian public university who had completed their internship or industrial training, as well as the employers who supervised them. The questionnaire for interns was prepared online and a link was sent to the respondents' mobile numbers. For employers, the link was sent *via* email. A total of 200 students and 150 employers were initially identified using a simple random sampling method. Responses were received from 164 students and 43 employers.

The questionnaire was designed to reveal the necessary employability skills employers look for, and how they rate those skills possessed by interns. Correspondingly, the self-assessment by the interns indicates their general perception of their skill acquisition. A set of 36 subskills were rated by interns and employers using a five-point Likert scale (from strongly disagree to strongly agree). The data for interns was tested for normality using the Shapiro-Wilks test to ascertain the appropriate method of data analysis, as many studies affirm that this is the most powerful normality test (Razali & Yap, 2011; Yang & Berdine, 2021). First, exploratory factor analysis (EFA) was performed to remove factors with loadings below 0.4. Then, principal component analysis using Varimax rotation was performed to obtain the factors for the interns' responses. Factor analysis generally helps researchers explore or confirm the relationships between survey items, and identify the total number of dimensions represented in the survey (Knekta et al., 2019). This method reduces large number of inter-correlated measures to a few representative constructs or factors that can be used for subsequent analysis (Ho, 2006).

Second, a skills gap analysis was performed to identify the gaps between the employer's expected skills (required) and the actual skills possessed by graduates (acquired) (Metilda & Neena, 2016). Skills gap analysis provides a mechanism to identify skills that are lacking among the interns through an evaluation performed by their employers during internship. A fundamental mismatch between the skills that employers seek and those that jobseekers possess causes difficulty for individuals to find jobs and for employers to find appropriately trained workers (Levesque, 2019). As the acquisition of a particular skill by an intern improves, the gap becomes smaller and *vice versa* (Pavlou, 2021). We use a threshold of 0.5 to indicate if an intern has performed poorly in that particular skill. When the difference between the expected and the actual value is larger than the threshold value, it may indicate that the interns are lacking in that particular subskill and skillset. Finally, a radar chart was used as a data visualisation method to map out the gaps (Saary, 2008; Seide et al., 2021). In radar charts, many attributes can be easily compared each along their own axis, and overall differences are apparent by the size and shape of the polygons (Nowicki & Merenstein, 2016). Thus, a skills radar chart was developed to identify the skills gap more comprehensively to undertake corrective measures.

# 4. Results and Discussion

# 4.1 Skills acquisition: Interns' perspective

The demographic and background information of the interns and employers surveyed is presented in Tables 1 and 2, respectively. More than 50% of the interns were assigned more than one job scope (Table 1). Approximately 60% of the employers supervised two or more interns (Table 2). As the Shapiro-Wilks test revealed that the data was not normally distributed, we performed an EFA to remove items with low factor loadings (below 0.4). Subsequently, to assess the factorability of the data, Bartlett's test of sphericity (Bartlett, 1954) and the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (Kaiser, 1970; 1974) were employed.

| Items                              | Percentage |  |  |
|------------------------------------|------------|--|--|
| Race (n = 164)                     |            |  |  |
| Malay/Bumiputera Sabah and Sarawak | 71.3       |  |  |
| Chinese                            | 17.7       |  |  |
| Indian                             | 9.8        |  |  |
| Others                             | 0.6        |  |  |
| Non-Malaysian                      | 0.6        |  |  |
| Gender (n = 164)                   |            |  |  |
| Male                               | 26.8       |  |  |
| Female                             | 73.2       |  |  |
| Nationality (n = 164)              |            |  |  |
| Malaysian                          | 99.4       |  |  |
| Non-Malaysian                      | 0.6        |  |  |

| Table | 1: | Interns' | Profile |
|-------|----|----------|---------|
|-------|----|----------|---------|

| Items                                  | Percentage |
|--|------------|
| Period of internship (weeks) (n = 164) |            |
| 8                                      | 5.5        |
| 14                                     | 87.8       |
| 28                                     | 6.7        |
| Last CGPA before internship            |            |
| 2.00-2.99                              | 0.6        |
| 3.00-3.69                              | 88.4       |
| 3.70-4.00                              | 11.0       |
| Age (n = 164)                          |            |
| 22                                     | 1.2        |
| 23                                     | 17.1       |
| 24                                     | 61.6       |
| 25                                     | 17.7       |
| 26                                     | 1.2        |
| 36                                     | 0.6        |
| 39                                     | 0.6        |
| Job scope 1 (n=164)                    |            |
| Administrative                         | 41.5       |
| Human resource                         | 17.7       |
| Sales and marketing                    | 10.4       |
| Customer relations                     | 7.9        |
| Media and communication                | 6.7        |
| Environment and green technology       | 3.0        |
| IT                                     | 3.0        |
| Social worker                          | 2.4        |
| GIS                                    | 1.8        |
| Data analysis                          | 1.2        |
| Finance                                | 1.2        |
| Others                                 | 3.0        |
| Job scope 2 (n=82)                     |            |
| Administrative                         | 16.5       |
| Customer relations                     | 12.2       |
| IT                                     | 11.0       |
| Media content                          | 1.8        |
| Human resource                         | 1.2        |
| Others                                 | 7.2        |

| Items                                     | Percentage (n=43) |
|---|-------------------|
| Sector                                    |                   |
| Government                                | 16.3              |
| MNC                                       | 7.0               |
| Private                                   | 55.8              |
| Semi-government                           | 20.9              |
| Department                                |                   |
| Customer relations                        | 9.3               |
| Human resource                            | 18.6              |
| Management                                | 11.6              |
| R&D                                       | 7.0               |
| Sales and marketing                       | 2.3               |
| Town planner                              | 2.3               |
| Customer relations and IT                 | 4.7               |
| Human resource and sales and marketing    | 2.3               |
| Management and human resource             | 4.7               |
| R&D and IT                                | 2.3               |
| Sales and marketing and IT                | 2.3               |
| More than two departments                 | 32.5              |
| Position                                  |                   |
| Customer relations executive              | 2.3               |
| Editor                                    | 2.3               |
| Finance executive                         | 2.3               |
| HR manager                                | 2.3               |
| Human resource executive                  | 25.6              |
| IT Executive                              | 4.7               |
| Manager                                   | 7.0               |
| Marketing and IT executive                | 2.3               |
| Marketing executive                       | 4.7               |
| Middle management                         | 4.7               |
| Production executive                      | 2.3               |
| Records management and recovery executive | 2.3               |
| Sales and marketing executive             | 7.0               |
| Team leader                               | 23.3              |
| Technical supervisor                      | 2.3               |
| Town planner                              | 2.3               |
| Welfare officer                           | 2.3               |

Table 2: Employers' Profile

| Items                  | Percentage (n=43) |
|------------------------|-------------------|
| Age                    |                   |
| 30-34                  | 11.5              |
| 35-39                  | 37.3              |
| 40-44                  | 23.3              |
| 45-49                  | 27.9              |
| Nationality            |                   |
| Malaysian              | 100.0             |
| Gender                 |                   |
| Female                 | 37.2              |
| Male                   | 62.8              |
| Race                   |                   |
| Chinese                | 30.2              |
| Indian                 | 18.6              |
| Malay                  | 51.2              |
| Interns supervised     |                   |
| 1                      | 39.5              |
| 2                      | 41.9              |
| 3                      | 16.3              |
| 4                      | 2.3               |
| Period of supervision  |                   |
| 8 weeks                | 2.3               |
| 14 weeks (1 semester)  | 90.7              |
| 28 weeks (2 semesters) | 7.0               |

The KMO measure of sampling adequacy value of 0.848 allows the use of EFA to determine what features are most important when classifying a group of items (DeCoster, 1998), or a group of skills. Subsequently, factor analysis was used to cluster 36 subskills into nine factors (Table 3), which accounted for 65% of the total variance.

The first factor, 'knowledge management skills', explains 27% of the total variance, with the highest factor loading being the ability to demonstrate relevant skills in a specialised field or of a multidisciplinary nature, related to the field of study, work and/or practice. This factor explains the intern's ability to not just possess the required knowledge, but to put it into practice when needed. As most interns are placed in more than one department during their internships, it is important for them to demonstrate the required skills for each different job scope. Possessing this subskill will enable them to remain desirable in the competitive job market. Interns will then be confident having not only acquired the necessary skills, but also demonstrate said skills to successfully complete tasks assigned to them.

| Factor dimensions  | Factor<br>loads | Eigenvalues | % Variance<br>explained | Cumulative percentage | Reliability |
|--|-----------------|-------------|-------------------------|-----------------------|-------------|
| Knowledge management skills  |                 | 9.694       | 26.927                  | 26.927                | 0.870       |
| Able to demonstrate relevant<br>skills in a specialised field, or of<br>a multidisciplinary nature related<br>to the field of study, work and/or<br>practice | .757            |             |                         |                       |             |
| Able to apply critical, analytical<br>and evaluation skills in the field of<br>study/work/practice   | .731            |             |                         |                       |             |
| Demonstrated the knowledge, skills<br>and ability to competently complete<br>the given task/assignment   | .718            |             |                         |                       |             |
| Able to apply skill / knowledge to a range of approaches in the field of study/work/practice   | .717            |             |                         |                       |             |
| Able to manage, resolve<br>complex applications and handle<br>unpredictable issues with creative<br>and innovative solution(s)                               | .695            |             |                         |                       |             |
| Able to demonstrate intellectual<br>independence in the application of<br>knowledge within specific field(s)   | .660            |             |                         |                       |             |
| Had the opportunity to acquire<br>skills on work coordination and<br>work management within teams  | .578            |             |                         |                       |             |
| Given the opportunity to describe<br>advanced and comprehensive,<br>theoretical and technical knowledge  | .425            |             |                         |                       |             |
| Cross-cultural and<br>entrepreneurial skills   |                 | 2.763       | 7.675                   | 34.602                | 0.735       |
| Demonstrated an appreciation of<br>broader socio-political, economic<br>and cultural issues at local/national/<br>regional level                             | .788            |             |                         |                       |             |
| Demonstrated entrepreneurial competency with selected project(s)   | .742            |             |                         |                       |             |
| Had the opportunity to identify new business opportunities   | .649            |             |                         |                       |             |

Table 3: Skills Acquired: Interns' Perspective

| Factor dimensions  | Factor<br>loads | Eigenvalues | % Variance<br>explained | Cumulative percentage | Reliability |
|--|-----------------|-------------|-------------------------|-----------------------|-------------|
| Decision making skills   |                 | 2.348       | 6.523                   | 41.125                | 0.584       |
| Able to undertake significant levels<br>of work-related responsibilities of<br>others as well as self                                      | .751            |             |                         |                       |             |
| Able to work cooperatively as a<br>team member and demonstrated<br>respect for all co-workers  | .734            |             |                         |                       |             |
| Demonstrated decision-making<br>capacities and professionalism by<br>working towards predetermined<br>goals and outcomes                   | .563            |             |                         |                       |             |
| Worked autonomously and showed<br>leadership and professionalism in<br>managing responsibilities within<br>broad organisational parameters | .531            |             |                         |                       |             |
| Demonstrated accountability especially in professional fields  | .497            |             |                         |                       |             |
| Lifelong learning skills   |                 | 1.866       | 5.183                   | 46.308                | 0.635       |
| Had opportunities to deal with<br>customers/clients/students<br>(initiating contact, conduction or<br>having a discussion on phone)        | .768            |             |                         |                       |             |
| Given opportunities to work<br>together with different people<br>in diverse learning and working<br>communities                            | .753            |             |                         |                       |             |
| Provided with a chance to engage<br>effectively in self-directed lifelong<br>learning and professional pathways                            | .451            |             |                         |                       |             |
| Practical skills   |                 | 1.717       | 4.769                   | 51.077                | 0.737       |
| The theoretical knowledge acquired<br>during my lectures had prepared me<br>sufficiently to perform well in my<br>job scope                | .743            |             |                         |                       |             |
| Had a conducive working<br>environment that encouraged me to<br>perform at my best   | .676            |             |                         |                       |             |
| Satisfied with my overall<br>performance during the internship<br>and would consider working in the<br>same field when I graduate          | .529            |             |                         |                       |             |

| Factor dimensions  | Factor<br>loads | Eigenvalues | % Variance<br>explained | Cumulative percentage | Reliability |
|--|-----------------|-------------|-------------------------|-----------------------|-------------|
| Time management, ethics and professionalism  |                 | 1.511       | 4.196                   | 55.273                | 0.715       |
| Could manage time, make decisions and evaluate outcomes  | .798            |             |                         |                       |             |
| Arrived on time, stayed on task and followed attendance policies   | .709            |             |                         |                       |             |
| Able to demonstrate adherence and<br>ability to identify ethical issues,<br>make decisions ethically, and act<br>professionally within the varied<br>social and professional environment<br>and practice | .666            |             |                         |                       |             |
| Modelled honesty, integrity and loyalty and the ability to accept change   | .656            |             |                         |                       |             |
| Communication skills   |                 | 1.252       | 3.478                   | 58.751                | 0.512       |
| Able to present ideas confidently,<br>accurately and coherently in<br>appropriate context in a well-<br>structured manner to a diverse<br>audience   | .704            |             |                         |                       |             |
| Communication at workplace was mainly in English   | .605            |             |                         |                       |             |
| Given the opportunity to convey<br>ideas both in written or oral forms<br>using appropriate and different<br>methods of presentation   | .549            |             |                         |                       |             |
| Problem solving skills   |                 | 1.114       | 3.093                   | 61.845                | 0.753       |
| Able to apply a range of essential<br>methods and procedures to solving<br>a broad range of complex problems   | .670            |             |                         |                       |             |
| Able to give critical feedback and solutions for tasks assigned  | .639            |             |                         |                       |             |
| Able to review, make adjustments<br>and supervise related practices<br>and processes concerning field of<br>specialisation   | .549            |             |                         |                       |             |
| Able to relate theory with practice  | .467            |             |                         |                       |             |

| Factor dimensions   | Factor<br>loads | Eigenvalues | % Variance<br>explained | Cumulative percentage | Reliability |
|---|-----------------|-------------|-------------------------|-----------------------|-------------|
| ICT skills  |                 | 1.034       | 2.871                   | 64.715                | 0.703       |
| Able to use and combine numerical and graphical/visual data for study/ work   | .677            |             |                         |                       |             |
| Able to use a broad range of<br>information, media and technology<br>applications to support study and/<br>or work                            | .665            |             |                         |                       |             |
| Can adapt to ever changing<br>technologies and resources by<br>identifying, learning and applying<br>new skills to improve job<br>performance | .613            |             |                         |                       |             |

Note: Principal components factor analysis with Varimax rotation. KMO measure of sampling adequacy = 0.848; Bartlett test of sphericity = 2628.779; p < 0.000

The second factor, 'cross-cultural and entrepreneurial skills', explains almost 8% of the total variance. The ability to demonstrate an appreciation of broader socio-political, economic and cultural issues at local/national/ regional level has the highest factor loading. As many multinational companies are established in Malaysia, they require a graduate workforce that is aware of the socio-political, economic and cultural sensitivities that exist within the organisation and how it affects business. To succeed in the new global workplace, millennials need to see the opportunities in their cultural differences, and their ability to effectively work with diverse groups is a non-negotiable 21st-century skill that employers require (Walsh, 2018). The formation of AFTA, which brings together a market comprising 600 million, requires not only entrepreneurial skills, but also cross-cultural competence (Ilieva, 2012). Jobseekers with these skills will have an added advantage to compete in the regional market.

The third factor, 'decision-making skills', explains almost 7% of the total variance. Decision-making skills is essential when interns face multiple alternatives and they need to weigh the costs and the benefits of their choices. They are generally more used to being guided rather than think for themselves, which greatly affects their ability to solve problems and evaluate the outcomes of their decisions. As such, internships can function as a platform for them to sharpen their decision-making skills (Schnoes et al., 2018).

The fourth factor, 'lifelong learning skills', explains 5% of the total

variance. Lifelong learning skills is made up of a set of several other skills, and refers to a continuous process of acquiring formal and non-formal skills that will help to improve job performance. A study by Devadason et al. (2010) also highlights the importance of lifelong learning as a perceived skill among students at Malaysian public universities.

The fifth factor, 'practical skills', explains 4.7% of the total variance. Most of the respondents were confident with the theoretical knowledge obtained during lectures. However, graduates were unable to put their theoretical skills into practical use because of low self-confidence. Low self-confidence while communicating also affected other skill areas, such as teamwork, decision-making and problem-solving. Internship experience is thus able to build self-confidence in communication and improve their ability to put into practice what they have learned (Ismail, 2018).

# 4.2 Skills gap analysis: Employers' versus interns' perspective

For skills gap analysis, four main skills that display the largest difference include 'problem-solving and scientific skills', 'communication, leadership and team skills', 'practical skills' and 'managerial and entrepreneurial skills'. These skills are discussed below in detail (see Table 4).

# 4.2.1 Problem-solving and scientific skills

For problem-solving and scientific skills, all items under this attribute had a deficiency of more than 0.5. Interns from the Arts and Social Sciences appear to be ill-equipped with problem-solving skills. The results reveal that employers look for competencies related to managing and resolving complex applications and handling unpredictable issues with creative and innovative solutions. Interns lack this subskill. Possible reasons include interns being very much book-based and unable to think independently and make decisions related to their job scope. Employers also indicated that critical thinking is lacking among interns. They are unable to apply critical and analytical skills to the workplace. Employers also gave a low rating for interns' ability to demonstrate intellectual independence in the application of knowledge needed for a task. Several studies identified problem-solving as one of the important skills that is lacking among jobseekers globally (QS, 2018; Society for Human Resource Management, 2019).

| Problem-solving and scientific skills   | Employer       | Interns        | Differenc |
|---|----------------|----------------|-----------|
| Able to manage, resolve complex applications and<br>handle unpredictable issues with creative and innovative<br>solution(s)                 | 3.05<br>(.653) | 3.74<br>(.642) | -0.69     |
| Able to apply critical, analytical and evaluation skills in the field of study/work/practice  | 3.09<br>(.648) | 3.76<br>(.708) | -0.67     |
| Able to apply skill/knowledge to a range of approaches in the field of study/work/practice  | 3.23<br>(.611) | 3.84<br>(.636) | -0.61     |
| Able to demonstrate intellectual independence in the application of knowledge within specific field(s)                                      | 3.28<br>(.630) | 3.83<br>(.623) | -0.55     |
| Communication, leadership and team skills   |                |                |           |
| Able to present ideas confidently, accurately and coherently<br>in appropriate context in a well-structured manner to a<br>diverse audience | 2.44<br>(.734) | 3.62<br>(.649) | -1.18     |
| Worked autonomously and showed leadership and<br>professionalism in managing responsibilities within broad<br>organisational parameters     | 2.79<br>(.559) | 3.74<br>(.688) | -0.95     |
| Given the opportunity to convey ideas both in written<br>or oral forms using appropriate and different methods of<br>presentation           | 2.77<br>(.718) | 3.63<br>(.718) | -0.86     |
| Demonstrated decision-making capacities and<br>professionalism by working towards predetermined goals<br>and outcomes                       | 3.12<br>(.697) | 3.88<br>(.677) | -0.76     |
| Could undertake significant levels of work-related responsibilities of others as well as self   | 3.47<br>(.505) | 4.00<br>(.586) | -0.53     |
| Practical skills  |                |                |           |
| Able to give critical feedback and solutions for tasks assigned   | 2.86<br>(.639) | 3.76<br>(.675) | -0.90     |
| Able to review, make adjustments and supervise related practices and processes concerning field of specialisation                           | 3.02<br>(.740) | 3.69<br>(.764) | -0.67     |
| Able to relate theory with practice   | 3.30<br>(.599) | 3.74<br>(.766) | -0.44     |
| Managerial and entrepreneurial skills   |                |                |           |
| Demonstrated an appreciation of broader socio-political,<br>economic and cultural issues at local/national/regional level                   | 2.93<br>(.669) | 3.58<br>(.799) | -0.65     |
| Had the opportunity to identify new business opportunities  | 2.63<br>(.725) | 3.18<br>(.902) | -0.55     |
| Demonstrated entrepreneurial competency with elected project(s)   | 3.16<br>(.531) | 3.61<br>(.714) | -0.45     |

# Table 4: Skills Gap Analysis

Note: (1) Figure in parentheses represents standard deviation value. (2) If the difference exceeded 0.5, then we considered the interns to have overrated themselves. (3) We only reported the difference when it exceeded 0.4.

# 4.2.2 Communication, leadership and team skills

For communication, leadership and team skills, one item, 'I was able to present ideas confidently, accurately and coherently in appropriate context in a well-structured manner to a diverse audience', had a deficiency, exceeding 1. This indicates that the interns were not able to communicate with accuracy and coherence to a diverse group. Employers tend to look for employees who can deliver their ideas and thoughts effectively. As many job scopes today require communication and networking, employers particularly look for this attribute in the hiring process. Inadequate communication skills can become a major hindrance for employability (Devadason et al., 2010; Balakrishnan, 2017; Azmi et al., 2018) and requires urgent addressing. Several other items also seemed to have a higher deficiency: 'I worked autonomously and showed leadership and professionalism in managing responsibilities within broad organisational parameters' (deficiency of 0.95) and 'I was given the opportunity to convey ideas both in written or oral forms using appropriate and different methods of presentation' (deficiency of 0.86). It is worrying that this attribute has a higher level of deficiency, indicating the dissatisfaction of employers. The MEF Salary Survey also indicates that 90% of employers expect graduates to improve their English proficiency to improve employability. The lack of leadership skill suggests that interns are not adequately prepared to take on roles that require more autonomy and decision-making.

## 4.2.3 Practical skills

For practical skills, the item with the highest deficiency was 'ability to give critical feedback and solutions for tasks assigned'. Generally, employers felt that the interns were neither able to give critical feedback nor find solutions for tasks assigned. Employers obviously look for individuals who can review, make adjustments and supervise tasks. Knowledge of theory alone is insufficient to perform well at workplace as employers seek employees who are able to put theory into practice (Hossain et al., 2018). The interns performed poorly in this subskill indicating the intern's inability to apply their theoretical knowledge effectively to successfully complete a task within their job scope. In this regard, the internship provides an opportunity for interns to put theory into practice (Nazron et, al. 2017).

# 4.2.4 Managerial and entrepreneurial skills

For managerial and entrepreneurial skills, the item with the largest deficiency was 'could demonstrate an appreciation of broader socio-political, economic and cultural issues at local/national/regional level'. Arts and Social Sciences students appear to be less equipped with general knowledge on various social, political and economic issues. This not only reflects poorly on the roles of the faculty and curriculum in providing the necessary exposure, but also on the personality and character of the interns. Most employers look for interns who have cross-cultural, socio-political and economic awareness, as well as entrepreneurial or business acumen. Mustapha and Greenan (2002) also stress the importance of entrepreneurial skills for non-business graduates. It came as no surprise when this skill was found to be lacking among Arts and Social Sciences interns, as they have limited exposure to entrepreneurship education. Factor analysis results also reveal that incorporating cross-cultural competence with entrepreneurial skills is a valuable asset for interns (Ilieva, 2012), especially with the formation of AFTA.

## 4.3 Radar analysis

The radar chart (Figure 1) shows the employers' expectations and how they rate the interns. It is evident that the employers gave importance to all seven skills. However, four specific skills were given more importance: 'values, attitudes and professionalism' (99.07%), 'communication, leadership and team skills' (99.07%), 'knowledge' (92.56%), and 'practical skills' (92.09%). The radar chart shows that the interns performed poorly in four main skills. These are 'information management and lifelong learning', 'problem-solving and scientific skills', 'values, attitudes and professionalism', and 'managerial and entrepreneurial skills'. The widest gap between employers expectation and the interns performance was observed for 'values, attitudes and professionalism' (35.81%). Values and attitudes, such as being hardworking and displaying a willingness to shoulder extra work (Pang et al., 2019), are highly valued by employers, in addition to professionalism. Bakar et al., (2007) point out that Malaysian employers expect their employees to have good work habits and attitudes, among which were good attendance,

punctuality, cooperation, interest, enthusiasm, honesty and loyalty. In a more recent Malaysian study (Cheong et al., 2016), values and personality were rated among the top four attributes needed among graduates. The present study also highlights that employers place more emphasis on 'values, attitudes and professionalism'.





Another skill that displayed a sizeable gap is 'communication, leadership and team skills' (25%). Globally, poor communication skills have been identified as a significant obstacle for employability among graduates in countries, such as Palestine (Nabulsi et al., 2021), Bangladesh (Uddin, 2021), and the UK (Lyonette et al., 2017). These studies emphasise the need to improve communication skills to improve graduate employability. The present study also points to the fact that communication skills, as one of the sub-components in 'communication, leadership and team skills', remain important in the Malaysian context (see also Devadason et al., 2010; Balakrishnan, 2017).

## 5. Conclusion and Recommendations

The main skills lacking among Arts and Social Sciences interns were identified to be 'values, attitudes and professionalism', 'information management and lifelong learning skills', 'problem-solving and scientific skills', 'communication, leadership and team skills', and 'knowledge'. On a positive note, the interns successfully matched the needs of their employers in certain skillsets, such as 'practical skills' and 'managerial and entrepreneurship'. The subskills within these two skills show a certain level of employer satisfaction and reflect positively on the existing curricula and its effectiveness in equipping interns with these skills.

Certain subskills did not entirely satisfy employers. However, as the overall rating of these skills did not show a significant difference in comparison to the intern's self-evaluation, they were taken to be meeting employers' requirements. The interns, during the self-evaluation, generally gave themselves a high rating of skills possessed. This could possibly be due to the fact that the interns were not fully aware of the skills and competencies expected of them, as they are yet to enter the actual labour market. It could also be an indication that the interns have minimal exposure to the job scope and their ideas of work demands are still theory-based. Although the interns' high self-evaluation responses in some questions were similar to the evaluations by employers, in most cases there was a mismatch.

Recommendations from this study include the need for undergraduates to be presented with more real-life problems to help them mentally prepare for the realities of working life, as well as develop a mindset capable of producing valid solutions within a constricted time frame. Undergraduates require guidance towards putting theoretical ideas into practical use and in converting their knowledge into practical working ideas within the current job scope and economic trends to meet the need of the industry. Interns should also be exposed to presenting and also carrying out daily conversations in English. Fear of making mistakes when communicating with others can pose challenges to improve their command of the language, as English is not their first language. Skill acquisition theory in this context provides insight into second-language acquisition among these interns. Even though speaking in English seems challenging for non-native speakers, language proficiency in can be sharpened over time to fulfil the need of the industry.

Public university graduates from Arts and Social Sciences faculties in Southeast Asia, which do not use English as the medium of instruction (with the exception of Singapore and Brunei Darussalam), need to be fully aware that they compete not only among themselves, but also with those graduating from private universities, foreign universities and their international branch campuses (such as University of Nottingham Malaysia and RMIT University Vietnam). Those from the latter institutions may display better English language proficiency. Malaysian public university graduates, as such, need to continuously sharpen their English language competency to enable them to stand tall in a borderless world. Poor English proficiency is not only an obstacle for employability in Malaysia, but also in other Southeast Asian countries, such as Indonesia (Nambiar et al., 2019) and Thailand (Franco and Roach, 2018). As more employment opportunities become available in the private sector, these graduates have to improve their English communication skills.

Graduates should be more realistic in job-seeking, being prepared to face situations where they are required to make decisions and take responsibility for them. This enables them to evaluate themselves more practically and accept their shortcomings, while constantly working towards self-improvement. The university curriculum needs to incorporate more of such elements. Incorporating the main skills of 'values, attitude and professionalism', 'information management and lifelong learning skills', 'problem-solving and scientific skills', 'communication, leadership and team skills', 'knowledge', 'management and entrepreneurial skills' together with cross-cultural competence and 'practical skills' in coursework components will better prepare interns to enter the labour market. This can be done through inclusion of these subskills in various classroom activities conducted by instructors.

Correspondingly, internship providers need to focus more on developing the skills and competencies of interns and providing them with a platform to self-assess. Interns need to be made aware of the skills industries require and how to effectively demonstrate these skills at their workplace. This will only be possible if internship providers play a more active role in guiding interns and presenting them with more opportunities to improve themselves before leaving the university. Inviting potential employers to carry out on-campus recruitment can provide students with better insights into what is expected of them and in order to help them to develop their skills accordingly.

The limitations of the present study include the generalisability of the research findings, as the sample is taken from a faculty in the field of arts and social sciences. Future studies can look into broadening the sample into several universities involving arts and social science faculties to identify saliency among Malaysian public universities.

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