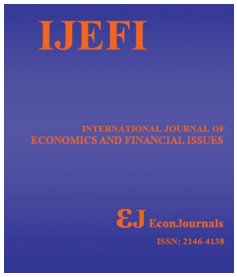

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2016, 6(S7) 120-124.

Special Issue for "International Soft Science Conference (ISSC 2016), 11-13 April 2016, Universiti Utara Malaysia, Malaysia"

Skills Mismatch in Small-sized Enterprises in Malaysia

Abdul Rahim Anuar[1]*, Wan Nurmahfuzah Jannah Wan Mansor[2], Badariah Haji Din[3]

[1]School of International Studies, Universiti Utara Malaysia, Kedah, Malaysia, [2]School of International Studies, Universiti Utara Malaysia, Kedah, Malaysia, [3]School of Government, Universiti Utara Malaysia, Kedah, Malaysia. *Email: abd182@uum.edu.my

ABSTRACT

The purpose of this study was to determine the skill mismatch faced by small-sized enterprises (SSEs) in Malaysia. The respondents were 242 human resource managers from selected SSEs in Malaysia. All variables showed a positive relationship towards skill mismatch among employees. The data were analyzed by using multiple statistical procedures, namely mean point value and correlation analysis. The result of the study showed that numerous SSEs faced issues of lack of skills in their workers. They acknowledged the existence of skill mismatch in the form of skill gap, horizontal mismatch, and over-education among their workers. Thus, they need to change the recruitment strategy and focus on skill training programs that could help workers to perform better and improve their productivity performance.

Keywords: Small-sized Enterprises, Skill Mismatch, Productivity
JEL Classifications: J00, J4

1. INTRODUCTION

Malaysia needs to have 50% skilled labor, especially in the science and technical (S and T) field to achieve a developed nation status by the year 2020. At present Malaysia has 28% S and T skilled labor from a population of 14.8 million workers in the country. In addition to skilled labor, the labor skills gap problem exists when the state education sector (supply side) generates new employment skills that do not match the needs of the industry (demand side). In addition to the lack of innovation, and research and development (R and D), the lack of skilled labor coupled with skill gaps among workers has led Malaysia's economy to be caught in the middle-income group of countries (Cherif and Hasanov, 2015). This study explored the labor issues and the type of skills required by the industry, particularly among small and medium-sized enterprises (SMEs).

According to Department of Statistics (DoS) (2012), there were about 634.136 SMEs in Malaysia in 2010 with gross output value of nearly RM507 billion. The number of workers employed by SMEs was 3.7 million people. Although the number of SMEs is higher than that of large companies (17,803 establishments), its contribution to the total industry output value is small compared to the large companies. In 2010, the contribution of SMEs in industry gross output value was 29% compared with the contribution of large enterprises, with 72%.

2. LITERATURE REVIEW

Malaysia's economic transformation was accelerated by the capacity and quality of its workforce. Moreover the development of SMEs has created a greater demand for skilled workers. According to the Malaysia Productivity Corporation (MPC) (2015) the market needs a more educated workforce so that they can possess the appropriate skills, knowledge, and talents to meet the challenges of the economy. Furthermore, Malaysia's economic structure was highly driven by manufacturing and services sectors (SSs). Thus in order to accelerate the market competitiveness, these industries would need a high quality workforce.

Norasmah et al., (2012) investigated the globalization impact on the need for skilled labor among youth. Their findings suggested that there is a need to reform education for the production of high quality human capital. Malaysia needs to produce first class mentality human capital in order to face challenges in the knowledge based economy and innovation field. The plan also needs to create competitiveness

among the new generation human capital so that they would have the courage to face the competitive global market. Furthermore, quality human capital should master important skills such as personal attributes, communication skills, learning skills, initiative, and technology planning and organizing (Latisha and Surina, 2010).

Besides general skills, the technical and vocational skills are also important. Findings from Malaysian Labor and Employment Statistics (2013) showed that 35% of workers in Malaysia have low qualifications and firms were facing 68% skills shortage among their workers (Noorziah et al., 2015). Thus by acquiring the required skills, the youth is actually available to get jobs, whether they get employed or become self-employed. The technical skills are also important for self-development since it could potentially enhance creativity among the youth. The technical and vocational education and training must focus on the knowledge and skills required for industrial development (Onderi et al., 2014). The industry has been developed with technology advancement and it has created new demands on the quality of employees. The quality mentioned here must begin from the education and training provided, which must have a connection with industrial needs.

According the Federation of Malaysian Manufacturers (FMM) report for salary, benefits, and employment conditions survey in the manufacturing sector 2013/2014, the skill shortage is in technical field (FMM, 2014). Besides that, the recruitment process also has its own difficulties as the report showed that most of the applicants do not have relevant skills for the job (FMM, 2014). Thus, relevant training should be provided more in the future in order to improve employability, especially among the youth. The report also showed the most required skills to be the mechanical, quality control, and manufacturing systems related skills (FMM, 2014). According to MPC (2015), the demand for specific skills such as ICT, mathematical-computational skills, English proficiency, problem solving skills, and people skills are crucial. Additionally, to minimize loss and increase profit are the mutual goals of all companies, and thus all managers need to have strong management skills, especially in managing profit/loss.

With regard to new graduates, the unemployment among fresh graduates in Malaysia is due to skill mismatch, weak in English proficiency, and lack of general skills which they should have acquired during their studies at the university level (Idham et al., 2014). As for youth employability, Subramaniam (2010) argued that the mismatch between youth skills and skills that are required by the industry contributed to the increased unemployment rates.

Meanwhile, Yogeesvaran (2005) highlighted the key findings of the Productivity and Investment Climate Survey (PICS) 2002/2003 with respect to the status of skills and education In Malaysia. Irrespective of location, industry, or firm characteristics, the large majority of firms identified skill shortages as a "severe" or a "very severe" problem. This is indicated by the average time taken to fill a vacancy for a skilled technician, which takes longer in Malaysia than in a few other Asian countries where PICS had been carried out. About 70% of managers surveyed identified insufficient supply of university graduates as the most important reason behind the skills shortages. The deficit in the supply of graduates was compounded with the presence of skills mismatch as reported by firms. Because of this, firms are forced to hire workers with diplomas to do the job of a degree graduate. The mismatch is also reflected by the qualifications of unemployed graduates registered for training schemes where about 40% of them have qualifications, which are not those required by the manufacturing sector. Shortage of skills was identified as a problem by the majority of the firms surveyed, irrespective of different location, industry, or firm characteristics.

According to Ministry of Human Resource Malaysia (2013), employment in Malaysia is set back by educational and skill mismatches. This occurs when institutes of higher learning produce a new workforce that cannot enter the labor market because of the differences in what they perceive is needed in the market and what is actually needed. Generally, the job market requires skills beyond just subject knowledge to increase employability rates. A degree is no longer adequate in today's ever competitive job market. The youth often tend to underestimate the job market while the job market's preference for experience over qualification tends to aggravate the situation even more.

Job mismatch is one of the major concerns which happen due to mismatch in graduates' education level, mismatch in graduates' qualifications, and mismatch of graduates' field of study. This mismatch also leads to skill mismatch because the education level, qualification, and field of study would represent the capability of the workers. If they did not acquire relevant skills needed by the job, then they would have to learn while they work in order to fulfill the requirements of the job. Most firms would spend for training, but they expect the workers to have at the very least the basic knowledge regarding the job being offered (Shujaat, 2011).

3. METHODOLOGY

This study focused on small-sized enterprises (SSEs). Table 1 categorizes SMEs by number of employees and type of business activity. The selection of SSEs was based on a random stratified sampling according to type of industry and region in Malaysia.

A total sample of 297 qualified SSEs was supplied by the DoS. Of this total, 242 SSEs were successfully interviewed. The response rate of the survey was 81% of the total sample. The questionnaire was addressed to the SSEs' human resource manager during the survey. The survey was conducted in August and September 2015.

The questions were divided into two main parts. The first part was related to the company profile, covering type of economic activity they undertake, ownership structure, and geographic market of the firm. The second part assessed the need for the development of

Table 1: SMEs category

Size	Number of workers in agriculture, mining and quarry, construction, and services sectors
Micro	<5 workers
Small (SSEs)	>5-50 workers
Medium	>51-150 works

Source: Department of statistics (2012). SSEs: small-sized enterprises, SMEs: Small and medium-sized enterprises

youth skills and talents, which include questions regarding lack of management skills and talent in the firm, the types of required skills for a period of 5 years, the training programs required by the firm, skill mismatch faced by the company, and recruitment criteria by type of employment-general workers, supervisors and technicians, new graduates, and managers/professionals.

A Likert scale from 1 (very low) to 5 (very high) was used to measure the importance of explanatory variables on skill and talent development of SSEs' workers. The statistical software SPSS version 22 was used to analyze the data from the survey. The mean (M) score was used to assess the performance of the observed variable. If the M score is high, then there is a strong relationship between the observed variables.

3.1. SSE Profile

The majority of the sample was private limited firms (76%), followed by single owner business (19%), partnership (4%), and public limited companies (1%). In addition, 90% of firms were fully owned Malaysian companies, 8% were majority Malaysian owned, while 50-50 ownership (1%), majority foreign owned, and fully owned foreign companies (0.4%) made up the rest of the sample (Table 2).

In terms of market geography, 95.5% of firms concentrated on the domestic market, 4.1% ventured into the international market, and 0.4% of businesses were both operating at the domestic and international levels. Besides that, 77% of firms did not have any R and D facilities, while 23% had R and D facilities. The period of establishment showed that there were 47% of companies operating between 6 and 10 years, 30% were established for more than 10 years, and 22.7% were newly established in the past 1-5 years.

4. FINDING AND ANALYSIS

4.1. Critical Skills and Talent Management

Regarding the need for critical skills and talent management in SSEs for the next 5 years, the majority of SSEs (68%) agreed that they have sufficient skills and talent management among their workers until 2020. However, 32% of SSEs viewed that they will face the problem of skilled and talent management shortages in the near future, and about 16% of SSEs were aware of such a problem since 2010.

Table 2: The activity of respondents' firm

Activity/sector of company	Frequency (n) (%)
Services	77 (31.8)
FBT	33 (13.6)
Wood and wood products, including furniture	16 (6.6)
Textile, worn apparel, and leather	13 (5.4)
Electrical and electronics	12 (5)
Machinery	11 (4.5)
Basic metal	9 (3.7)
Paper, printing, and publishing	8 (3.3)
Transport	7 (2.9)
Fabricated metal	5 (2.1)
Plastic	5 (2.1)
Manufacture of furniture	4 (1.7)
Recycling	3 (1.2)
Non-metallic mineral	3 (1.2)
Medical, precision, and optical instruments	2 (0.8)
Rubber	1 (0.4)
Others	33 (13.6)
Total	242 (100)

FBT: Food, beverage, and tobacco

4.2. Skill and Talent Management Attributes

Attributes that affect skill and talent management in SSEs were identified to be communication, teamwork, problem solving, initiative and enterprise, planning and organizing, self-management, learning, and technology. Among these attributes, about 44% of SSEs agreed that teamwork is the most important (M = 4.23) for skill and talent management, followed by initiative and enterprise among workers (M = 4.17). However, due to the nature of the firms' size, about 30% of the SSEs' viewed that technology is the least important attribute in skill and talent management (M = 3.94). Even though technology was given the least emphasis compared to the other attributes, its mean score was almost 4, which is considered as high.

In order to overcome the problem of skills and talent management shortages, approximately 75% of SSEs adopted the approach of enhancing skills and talent management amongst employees internally. This would enable them to save cost on skills development and training as compared to carrying out training external to the firm. Thus, in order to increase employee skills, the majority of SSEs require their employees to undergo technical skills training (62%), followed by information technology training (30%), and human resource management (15%).

4.3. The Expectation of Management Skills that Required within the Next 5 Years

The types of skills firms would require cover five main areas, namely technical, management, finance, marketing, and leadership. Among 60-77% of SSEs stated that all management skills are important. Among the skills that has been considered to be critical for SSEs in the next 5 years (in preparation for the year 2020) is marketing skills among employees (M = 4.19). This is pertinent in enhancing the sales accomplished by the firms in the future in order to ensure the survival of the firm in business. Other important skills, according to the mean score values, included management (M = 4.17), followed by finance (M = 4.08), technical (M = 4.0), and finally leadership (M = 3.96).

4.4. Types of Skill Mismatch

In this study and borrowing from CEDEFOP's (2010) categorization, the skills mismatch consists of the following form:

- Skill shortage: Demand for a particular type of skill exceeds the supply of people with that skill
- Surplus shortage: Supply for a particular type of skill exceeds the demand of people with that skill
- Skill gap: Type or level of skill is different from that required to adequately perform the job
- Vertical mismatch: The level of education or qualification is less or more than required
- Horizontal mismatch: The type/field of education or skill is inappropriate for the job
- Over-education: Workers have more years of education than the job requires

- Under-education: Workers have less years of education than the job requires
- Over-qualification: Workers hold a higher qualification than the job requires
- Under-qualification: Workers hold a lower qualification than the job requires
- Skills obsolescence: Skills previously used in a job are no longer required and/or skills have deteriorated over time.

Response from the SSEs related to the skill mismatch was mixed. Overall, about 52% of SSEs stated that they did not face the problem of skill mismatch among their workers. Meanwhile, the remaining 48% highlighted that they faced the problem of skill mismatch. For SSEs that do face this problem, they specifically had to deal with the problem of skill gap, which is the occurrence when the level of skills is different from that required to adequately perform the job (64%), followed by skill shortage which is the demand for a particular type of skill exceeds the supply of people with the skill (59%). Therefore, this response by SSEs regarding skill mismatch is in line with the action taken by SSEs in wanting their workers to join technical and information technology related training programs.

4.4.1. Skill mismatch by industry

In examining the skill mismatch by industry, the focus was more on the wood and wood products (WWPs), food, beverage, and tobacco (FBT), and SS industries. These main sectors comprised 52% of the total SSEs. Table 3 shows skill mismatch according to the major sectors of SSEs.

Among the forms of skills mismatch, SSEs in all three sectors noted that skill gap among their workers is the most significant problem in which type or level of skills is different from that required to adequately perform the job. This is followed by horizontal mismatch in which the type or field of education or skill is inappropriate for the job. Over education is also a major problem faced by SSEs in the three major sectors where workers have more years of education than the job requires.

4.5. Type of SSEs' Economic Activity and Skill and Talent Management's Attributes

For this part, the SSEs economic activity was divided into three main sectors, namely (i) WWP, (ii) FBT, and (iii) services. For SSEs involved in WWP, their workers largely lacked in the learning skill area. Meanwhile for the FBT sector, its workers were weak in the area of problem solving. For the SS, the SSE workers were faced with problem of self-management skills.

In order to overcome the problem of lacking in skill and talent management amongst workers in firms, SSEs involved in WWP and services industries focus on the external recruitment. Meanwhile, the FBT sector implements internal cross skilling and leadership development programs. This means that the type of economic activity the SSEs are involved in would influence the skills attribute and talent management amongst SSE workers. Therefore, SSE firms should overcome the problem of poor skills attribute and talent management amongst workers by taking economic activity type into consideration when developing their human resource.

Table 3: Relation between types of skill mismatch and firm activities

Type of skill mismatch	WWP	FBT	SS
Skill shortage Demand for a particular type of skill exceeds the supply of people with that skill	3.3	5.4	19.4
Surplus shortage Supply for a particular type of skill exceeds the demand of people with that skill	2.5	4.5	12.4
Skill gap Type or level of skill is different from that required to adequately perform the job	4.5	7.4	21.1
Vertical mismatch			
(a) The level of education or qualification is less than required	2.5	3.3	13.2
(b) The level of education or qualification is more than required	2.5	5.8	15.3
Horizontal mismatch The type/field of education or skill is inappropriate for the job	3.7	4.5	18.6
Over-education Workers have more years of education than the job requires	3.3	5.8	21.5
Under-education Workers have less years of education than the job requires	2.1	2.5	14.9
Over-qualification Workers hold a higher qualification than the job requires	2.5	5.8	15.7
Under-qualification Workers hold a lower qualification than the job requires	2.5	2.9	13.6
Skills obsolescence Skills previously used in a job are no longer required and/or skills have deteriorated over time	2.5	3.7	13.6

WWP: Wood and wood product, FBT: Food, beverage, and tobacco, SS: Services sector

The majority of firms agreed that skills in (i) technical, (ii) management, (iii) finance, (iv) marketing, and (v) leadership areas would affect the effectiveness of the firm in the future. In the coming 5 years, as the year 2020 looms closer, among the five skill attributes of firm workers, SSEs place greatest emphasis on marketing skills (M = 4.19). This skill is among the most pertinent in ensuring SSE success in future business endeavors. Additionally, the other identified attributes also influence the sustainability of the business, which include management (M = 4.17), followed by finance (M = 4.08), technical (M = 4.00), and finally leadership (M = 3.96) skills.

5. CONCLUSION

Even though the majority of SSEs stated that they did not have problems with skills and talent management shortages among their workers, there were still a large number of SSEs that faced the lack of skills and talent management in their workers in the

near future. This problem, if left unchecked, could affect the operations and profits of SSE businesses in the future. SSEs also realized that other skills such as teamwork, and initiative and enterprise as well as technology are important in enhancing the skills and talent management amongst their workers. They also acknowledged the existence of skill mismatch in the form of skill gap, horizontal mismatch, and over education among their workers. In order to overcome these problems of skill gap, SSEs need to focus on training programs for enhancing technical, information technology, and human resource management skills. In addition to this and relating to the recruitment of workers into the general worker positions up until the managerial positions, SSEs should place emphasis on the criteria of work experience, English language proficiency, and wage levels in order to overcome the above described problems of skill mismatch among their workers.

REFERENCES

CEDEFOP. (2010), The Skill Matching Challenge: Analyzing Skill Mismatch and Policy Implications. Luxembourg: European Centre for the Development of Vocational Training, European Union.

Cheriv, R., Hasanov, F. (2015), The Leap of the Tiger: How can Malaysia can Escape the Middle-Income Trap. IMF Working Papers, June, 2015. Washington, DC: IMF.

Department of Statistics Malaysia. (2012), Economic Census 2011: Profile of Small and Medium Enterprises. Putrajaya: Department of Statistics Malaysia.

Department of Statistics Malaysia. (2013), Labour Force Survey Report Malaysia, 2013. Putrajaya: Department of Statistics Malaysia.

Federation of Malaysian Manufactures (FMM). (2014), FMM salary, benefits and employment conditions survey in the manufacturing sector 2013/2014. Kuala Lumpur: FMM.

Idham, M.M.R., Asliza, M.Y., Wan, N.S., Adi, H.T. (2014), Factors influencing unemployment among graduates in Malaysia – An overview. Journal of Economics and Sustainable Development, 5, 168-173.

Latisha, A.S., Surina, N. (2010), Employability awareness among Malaysian undergraduates. International Journal of Business and Management, 5, 119-123.

Malaysian Productivity Corporation (MPC). (2015), Productivity Report 2014/2015. Petaling Jaya: MPC.

Ministry of Human Resource Malaysia. (2013), Youth Employment Malaysia. Paper Presented at ASEAN Forum on Youth Employment, 13 May 2013. Semarang, Indonesia: The Gumaya Tower Hotel.

Noorziah, M.S., Kadir, R., Kamisah, B. (2015), Human resources management roles and skills shortages in Malaysian organizations. Open Journal of Social Sciences, 3, 219-226.

Norasmah, O., Hafiza, O.N., Rahmah, I. (2012), Impact of Globalization on Entrepreneurship Education and Entrepreneurial Skills in Higher Education Institutions. Proceedings of the 2nd International Conference on Economics, Trade and Development IPDER, 36. p84-89.

Onderi, H., Ajowi, J., Malala, G. (2014), Restructuring technical and vocational education and training (TVET) for sustainable development in Sub-Saharan Africa. International Journal of Interdisciplinary Research and Innovations, 2, 40-45.

Shujaat, F. (2011), Mismatch between education and occupation in Pakistan. Pakistan, Islamabad: Pakistan Institute of Development Economics (PIDE).

Subramaniam, T. (2010), Micro enterprises and employment creation among the youth in Malaysia. Jati, 15, 152-166.

Yogeesvaran, K. (2005), Addressing Skills Gap: Malaysian Case Study. Paper Presented at Regional Conference on Investment Climate and Competitiveness in East Asia, 21-22 November 2005. Kuala Lumpur, Malaysia: Renaissance Kuala Lumpur Hotel.