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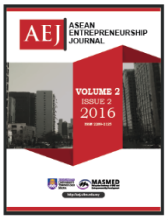

Impact of Entrepreneurship Education Effectiveness towards Graduate Employability

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ABSTRACT

The issue of graduate employability has been a point of discussion for many years. The high unemployment figure all over the world has somehow affected graduates of higher education institutions, as jobs are harder to get and employers can afford to be more selective. Employers look for other skills in graduates, more than just the basic knowledge of the graduates' field of study. Research has shown that entrepreneurship education enhances skills sought after by employers. Therefore, this study looked into the relationship between entrepreneurship education effectiveness and the skills needed for graduate employability in an effort to further study whether entrepreneurship education does have a positive impact on graduate employability. The study was analyzed using structural equation modelling (SEM), involving 200 university students in Malaysia. The result indicated positive significant relationship between entrepreneurship education effectiveness and the skills needed for graduate employability.

Keywords: Entrepreneurship, education, entrepreneurship education effectiveness, graduate employability

1. INTRODUCTION

In many countries in the world, employability of graduates is high on the nation's agenda. Efforts are made by Higher Learning Institutions (HLIs) to develop so-called employable graduates by allowing students to choose more selectively their choice of courses. With companies hiring fewer people, companies are more selective and look for many other qualities in a candidate than just paper qualification. As the concern among HLIs regarding graduates employability increases, HLIs have embedded entrepreneurship education into the curriculum as more and more employers believe that graduates with entrepreneurship education are more enterprising and are more sought after by employers. This is so as to equip students, among others, with the knowledge and skills to recognise business opportunities, listen to the market and create ideas. The majority of HLIs believe that entrepreneurship education is to inculcate entrepreneurial characteristics to the students so that when they graduate, they have certain value added skills that will increase their chances in employment (Yusoff et al., 2014). In Malaysia, the unemployment rate is known to have increased gradually. From 450,000 in June 2015, the number of unemployed people increased to 505,000 in May, 2016 (Trading Economics, 2016). It shows a worrisome increase of 55,000 unemployed people in a year. Various directives and initiatives with have been implemented by the government to mitigate the unemployment rate, one of them is implemented by the Malaysia HLI to offer entrepreneurship subjects or co-curriculum in entrepreneurship as a prerequisite for graduation. Also, in all public universities in Malaysia, undergraduates of all disciplines must complete at least one entrepreneurship class to graduate. The aim is to instill, develop and enhance entrepreneurial characteristics and entrepreneurial behaviours to produce a new generation of entrepreneurially-oriented individuals to increase their employability. On the other hand, Universiti Teknologi MARA (UiTM), the largest university in Malaysia has been awarded the prestigious Most Entrepreneurial University Award for three consecutive years since it was introduced in 2012 (Rahim, Chik, Bahari, Salleh & Bakri, 2015). As UiTM is considered as the benchmark for entrepreneurship studies among universities in Malaysia, this paper will look at the impact of entrepreneurship education effectiveness towards graduate employability among UiTM students.

2. LITERATURE REVIEW

This part discusses related topics and issues regarding entrepreneurship education effectiveness and graduate employability. Wealth and most jobs are created by small businesses founded by entrepreneur minded individuals. Many of them went on to create big businesses. Among those exposed to entrepreneurship, many often say that they have more opportunity to exercise creative freedoms and feels that they have higher self-esteem and a greater sense of control over their own lives. Entrepreneurship

education was developed for many reasons, one of which is to prepare young people for success in an entrepreneurial economy. It impacts a learner at all levels in a wide number of contexts. Few studies have linked entrepreneurship studies and experience in university towards graduate employability (Rahim & Lajin, 2015). This may explain why there are such a wide variety of entrepreneurship education programs, all of which can provide important outcomes at various stage of a learner's life.

2.1 Entrepreneurship Education Effectiveness

Generally, entrepreneurship education should be able to offer students with an understanding of a business purpose, structure and how the business interconnects with society and the economy. Entrepreneurship education should be able to impart skills that can be imparted through the educational system that enable individuals to develop new, innovative plans (Lundstrom & Stevenson, 2001). Past studies have suggested that entrepreneurship education should start early within the education system (Kroon & Meyer, 2001). The entrepreneurial knowledge and skills gained through their entrepreneurship education are used over their lifetime (Raposo & Do Paco, 2011) as it encourages creative thinking and promotes a strong sense of self-worth and empowerment. Entrepreneurship education offered at university level is known to have a positive influence in creating a career prospect for graduates (Galloway & Brown, 2002). Entrepreneurship education is deemed important and there was an urge for entrepreneurship education to be a subject at all levels of higher institutions of learning in developing countries, particularly Malaysia (Rahim, Bahari, Abidin, Junid, Kamaruddin, Lajin, Buyong, & Bakri, 2015)

2.2 Graduate Employability

Having good grades alone do not guarantee employment for Malaysian graduates. Employers look for other strengths such as a good command of the English language and soft skills in the individual. These skills can be analytical thinking, intelligence, independence, communication, leadership, computer skills and work experiences of the graduates (Ismail, 2011). Employers look for flexible and adaptable workforce as they seek to transform their organisations and companies into being more responsive to the changing needs and demands of the market (Singh & Singh, 2008). They seek graduates not only with the required skills and knowledge, but also with the ability to be proactive and responsive to problems and opportunities. Employers, regardless of their needs, require workers who possess appropriate soft skills such as communication and interpersonal skills and other abilities such as able to organize and manage time, good command of ICT and main languages used in the world. However, acquiring graduates with these qualities can be quite difficult. Most graduates are trained in their technical knowledge and not in soft skills. Previous

study (Singh & Singh, 2008) has highlighted seven skills required for the graduates to secure job placement in the industry. The skills are personal organization and time management skills, problem solving and adaptability skills, leadership skills, communication skills, human skills, English language proficiency and literacy skills as well as information and communications technology skills.

3. RESEARCH METHOD

The study adopted face-to-face survey using standardized questionnaire. This resulted in 200 valid responses from Universiti Teknologi MARA students in Selangor. As the survey was conducted via interview method, 100% response rate was achieved. The study adapted the measures used to operationalize the constructs included in the model from relevant previous studies, making minor wording changes to tailor these measures for this study. The measures were adapted from Rae and Harris (2012) as well as Singh and Singh (2008) for entrepreneurship education effectiveness and graduate employability respectively. All items were measured using a five-point likert scale, ranging from 1 = strongly disagree to 7 = strongly agree. The hypothesized models were empirically tested using the structural equation modeling (SEM) approach, The measurement model was estimated using confirmatory factor analysis (CFA) to test reliability and validity, and the structural model was analyzed to examine the model fit results of the proposed theoretical models.

4. ANALYSIS

4.1 Descriptive Statistic

The descriptive statistics of the respondents is shown in Table 1. The respondents are Universiti Teknologi MARA students in Selangor, which consists of female (n=127, 63.5%) and male (n=73, 36.5%). Majority are between the age of 22 to 25 years old (n=109, 54.5%). Most of the respondents are single (n=163, 81.5%) and studying in the level of diploma and below (n=89, 44.5%)

Table 1: Sample's characteristics (n = 200)

Variable	Description	N	%
Gender	Male	73	36.5
	Female	127	63.5
	Total	200	100
Age	18 – 21	60	30.0
	22 – 25	109	54.5
	26 and above	31	15.5
	Total	200	100
Marital Status	Single	163	81.5
	Married	37	18.5
	Total	200	100
Education level	Diploma and below	89	44.5
	Degree	88	44
	Postgraduate	23	11.5
	Total	200	100

4.2 Reliability and Validity Measurement

The research used confirmatory factor analysis (CFA) as the instrument to examine the reliability and validity of the constructs. The summarization of the internal reliability and convergent validity results is shown in Table 2. Cronbach's alpha is used to test the internal consistency reliability. The resulting alpha values ranged from 0.717 to 0.975, which are above the acceptable threshold 0.70 suggested by by Hair et al. (2010). Convergent validity is the degree to which multiple attempts are made to measure the same concept in agreement. Convergent validity was assessed based on factor loading, composite reliabilities, and variances extracted (Hair et al. 2010). Table 2 shows results of the convergent validity. The factor loading for all items ranging from 0.705 to 0.983, exceeds the recommended level of 0.6 (Hair et al. 2010). Composite reliability values, which depict the degree to which the construct indicators indicate the latent construct, ranged from 0.717 to 0.975. The composite reliability of all latent constructs exceeded recommended level of 0.7 (Hair et al. 2010). The average variances extracted, which explains the overall amount of variance in the indicators accounted for by the latent construct, were in the range of 0.564 to 0.936. The average variances extracted of all latent constructs exceeded recommended level of 0.5 (Hair et al. 2010).

Table 2: CFA Measurement Result

		Convergent Validity		
Construct	**Cronbach's Alpha**	**Factor Loading**	**Composite Reliability**	**Average Variance Extracted**
Entrepreneurship Education Effectiveness	0.837	0.768 0.939	0.846	0.736
Personal Organization and Time Management Skills	0.825	0.757 0.788 0.827	0.834	0.626
Problem Solving and Adaptability Skills	0.766	0.884 0.705	0.778	0.639

Leadership Skills	0.759	0.831 0.737	0.762	0.617
Communication Skills	0.844	0.811 0.900	0.846	0.734
Human Skills	0.717	0.770 0.725	0.717	0.559
English Language Proficiency and Literacy Skills	0.975	0.983 0.952 0.957	0.975	0.936
Information and Communications Technology Skills	0.694	0.776 0.725	0.721	0.564

The analysis results in Table 3 indicate that the square correlations for each construct is less than the average variance extracted by the indicators measuring that construct. Thus, the measure has adequate discriminant validity. In summary, the measurement model demonstrated adequate reliability, convergent validity, and discriminant validity.

Table 3: Discriminant Validity of Construct

	COMM	TIME	LEADER	ICT	ENGLISH	HUMAN	PROBLEM	EEE
COMM	**0.73**							
TIME	0.41	**0.63**						
LEADER	0.57	0.40	**0.62**					
ICT	0.27	0.37	0.46	**0.56**				
ENGLISH	0.21	0.18	0.34	0.43	**0.94**			
HUMAN	0.45	0.48	0.49	0.35	0.25	**0.56**		
PROBLEM	0.27	0.25	0.49	0.43	0.32	0.43	**0.64**	
EEE	0.48	0.34	0.38	0.41	0.22	0.33	0.46	**0.74**

Note: The bold figures represent the average variance extracted, while the other matrix entries represent the square correlations.

Table 4 illustrates the overall model fit. The ratio (χ^2/df) value is 1.683, below the recommended threshold of 3.0 (Hair et al. 2010). The goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) both exceed the recommended cut-off level of 0.8 (GFI=0.914, AGFI=0.862) as recommended by Hair et al., (2010). The comparative fit index (CFI) is 0.964 and Tucker-Lewis Index (TLI) is 0.949, both greater than the 0.9 recommended value (Hair et al. 2010).The root mean square error of approximation (RMSEA) is 0.059, within the recommended cut-off level of 0.08 recommended by Hair et al., (2010). The combination of these results suggests that the demonstrated measurement model fits the data well.

Table 4: Fit Results for Measurement Model

Measurement Model	Fits							
	χ^2	Df	χ^2/df	RMSEA	GFI	AGFI	CFI	TLI
	180.22	107	1.683	0.059	0.914	0.862	0.964	0.949

The study has formulated seven hypotheses. The summary of the hypotheses is shown in Table 5. For Hypothesis 1 (H1), it shows that EEE has positive significant effect on TIME (β= 0.522, t=5.434, p<0.001). Next, for Hypothesis 2 (H2), the hypothesis testing shows that EEE has positive significant effect on PROB (β= 0.544, t=6.380, p<0.001). For Hypothesis 3 (H3), EEE has positive significant effect on LEADER (β= 0.663, t=5.775, p<0.001). While for Hypothesis 4 (H4), EEE has positive significant effect on COMM (β= 0.650, t=6.467, p<0.001). For Hypothesis 5 (H5), EEE has positive significant effect on HUMAN (β= 0.570, t=5.775, p<0.001). Then for Hypothesis 6 (H6), EEE has positive significant effect on ENGLISH (β= 0.371, t=4.528, p<0.001). Lastly, for Hypothesis 7 (H7), EEE has positive significant effect on ICT (β= 0.586, t=5.142, p<0.001). Therefore, all seven of the hypotheses are supported in this study. It shows that entrepreneurship education effectiveness (EEE) positively influences all the constructs of graduate employability.

The results of this study show that entrepreneurship education effectiveness (EEE) is a predictor for graduate employability which is measured by Personal Organization and Time Management Skills (TIME), Problem Solving and Adaptability Skills (PROB), Leadership Skills (LEADER), Communication Skills (COMM), Human Skills (HUMAN), English Language Proficiency and Literacy Skills (ENGLISH) and Information and Communications Technology Skills (ICT).

Table 5: Hypothesis Testing Result

Hypothesis No	Hypothesis Path			Path Coefficient	T Value	P Value	Decision
H1	TIME	<---	EEE	0.522	5.434	***	Supported
H2	PROB	<---	EEE	0.544	6.380	***	Supported
H3	LEADER	<---	EEE	0.663	6.320	***	Supported
H4	COMM	<---	EEE	0.650	6.467	***	Supported
H5	HUMAN	<---	EEE	0.570	5.775	***	Supported
H6	ENGLISH	<---	EEE	0.371	4.528	***	Supported
H7	ICT	<---	EEE	0.586	5.142	***	Supported

*:p<0.05;**:p<0.01;***:p<0.001

TIME: Personal Organization and Time Management Skills, PROB: Problem Solving and Adaptability Skills, LEADER: Leadership Skills, COMM: Communication Skills, HUMAN: Human Skills, ENGLISH: English Language Proficiency and Literacy Skills, ICT: ICT Skills.

5. CONCLUSION

This study has empirically proven that entrepreneurship education effectiveness (EEE) positively influence the skills needed for graduate employability. As graduates are facing problems in employability, it is time that Higher Learning Institutions (HLI) seriously consider the importance of entrepreneurship education and its effectiveness. There is a need for the masses to be aware that entrepreneurship education is not mainly for creating entrepreneurs, but it also creates graduates with entrepreneurial skills that is similar with the skills needed in getting employed. Therefore, HLIs and academics should play an active role in ensuring the effectiveness of entrepreneurship education for the benefit of the future generations in securing employments.

6. LIMITATION AND FUTURE RECOMMENDATIONS

The limitation of this study is that the respondents are only from Universiti Teknologi MARA(UiTM) Selangor, therefore it could not be generalized neither for students in other universities nor other UiTM branches. As this is an exploratory study, it is recommended that future studies are being done throughout Malaysia.

7. ACKNOWLEDGMENT

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