

## THE ECONOMIC AND SOCIAL VALUE OF FOSTERING ENTREPRENEURSHIP EDUCATION



Nur Hazelen Mat  
Rusok<sup>1</sup>  
Naresh Kumar<sup>2+</sup>  
Khamisah Abd Manaf<sup>3</sup>

<sup>1,2</sup>Lecturer, Faculty of Business and Management, Universiti Teknologi MARA, Malaysia

<sup>3</sup>Professor, Global Entrepreneurship Research and Innovation Centre, Universiti Malaysia Kelantan, Malaysia



(+ Corresponding author)

### ABSTRACT

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Malaysia.

Students and alumni reported a weak desire for a transition towards entrepreneurship despite endless support from the government and the higher education institution (HEI). Indeed alumni and students prefer more security and stability in working life. The survey results show that it is easier for graduates to find employment immediately after their graduation. Besides, it turns out that alumni have opportunities to display their creativity and to come up with new ideas in their current job. Similarly, the students reported that they are able to display creativity in whatever activities they are involved. The impact of entrepreneurship education on society and economy were average. The study implies that HEIs should focus in developing greater levels of innovative entrepreneurial activity to support students in identifying viable entrepreneurial opportunities and new venture creation. Continuous assessment is vital to realign the entrepreneurship education and become the agent of industrial innovation, technological development, economic development and social development especially in the context of growing knowledge-based economy.

**Contribution/ Originality:** This study is one of very few studies which have investigated the effects and impact of entrepreneurship education on intentions towards entrepreneurship, employability, society and the economy.

### 1. INTRODUCTION

With the increasing intake of students, higher education institutions (HEIs) have witnessed a phenomenal increase in the number of graduates across many disciplines each year in Malaysia. Consequently, large number of graduates enters the fragmented labour market to seek jobs and not all are successful immediately upon graduation. Indeed entrepreneurship has been recognized as one of the continuing strategies to address the issue of graduate unemployment, attitude of recent graduates to be dependent on the government and private organizations for employment and the need to enhance entrepreneurial mindsets of the nation to use the resources allocated by the government for the promotion of entrepreneurship especially for small and medium enterprises more vigilantly (Yusof *et al.*, 2008; Zainuddin and Rejab, 2010; Zainuddin and Ismail, 2011; Ahmad, 2013). Furthermore, the government believes that effective entrepreneurship education with holistic structures should be able to equip the

graduates with a variety of entrepreneurial competencies that will help develop a series of successful entrepreneurs with local and global business mindsets. The government recognizes that Malaysia could no longer depend on cheap labour and needs to focus more on opportunity-based entrepreneurship instead of labour intensive, necessity-driven entrepreneurship to boost the current economy (The Malay Mail, 28 February 2012). This indeed reflects the depth of seriousness in instilling entrepreneurial mindset among students of the HEIs via vibrant role of respective stakeholders. The government is aggressive in ensuring progress in entrepreneurial education and it is clearly documented in the Malaysia Plans. This positive step by the government is to support the economic drive and to narrow the wealth disparities between societies in Malaysia as well as abroad. The success of the Economic Transformation Programme (ETP) to some extent relies significantly on innovative entrepreneurs and entrepreneurship development in the country.

Given the current economic challenges facing many countries across the globe, the notion of engendering greater entrepreneurial activity has become a prominent goal for many nations. The relevance of entrepreneurship to economic development has been highlighted by many researchers (e.g. Davidsson *et al.* (2006)) and it is now well-recognised that education and training opportunities play a key role in cultivating future entrepreneurs and in developing the abilities of existing entrepreneurs to grow their business to greater levels of success Henry *et al.* (2003). According to the European Commission (2012) the aim of entrepreneurship education and training should be to 'develop entrepreneurial capacities and mindsets' that benefit economies by fostering creativity, innovation and self-employment.

Entrepreneurship education is not firmly associated with new venture creation as a sole educational objective and in fact this issue is widely debated among scholars (Mwasalwiba, 2010). Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and it provides a foundation for entrepreneurs to establish a social or commercial activity. The following objectives are to be reached through entrepreneurship education: (1) improvement of the entrepreneurship mindset of young people to enable them to be more creative and self-confident in whatever they undertake and to improve their attractiveness for employers, (2) encourage innovative business start-ups, and (3) improvement of their role in society and the economy.

Various measures have been undertaken by HEIs with the aim to achieve the goal of complementing and exposing graduates to the world of entrepreneurship following the aspiration of the government of Malaysia (Ahmad *et al.*, 2004; Jaafar and Aziz, 2008). HEIs has introduced compulsory entrepreneurial courses that impart essential entrepreneurial knowledge as a part of the strategy to tune the mindset of students to look at self-employment as a better alternative compared to salaried employment. Nevertheless, the aim of teaching entrepreneurship is to give the students a broad view of the concept of entrepreneurship and to nurture curiosity and consciousness in business. It is anticipated to help graduates discover possibilities of various opportunities available in the dynamic business world. The theoretical and practical information gained from entrepreneurial courses are anticipated to build graduates' prior knowledge that will help them embark into business or explore business opportunities. However, it is unclear whether the present method of teaching entrepreneurship in HEIs can help increase the number of entrepreneurs in Malaysia. Despite all the efforts by the Malaysian government to develop entrepreneurial competencies, there are not many successful entrepreneurs in the country (Othman *et al.*, 2006; Awang *et al.*, 2009) and there is a dearth of knowledge on current students and graduates attitude toward entrepreneurship across all the disciplines (Pihie and Sani, 2009; Sharrif and Saud, 2009). Therefore, in this article we have presented the outcomes of a research focuses on the effects and impact of entrepreneurship education on the following three dimensions: (1) intention towards entrepreneurship; (2) graduate's employability; and (3) society and the economy.

## 2. METHODOLOGY

The purpose of this study was to collect data from a large sample to establish a measurable effects and impact of entrepreneurship education. Therefore, positivism approach was considered more suitable. A descriptive analysis was undertaken in order to ascertain and describe the characteristics of the variables of interest in this study of a large institution in Malaysia (for the purpose of anonymity the actual name of the institute is not mentioned). The population of this study consists of more than ten thousand for each group of respondents, final year students and current graduates/alumni. Thus the researchers decided to get 2500 samples from each group of respondents. This decision made to fulfill the aspiration to receive at least a total response of 15% to 20% for each group of respondents. Perhaps the decision on total sample was also influence and encouraged by the availability of funding from the Ministry of Higher Education, Malaysia.

This study utilized relevant self-report survey instrument that was obtained from the research report which was prepared in 2012 for the European Commission - Directorate-General for Enterprise and Industry by EIM Business & Policy Research (the Netherlands). The items was rated on a 5-point Likert scale as in the original instrument with responses ranging from 1 (strongly disagree) to 5 (strongly agree). In summary, all the reliability coefficients (Cronbach Alpha) were above 0.7 and within the acceptable range (Hair *et al.*, 1998). Enumerators was used to collect data from the respective group of respondents. A total of 2232 and 2007 usable questionnaires for each of the set of respondents, students and alumni were received. Standard tables have been prepared, where the variables that are included in the dataset are tabulated against a limited number of control variables: gender and program clusters (ST - Science and Technology; SSH- Social Sciences and Humanities; and MB- Management and Business).

## 3. IMPACT ON INTENTIONS TOWARDS ENTREPRENEURSHIP

The impact of entrepreneurship courses on the intentions of students and alumni respondents towards entrepreneurship is presented in this section. The entrepreneurial intentions provide an indication as to what extent current final year students and alumni looking forward to a transition towards entrepreneurship. Entrepreneurial intentions can be expressed both in terms of the self-perception of the respondents towards a transition to entrepreneurship and their current preference for employment. Students and alumni were asked as a first indication of entrepreneurial intentions to what extent they consider themselves as entrepreneurial persons. To recapitulate, being entrepreneurial is defined as having the ability to turn ideas into action, including creativity, innovation and risk-taking as well as having a strong sense of initiative and tolerance to failure. It turns out that alumni consider themselves more entrepreneurial person than students (Figure 1). 61.30% of the alumni consider themselves slightly or somewhat entrepreneurial. On the other hand, only 37.7% of the students group consider themselves between 'very entrepreneurial' to 'somewhat entrepreneurial' person. Both Male and female alumni consider themselves more as an entrepreneurial person than male and female students (Figure 2). In terms of program clusters, 72.93% of the alumni in the SSH cluster perceived themselves as more entrepreneurial person compared to other two program clusters of both alumni and students respondents (Figure 3).

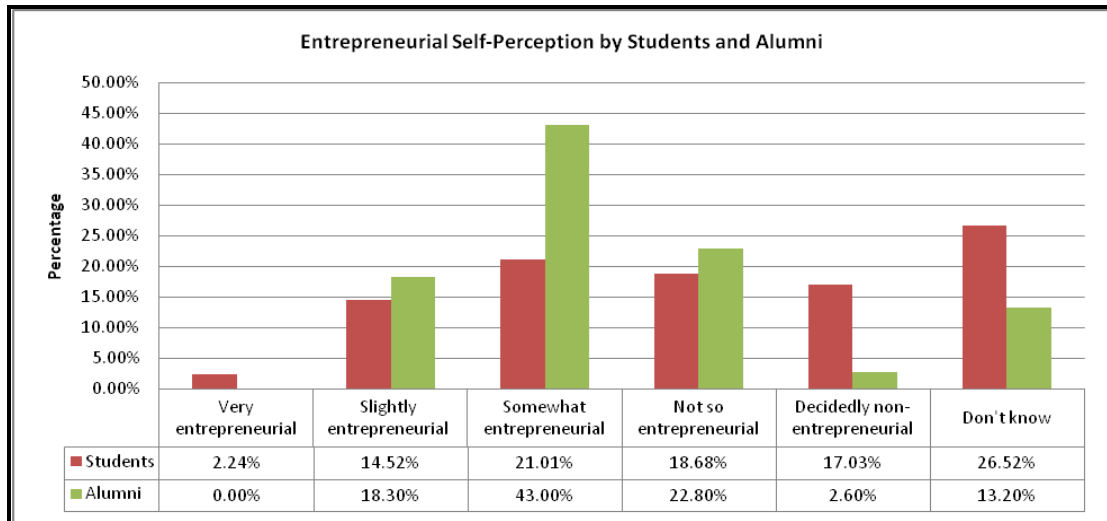


Figure-1. Entrepreneurial self-perception by Students (n=2232) and Alumni (n=2007)

Source: Kumar *et al.* (2014)

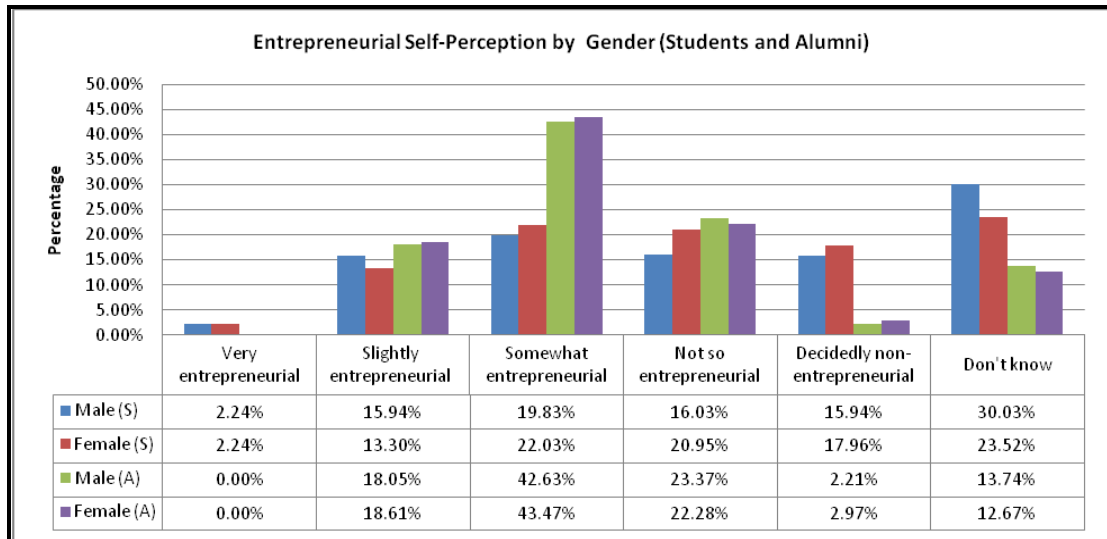


Figure-2. Entrepreneurial self-perception by Gender for Students and Alumni

Source: Kumar *et al.* (2014)

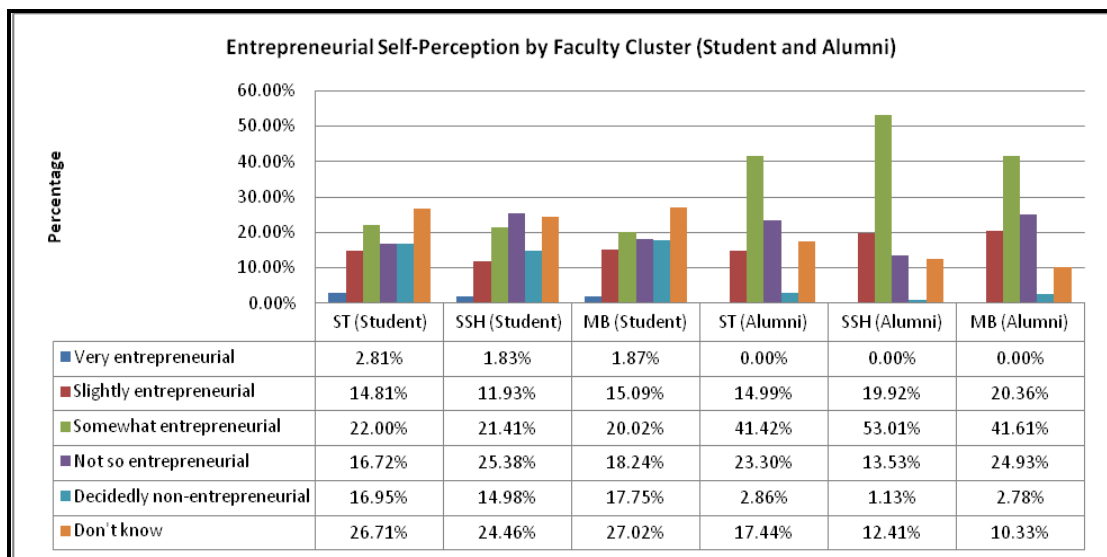


Figure-3. Entrepreneurial self-perception by Program Clusters for Students and Alumni

Source: Kumar *et al.* (2014)

**3.1. Intentions towards Entrepreneurship: Self-Perception**

One way of indicating the entrepreneurial intentions is to ask alumni about their self-perception towards entrepreneurship. Several statements were used in order to measure the self-perception. The statements were clustered into two structures. The first structure is the clustered score on the following four statements, labeled as Construct 1:

- I am ready to do anything to become an entrepreneur;
- My professional goal is to become an entrepreneur;
- I have no intention of ever starting a firm;
- I am not entrepreneurial.

It turns out that alumni (mean=13.31) have a stronger desire for a transition towards entrepreneurship than Students (Mean 12.09) (Table 1). On a score range of 1 = strongly disagree to 5=strongly agree, male alumni respondents indicated that they have an even stronger desire for a transition towards entrepreneurship than other groups of respondents (Figure 4). Furthermore, male respondents outscore female for both the sets of respondents, students and alumni. There are no significant program clusters differences for both the students and alumni (Table 3).

**Table-1.** Self-perception of the Key Entrepreneurship Competence by Students and Alumni

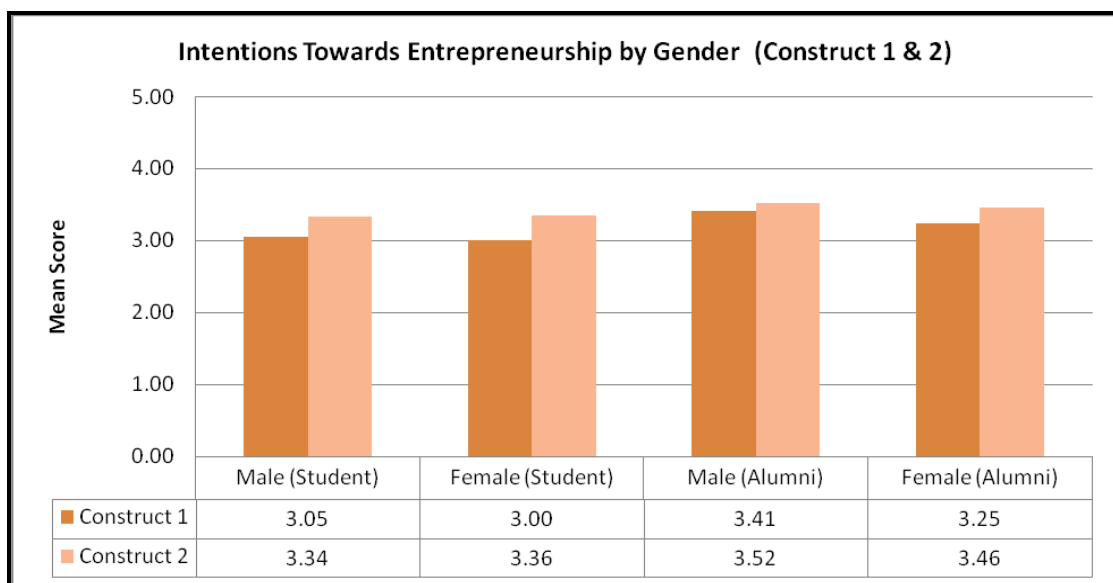
Entrepreneurship Construct	Students (n=2232)				Alumni ( n=2007)			
	Min	Max	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>
Construct 1	4.00	20.00	12.09	2.35	4.00	20.00	13.31	2.693
Construct 2	4.00	20.00	13.39	2.33	4.00	20.00	13.97	2.431

Source: Kumar *et al.* (2014)

**Table-2.** Results of Independent t-test of Gender and Intentions towards Entrepreneurship

Entrepreneurship Constructs	Students (n=2232)			Alumni ( n=2007)		
	Male	Female	<i>t- statistic</i>	Male	Female	<i>t- statistic</i>
	Mean	Mean		Mean	Mean	
Construct 1	12.2051	11.9942	4.454*	13.6299	12.9871	28.988***
Construct 2	13.3421	13.4256	.710	14.0973	13.8416	5.564*

Note: \**p* < 0.05 \*\**p*< 0.01 \*\*\**p*< 0.001



**Figure-4.** Students and alumni intentions towards entrepreneurship measured by Gender

Note: Scales Strongly Disagree (1); Disagree (2); Somewhat Agree (3); Agree (4); Strongly Agree (5)

Another – very similar - way of indicating the intentions towards entrepreneurship is the clustered score on the following four statements labeled as Construct 2:

- A career as an entrepreneur seems attractive to me;
- I think that entrepreneurship would provide great satisfaction;
- Among various options, I'd rather be an entrepreneur;
- I am negative towards entrepreneurship.

The clustered score for the four statements, labeled construct 2, also shows that alumni respondents have a stronger desire for a transition towards entrepreneurship than students (Figure 5). On an average they are less negative towards entrepreneurship, they have a stronger desire to be an entrepreneur among various options, they think more often that entrepreneurship will give them greater satisfaction and they see more often the attractiveness of a career as an entrepreneur. There are significant differences in response of the alumni gender. Male alumni scored significantly higher than female alumni (Table 2). Of the three program clusters, students in MB cluster have the significant strongest desire towards entrepreneurship (Table 3). Amran *et al.* (2013) in their research report that assesses the relationship of entrepreneurial intention and its antecedents among graduating students of Universiti Teknologi Malaysia, highlighted that the entrepreneurial intention has a positive and significant relationship with university environments. The current research findings re-establish that it is insufficient for HEIs to just introduce courses on entrepreneurship, but they need to establish the entrepreneurial atmosphere within their institutions to continuously encourage students to view the potential of being an entrepreneurs.

Table-3. Results of one-way ANOVA test of Program Clusters and Intentions towards Entrepreneurship

Entrepreneurship Constructs	Students (n=2232)				Alumni (n=2007)			
	ST	SSH	MB	F-statistic	ST	SSH	MB	F-statistic
	Mean	Mean	Mean		Mean	Mean	Mean	
Construct 1	12.13	12.23	12.01	1.33	13.29	13.27	13.31	.027
Construct 2	13.21	13.44	13.52	4.22*	13.98	13.88	13.97	.189

Note: \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001

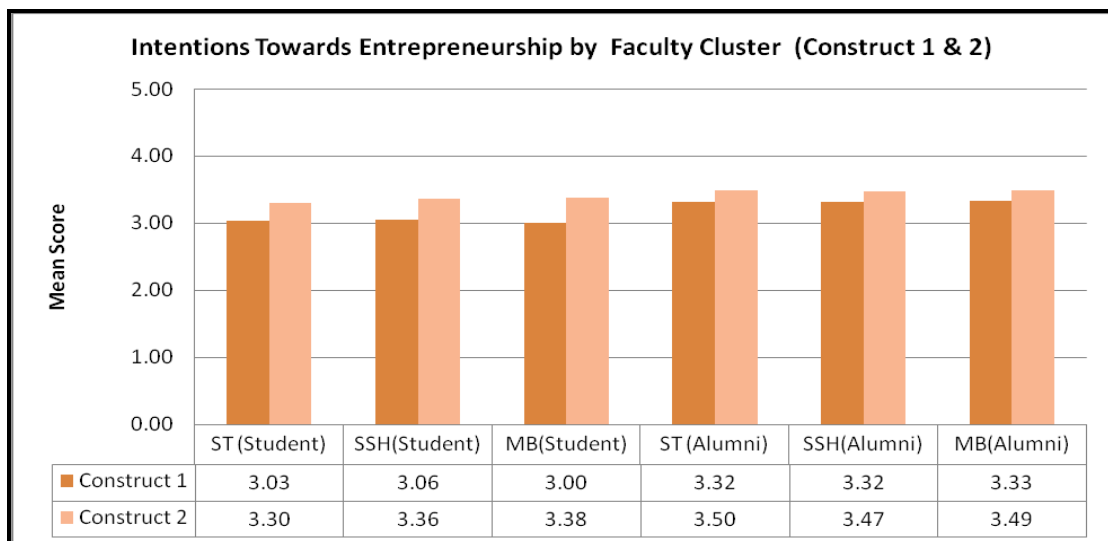


Figure-5. Students and alumni intentions towards entrepreneurship measured by Gender

Note: Scales Strongly Disagree (1); Disagree (2); Somewhat Agree (3); Agree (4); Strongly Agree (5)

### 3.2. Intentions towards Entrepreneurship: Employment Preference

Students and Alumni's intentions towards entrepreneurship can also be expressed by their employment preference: if they had the choice at this moment, would they rather be an employee or self-employed? Again the

results are quite similar: it turns out that the employment preferences of the students and alumni skewed towards to be an employee. About 92.28% of the alumni have a preference for being employee at this moment compared to 65.82% of the student respondents (Figure 6). Surprisingly, not even 10% of the alumni prefer to be self-employed. The respondents in this study are randomly selected and thus there is no bias towards any of the two groups. The objective of this study is to compare personal and professional developments of students and alumni who have participated in entrepreneurship courses. Issues of unemployment in Malaysia amidst current business uncertainties in global economics have led to the need for the youth to find opportunities in self-employment (Jaafar and Aziz, 2008; Abdullah *et al.*, 2009). Besides the current limited and challenging workplace environment and the many disadvantages of being an employee have prompted many individuals to embark in self-employment, particularly in the form of entrepreneurial ventures. However the evidence from this study shows that less youth have responded positively to this challenge.

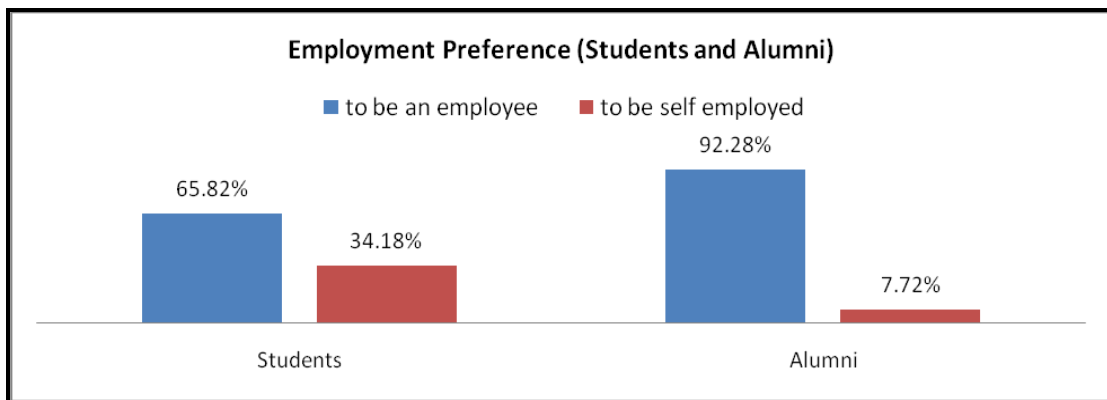


Figure-6. Students and Alumni employment preference

Source: Kumar *et al.* (2014)

Figure 7 shows employment preference between male and female for students and alumni respondents. Both the male and female alumni scored above 90% indicating that they prefer being an employee. Similarly male and female students scored low (less than 35%) for their preference to be self-employed. Both the group of respondents appears to be dissuaded by fear of failure. Compared to male and female students, fewer male and female alumni believe there are many opportunities for entrepreneurship and that they have the capabilities for this endeavor. Alumni prefer to avoid risks and are less competitive than students. Furthermore, the comparisons of percentages across program clusters shows that MB cluster for both the samples (students and alumni) shows a very little preference being self-employed (Figure 8). The responsibility of supporting oneself and family might be a reason that leads to the need for a stable income.

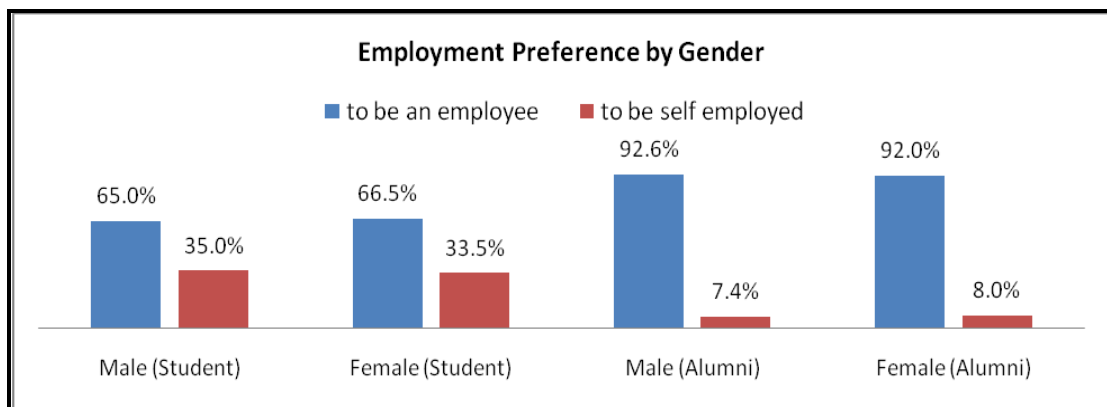


Figure-7. Students and Alumni employment preference by Gender

Source: Kumar *et al.* (2014)



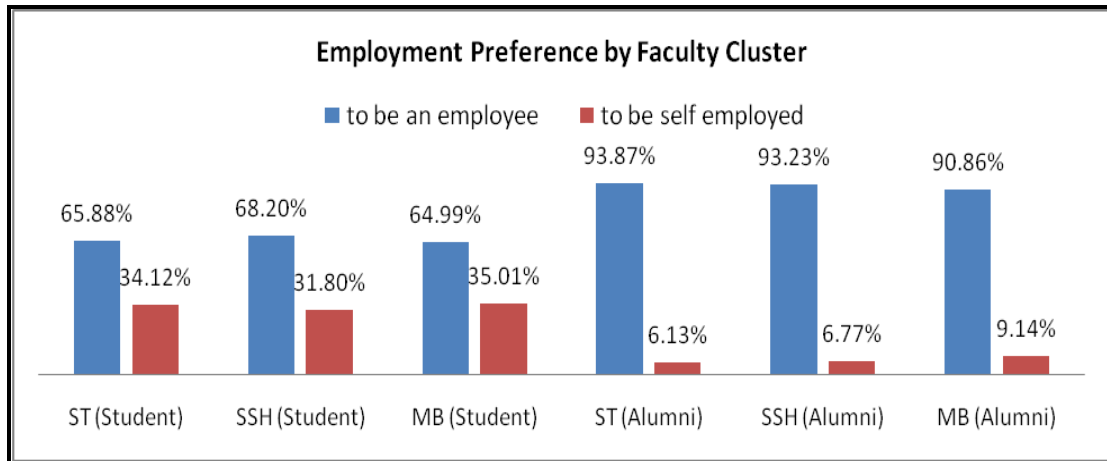


Figure-8. Students and Alumni employment preference by Program Clusters

Source: Kumar et al. (2014)

### 3.3. Reasons for Employment Preference

Students and alumni participated in this study, were asked the reasons concerning their employment preference. In general, students mainly have a preference for being in paid employment because of the fixed working hours, and guaranteed fixed and regular income. Other reasons (among others) are lack of business ideas, stability of employment and lack of finances for self-employment. Alumni have given more than 60% for the following reasons for choosing paid employment: stability of employment, regular, fixed income (versus irregular, variable income) and lack of finances for self-employment. Table 4 shows the percentages for gender in the case of reasons for paid employment preference.

Table-4. Reasons for the preference of being an employee by Gender (Students and Alumni)

Entrepreneurship Construct	Students (n=1469)			Alumni (n=1852)		
	Percentage			Percentage		
	Male	Female	Overall Students	Male	Female	Overall Alumni
Regular, fixed income (versus irregular, variable income)	47.0	53.0	82.7	52.0	48.0	67.9
Stability of employment	43.9	56.1	66.4	51.0	49.0	76.9
Fixed working hours	44.9	55.1	90.0	47.2	52.8	38.2
Protection by social security and/or insurance	-	-		-	-	
Lack of business ideas	47.5	52.5	79.0	43.9	56.1	45.0
Lack of finances for self-employment	44.3	55.7	67.3	47.7	52.3	63.0
Lack of skills for self-employment	38.2	61.8	22.5	43.7	56.3	10.7
Severity of decision-difficult to reverse decision/being tied to business	37.8	62.2	24.3	-	-	-
Afraid of red tape, problems with public authorities	40.2	59.8	23.2	41.5	58.5	5.1
Afraid of legal and social consequences if I fail	39.5	60.5	22.4	40.3	59.7	6.4

Source: Kumar et al. (2014)

### 3.4. Reasons for the Preference of Self-Employment

The main reason why alumni prefer to be self-employed is that they wish for freedom to choose place and time of work. Other reasons (among others) are personal independence/self-fulfillment/interesting tasks and better income prospects. These two reasons are similar as stated by current final year students. Lack of attractive employment opportunities is more often mentioned by students. This suggests that students base the preference for self-employment more or less on the disadvantages of being an employee (push factors) rather than the



advantages of being self-employed (pull factors) and vice versa. Table 5 shows the summary of the reasons for self-employment preference.

Table-5. Reasons for the preference of being Self- employed by Gender (Students and Alumni)

Entrepreneurship Construct	Students (n=763)			Alumni ( n=155)		
	Percentage			Percentage		
	Male	Female	Total Students	Male	Female	Total Alumni
Personal independence/self-fulfilment/interesting tasks	49.6	50.4	62.1	35.8	64.2	70.3
Realisation of a business opportunity	43.3	56.7	37.9	50.7	49.3	43.2
Better income prospects	48.4	51.6	88.7	41.8	58.2	63.2
Freedom to choose place and time of work	45.8	54.2	26.6	47.4	52.6	99.4
Lack of attractive employment opportunities	50.3	49.7	71.2	40.9	59.1	14.2
Members of family / friends are self-employed	55.1	44.9	9.0	54.7	45.3	41.2
Favourable economic climate	53.1	46.9	14.8	52.5	47.5	25.8
To avoid uncertainties related to employment	54.9	45.1	9.3	57.6	42.4	21.3
To contribute to society	51.4	48.6	9.7	-	-	-

Source: Kumar et al. (2014)

#### 4. IMPACT ON THE INDIVIDUAL’S EMPLOYABILITY

Improving the entrepreneurship key competence is expected to increase the employability of individuals. Employability is the extent to which an individual is in a position to find a first job, to maintain a job and find a new job in paid and/or in self-employment. There is a broad range of aspects to measure employability. In this study we have focused on job experience, job satisfaction, annual income and involvement in business start-up of the alumni who are in paid employment.

##### 4.1. Current Occupation

A total of 83% of the alumni respondents is currently employed, whereas 12% is seeking for job and 4.30% are currently pursuing their post graduate studies (Figure 9). Majority of the alumni is in management related employment and civil servants. One should be aware that shrinkage in the employment opportunities in the public and private sectors requires them to exhibit higher levels of entrepreneurial skills to compete in the changing job market, or to look for self-employment opportunities.

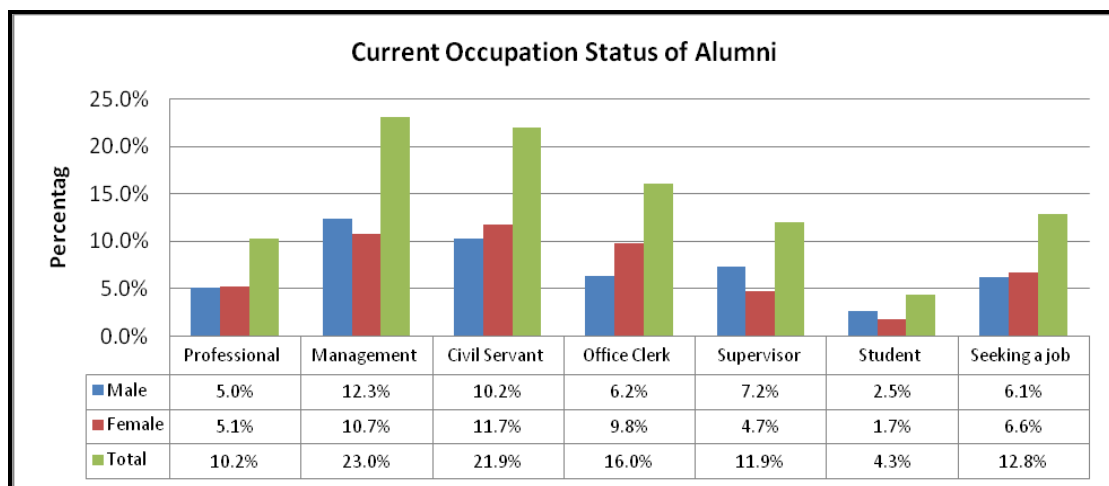


Figure-9. Current Occupation Status of Alumni by Gender

Source: Kumar et al. (2014)

**4.2. Job Experience**

One of the characteristics of an individual’s employability is the extent to which an individual is capable of finding his or her first job. It seems to be easier for alumni respondents to find employment immediately after their graduation and the chance of being unemployed in the first year after graduation is lower. Majority (71.10%) of the alumni started their first period of employment directly after their graduation (Figure 10). Less than 30% of the alumni experienced less than one year of unemployment. The total percentage of alumni who have undergone a one year period of unemployment, 14.6% are male and 14.3% are female. In term of employment, both the gender is almost equal, male (35%) and female (36%). Alumni in the MB (36%) program cluster reported high in securing job after graduation. This is followed by ST cluster (25.7%) and SSH cluster (9.4%).

Apparently alumni on an average either remain a longer time in an occupation or they are able to switch jobs more easily. No indication that the alumni have applied or received job offers or worked abroad. Perhaps the current job availability, business opportunities and work-life balance have attracted the alumni to stay in Malaysia despite their entrepreneurship education exposed to the international opportunities. This scenario might change as time passes and individuals would like to experience new things in new place.

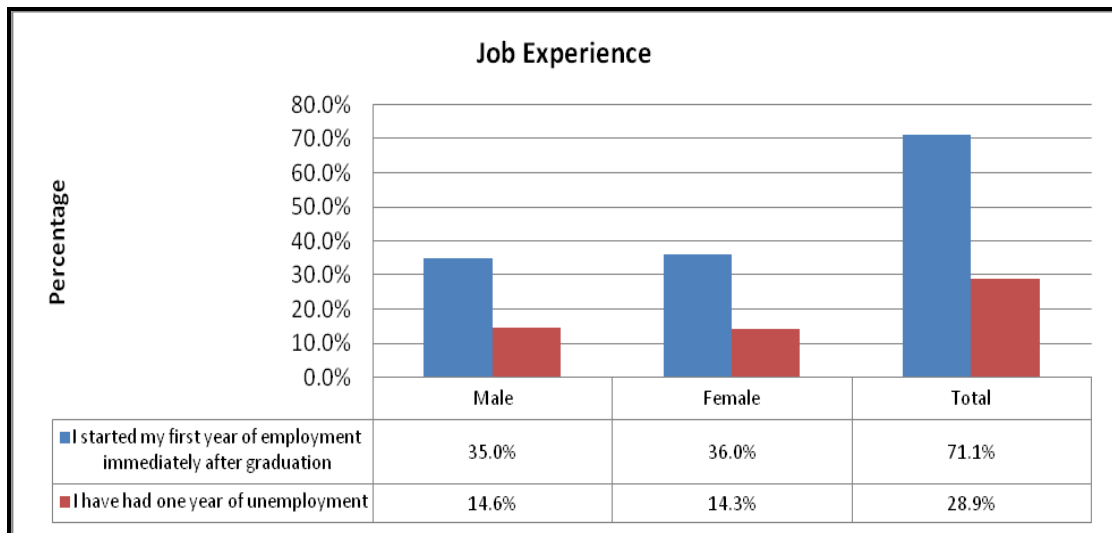


Figure-10. Job Experience of Alumni by Gender

Source: Kumar *et al.* (2014)

**4.3. Innovative and Creative Positions**

Improvement of the entrepreneurship competence is expected to lead to more innovation in the work is performed. Consequently, individuals are expected to get positions in which they have more opportunities to display creativity and to come up with new ideas in the current job and to put them into action. These individuals are in a better position to maintain their jobs through this entrepreneurial attitude. It turns out that significantly more alumni respondents have opportunities to display their creativity and to come up with new ideas in their current job. Interestingly the student respondents also reported that they are able to display creativity and come up with new ideas in whatever activities they are involved. Figure 11 shows the results on students and alumni’s capability to display creativity and new ideas.

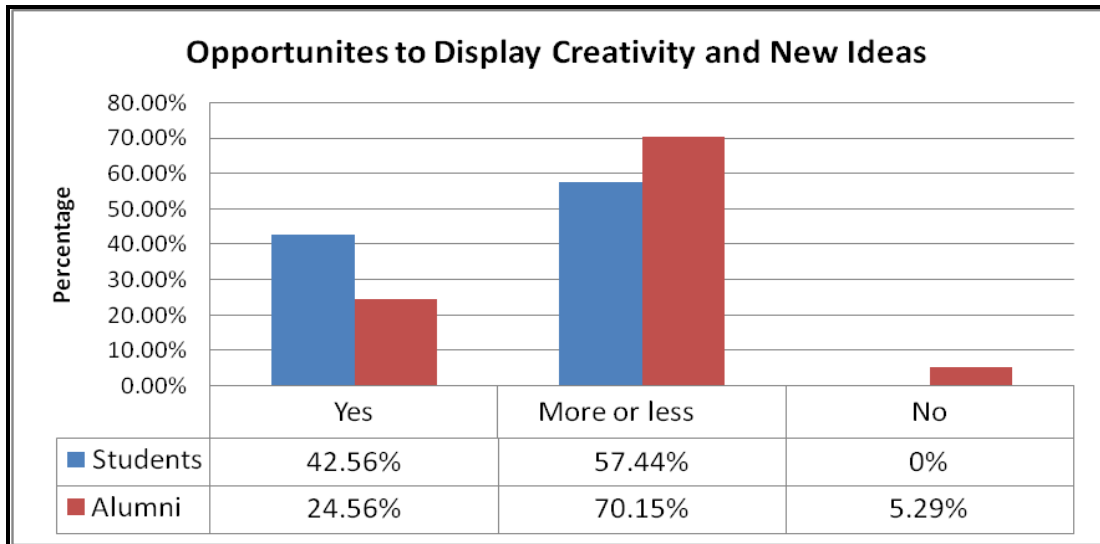


Figure-11. Students and Alumni's ability to display Creativity and New Ideas

Source: Kumar et al. (2014)

#### 4.4. Job Satisfaction

Another characteristic used to measure the impact of entrepreneurship courses on individual employability is the extent to which the individual is satisfied with his or her current job. For example, individuals with high employability are in a better position to change jobs in case they are not satisfied with their position. On a scale from 1 (dissatisfied) to 5 (very satisfied) alumni rate their job satisfaction on average between 'somewhat satisfied' to 'satisfied' (Figure 12). One reason for this could be that alumni who prepared themselves for certain job during their undergraduate studies, become more satisfied once they get jobs of their dream.



Figure-12. Job Satisfaction of Alumni by Gender

Source: Kumar et al. (2014)

#### 4.5. Monthly Income

Higher employability would also indicate that individuals are capable of getting better paid positions. In terms of monthly income of employed alumni, the income range is within the average income of persons with tertiary education and with less work experience. Male and female alumni in paid employment have a more and less equal income (Figure 13), thus, gender discrimination is not a case in the Malaysian labour market.

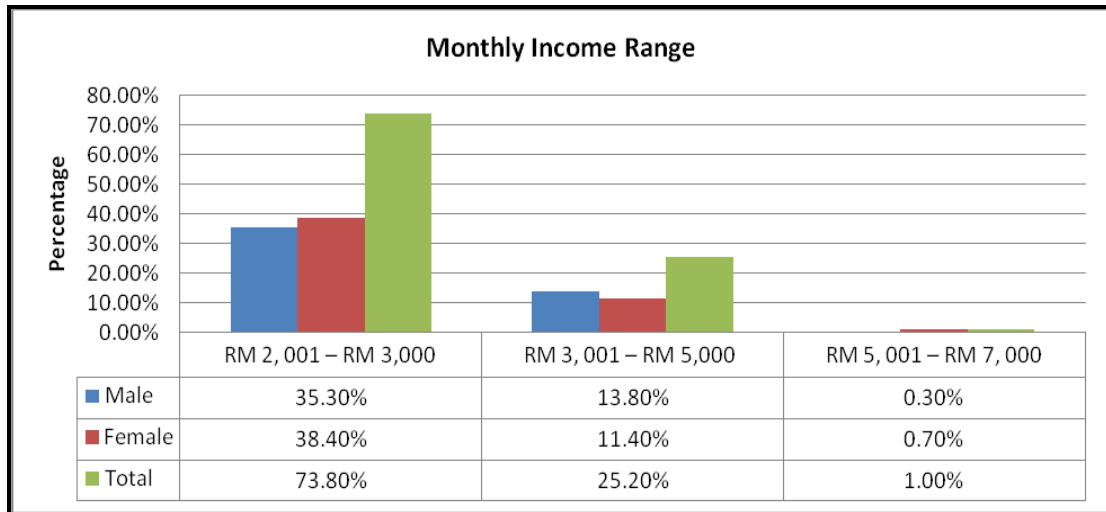


Figure-13. Monthly Income Range of Alumni by Gender

Source: Kumar *et al.* (2014)

## 5. IMPACT ON SOCIETY AND ECONOMY

Improvement in the entrepreneurship key competencies is expected to have an impact on society and economy, apart from higher employability. Entrepreneurship competencies will have an impact on society through the behaviour of individuals in their social and personal life. The impact on the economy will take place via jobs that are filled and by the creation of new firms. Previous section in this article has indicated on the jobs that the alumni are engaged at present. The impact on the economy of students and alumni is presented in Figure 16. The impact is measured based on the following characteristics: past involvement in starting a business and future plans considering starting a business. The impact of the entrepreneurs is based on the following characteristics: the number of new firms, the level of innovation of these firms, the number of jobs created by these new firms and the annual growth rates both in terms of turnover and employees.

### 5.1. Impact on Society

#### 5.1.1. Participation in Voluntary Work

Entrepreneurship education is expected to improve the entrepreneurship key competencies which will also have an impact on the role in society (social and personal life). Whether this impact exists is illustrated by the participation in voluntary work. This work can be in the form of being a volunteer in school, in the local community, in politics, employee volunteering or environmental volunteering. It turns out that there are only slight differences between the students (71.6%) and alumni (60.2%) regarding volunteer work (Figure 14). In both groups approximately 6 out of 10 individuals involved in (some sort of) volunteer work. Many female students (38.9%) were involved in volunteer work compared to male students and both gender of alumni respondents.

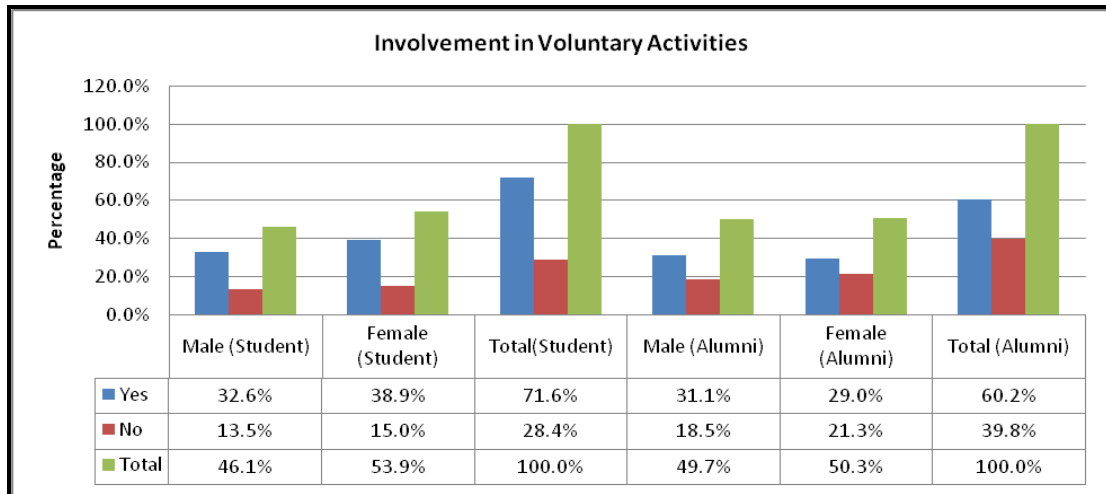


Figure-14. Students and Alumni Involvement in Voluntary Activities

Source: Kumar *et al.* (2014)

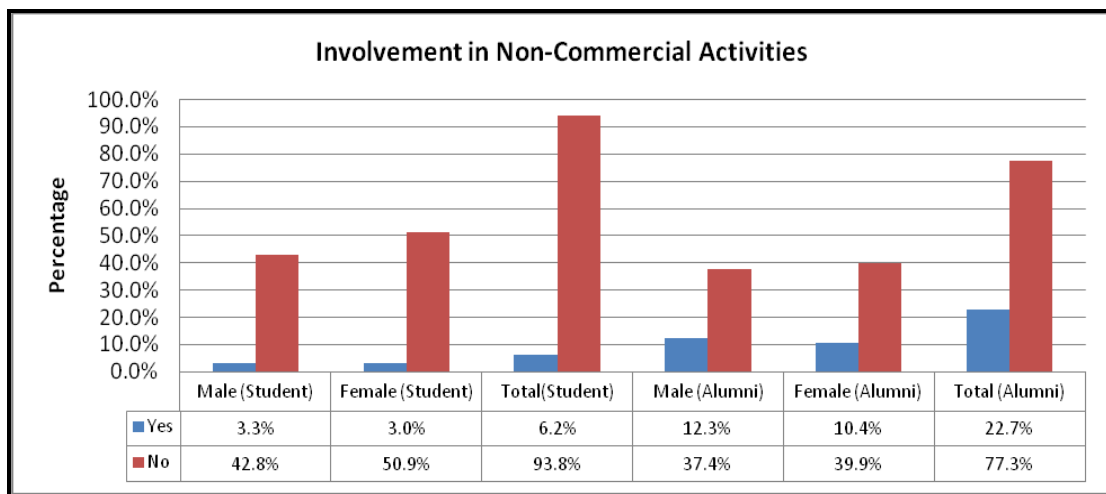


Figure-15. Students and Alumni Involvement in Non-Commercial Activities

Source: Kumar *et al.* (2014)

### 5.1.2. Participation in Non-Commercial Work

Male alumni (12.3%) are more often involved in an initiative to start a non-commercial project outside their work, such as starting a charity or a hobby club. Male alumni rated themselves high in starting a non-commercial project compared to female alumni and both gender in students group. Overall alumni score better than students concerning starting a non-commercial project (Figure 15). We concur what Kelley *et al.* (2010) propound that within any society it is important to support all people with ‘entrepreneurial mindsets’ and not just solely focus on inspiring others to start a business. Entrepreneurship education besides developing individuals’ skills to start a business should give attention to nurture individuals’ capability of behaving entrepreneurially in whatever role they take in life.

## 5.2. Impact on the Economy

### 5.2.1. Business Start-Up

Majority of the alumni are currently in paid employment. In order to determine to what extent alumni have had an impact on the economy, we analyzed whether they have already tried to accomplish a transition towards self-employment. None of the alumni started a business or are currently taking steps towards starting one. Approximately 89% of alumni who have never started their own business indicate that they have never helped someone else either to start a business. In addition, alumni in paid employment or without a professional activity

were asked about their involvement in self-employment. A relative large proportion of the alumni, 60%, indicate that it never entered their minds to start a business. On the other hand, 33% of the alumni indicate that they are thinking about starting a business. At the same time, both female and male alumni equally (16.6%) indicate that they do think about starting a business (Figure 16).

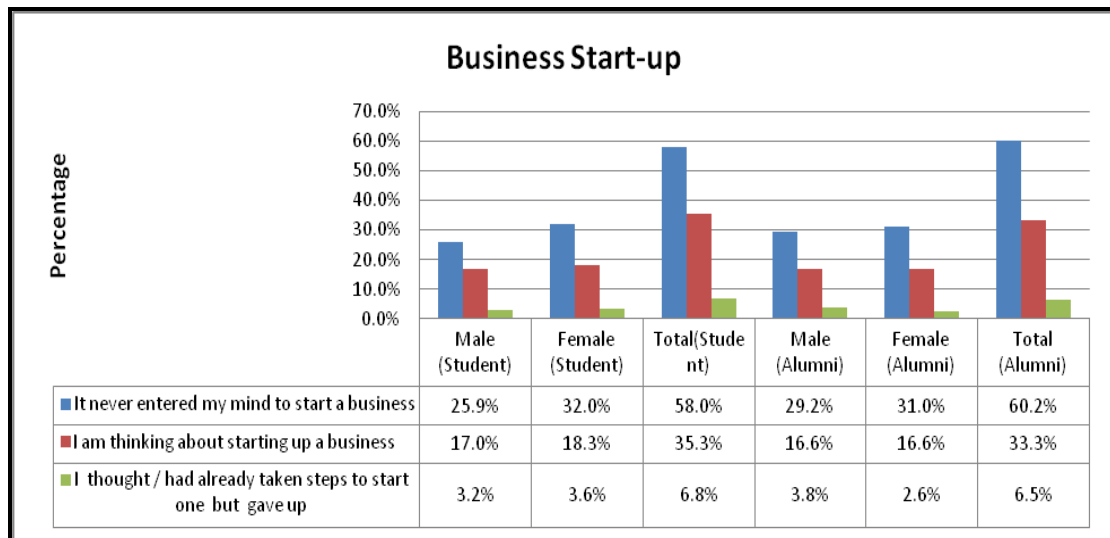


Figure-16. Perceptions of Students and Alumni on Business Start-up

Source: Kumar et al. (2014)

Figure 16 shows that many students (58%) who are currently in the final year ( without paid employment or a professional activity) indicate that it never entered their minds to start a business. However 35% of the students show that they are thinking about starting a business, but they are currently not self-employed. This indicates that there is a small potential among the current students to become self-employed in the future. However, it will not be feasible for all of them to become self-employed because of several reasons associated with politics, economics, social, technology, legal and environment. Some specific reasons for the preference of being an employee have been discussed earlier helps to clarify the reasons why students are not tuned themselves to be self-employed (to start-up a business).

Finally, students and alumni in paid employment or without a professional activity have indicated the likelihood of starting their own business within the next ten years. More alumni indicate that it is 'highly unlikely' for them to start their own business within the next 10 years (Figure 18). Moreover, 30% of students indicate that it is unlikely for them to start their own business within the next ten years. More female students indicate that it is highly unlikely for them to start a business within the next ten years. There are some students and alumni not sure about their intention to start-up business in the next 10 years (Figures 17 and 18). Perhaps their decisions to start-up business might be reverse as time goes and with more experiences gained in their respective field of interest. The findings reflect the type of activities in the entrepreneurship courses have not strongly embeds students' awareness about the importance and necessity of entrepreneurship for the youth community. Thus, the youth who had previously lacked in the participation of new venture development are living with the same mindsets since the motivation to become entrepreneurs is not high. It is urgently necessary to embed activities in the entrepreneurship courses that have the elements aimed to develop students' enthusiasm and confidence to step into entrepreneurship with a strong realization the values of entrepreneurship for nation building.

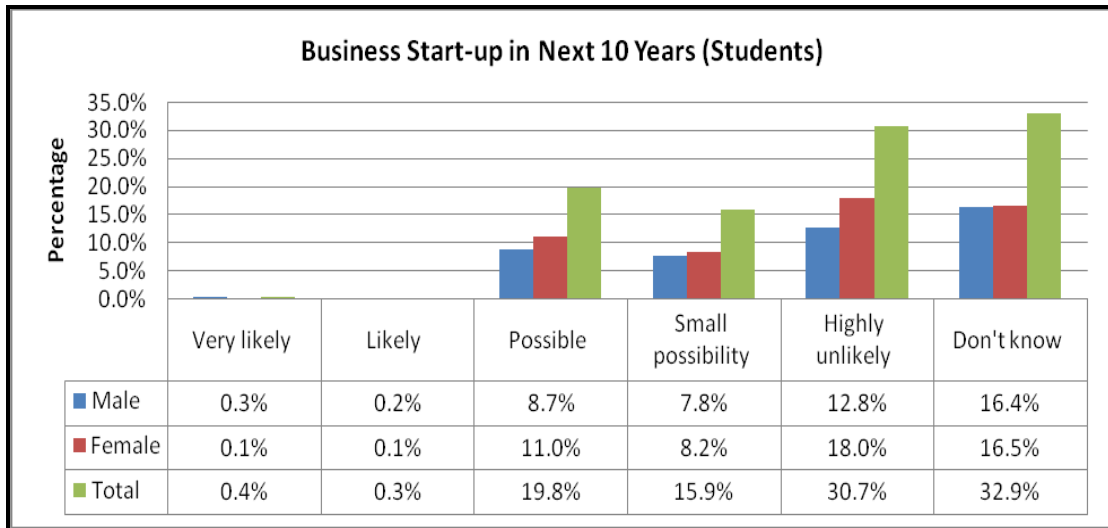


Figure-17. Students Intentions to start a business within next 10 years.

Source: Kumar et al. (2014)

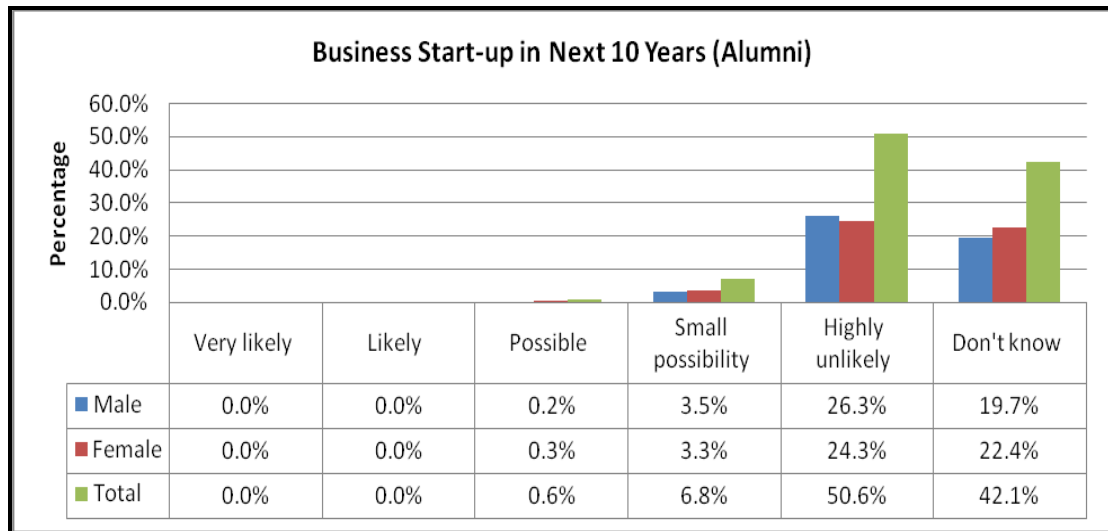


Figure-18. Alumni Intentions to start a business within next 10 years.

Source: Kumar et al. (2014)

## 6. CONCLUSION

None of the alumni in the survey are self-employed, thus more detailed information about business to measure the impact of new enterprises on the economy could not be achieved. The average number of years between graduation and start-up does not exist in the case of alumni. This means that alumni had not started any business well before or after their graduation; despite the HEI offering courses in business startups (principles of entrepreneurship) to all students. It is anticipated at least 10% of the alumni self-employed with successful business. An important factor for growth of an economy is the level of innovation. Improvement of the entrepreneurship key competencies necessary to be a successful entrepreneur is expected to encourage more graduates to become successful innovators and entrepreneurs. An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations, according to the Oslo Manual. An important change in the third edition of the Oslo Manual is the removal of the word 'technological' from the definitions, since this would limit responses of innovative small and medium size enterprises (SMEs) in the services sector. The level of innovation of businesses of currently self-employed alumni could not be assessed for the reason that none of them is actively involved in own business. One of the indicators of the impact on the economy is the annual net income of



entrepreneurs. However, at this point of time the alumni are not directly contributing to economic advancement. It seems that the alumni in this study are generally happy with their current income generated from their employment and contributing to the national income and innovation capabilities in some other form of activities directly linked to their current employment. The empirical findings have provided some insight into the characteristics of the present-day youths to be involved in the competitive modern businesses. Moreover, through entrepreneurship, new businesses and jobs are created, which is of critical importance in today's global business environment. New venture creation is a critical driving force of economic growth, creating new jobs, as well as enhancing tax revenues, boosting exports, and generally increasing national productivity. This indicates that current initiatives need further restructuring and more new forms of intervention must be in place to enhance youth's intentions and attitude toward entrepreneurship. In addition, the government has initiated many policies to develop entrepreneurs as indicated in the Malaysian Plans. The results of this study highlighted that the efforts have not persistently helped the students to realize the importance and necessity of entrepreneurship for socio-economic development of the nation.

Although a few exceptional individuals become entrepreneurs immediately or before their graduation, the development of an entrepreneurial attitude can be encouraged in all students. Therefore, entrepreneurship should not be considered just as a mean for creating new businesses, but as a general attitude that can be usefully applied by everyone in their daily life and working experience. The objectives of teaching entrepreneurship (adapted to the different levels of education) will therefore include personal development, business development and entrepreneurial skill development (European Commission, 2012). However one should notice that entrepreneurship courses offered at the HEI selected for the present research are basic and it is fitted within the undergraduate programmes as a compulsory elective course for all programmes. The course delivery combines both theoretical and practical aspects of entrepreneurship competence using simulation method, case study, role model, working papers, and writing business plans / blueprint. Embedding technology entrepreneurship course into science and technology disciplines is a strategic move of the HEI to encourage the development of more technopreneurs.

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