The Influence of Entrepreneurship Education towards the Entrepreneurial Intention in 21st Century Learning

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Abstract
The research had been conducted to identify whether there are any significant differences of entrepreneurs’ intention level based on education demographic of them and to what extent the relationship between their intentions and to choose entrepreneurship as their career choice. This research moved around the chosen of 462 final years Bachelor in engineering students of Universiti Teknologi Malaysia (UTM), Universiti Tun Hussein Onn Malaysia (UTHM), and Universiti Teknikal Malaysia which centralised at the south region of Malaysia as samples from the whole research population. Questionnaires had been used to collect descriptive and inferential research data. This research data previewed that the entrepreneurial education influenced entrepreneur’s intention as well as driven them to choose entrepreneurship as a career. Research data collected provides a huge implication towards the implementation of entrepreneurship education programs in Malaysia. In the context of this study, entrepreneurial development needs to be well planned to enable the number of entrepreneurs to be enhanced and can only be established to become resilient and competitive entrepreneurs globally.

Keywords: Entrepreneurship education; Entrepreneurial intention; And entrepreneurial career selection behavior.

1. Introduction
The entrepreneurial career selection behaviour in entrepreneurship through entrepreneurial education is one of the ways to create perceptions and equip individuals with strong entrepreneurial knowledge and skills (Henderson and Robertson, 2000); (Ishak Hj Abdul Rahman et al., 2006); (Robertson et al., 2003). Hence, various parties from the public and private sectors strive to provide exposure on entrepreneur field through education. Formal and informal entrepreneurial education is also an initial inventory of individual development that is necessary for those who want to become an entrepreneur (Kuratko, 2009); (Zaidatol, 2010).

The incentives for entrepreneurship are also in line with statistics from the Department of Statistics, Malaysia which shows an increase in the number of unemployed graduates at 3.1 percent and has also given significant challenges to higher education institutions (Nor Hafiza and Binti Othman, 2012); (Marcela et al., 2012); (Ioana Panc et al., 2012); (Nihan et al., 2012); (Nor Fadhilah Nasharudin and Halimah Harun, 2010); (Salmah et al., 2009); (Nor Aishah Buang dan Ruhizan Mohd Yassin, 2008); (Hoe Chee Hee, 2006); (Nor Aishah Buang et al., 2005) to develop quality graduates and have a variety of skills. As in the study, especially the engineering students in which study shows that some of the engineering students are less interested in venturing into entrepreneurship. Therefore, in order to increase the intention of engineering graduates to venture into entrepreneurship, this study is conducted to identify the significant differences in the entrepreneurial intention level of final year students and to identify whether there is a significant relationship between entrepreneurial intentions and entrepreneurship career behavior.

2. Entrepreneurial Education
Entrepreneurship education is a lifelong learning process to continuously enhance entrepreneurial knowledge and skills from basic education to adulthood. However, this study was conducted among IPTA students as a preparatory effort for students to face the work environment after graduation. The preparation for entrepreneurship is also focused on critical field students especially in engineering because there is a lack of exposure in entrepreneurship courses amongst science stream students. Entrepreneurship education also has a positive impact on student entrepreneurial potential (Nor Aishah Buang et al., 2005).

3. Entrepreneur Intention Theories
Intention is a situation of thought that focuses on a person’s convergence, experience and behavior to a specific objective or behavior (Bird, 1988); (Shapero and Sokol., 1982). Someone who has an intention to do something, there is some psychological process involved that is continuous which includes effort, patience and diligence to get

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what one thinks of. In recent decades, Planned Behavioral Theory has been widely used as a psychological theory that illustrates and predicts human behavior (Thachev and Kolvereid, 1999). The Progressive Behavioral Theory is developed from the theory of Reasoned Action which originally had two variables to three variables for example; by incorporating a variable that takes into account one’s ability to assess its ability in one case (Ajzen, 1991).

However, from the point of view of Ajzen (1991), this theory has two variables: the attitude of the subject to a behavior based on the likes or dislikes of the individual towards a desired job and a subjective norm that is an individual’s perception of the person’s close relationship to the behavior or intended job. Then, this theory develops with the addition of another variable that is the behavior of acceptable control which is a person’s ability to assess his ability to do something (Ajzen, 1991). Entrepreneurship is also a well-planned behavior before one chooses to be an entrepreneur or get involve in the business world (Krueger, 2000).

Referring to Bird’s Entrepreneurship Intention Models (1988) as in Figure 1, there are two main factors that will strengthen the desire for something that is situation and personal factors. Situation factor consists of elements of social, political and economic environment while for personal factors are encompassing history, personality and capability. Both factors will be assessed through rational cognitive and analytic formulas as well as intuitively evaluating. This cognitive and intuitive awareness is a factor that has a direct impact on the formation of intention and in accordance with Forbes (1999) statement which stresses that Bird is actually highlighting the concept of entrepreneurial intention from a cognitive point of view.

These also mean even though behaviour and self-efficacy are chosen as the predictor of the ultimate intention variables, cognitive factors also played an indirect role (Ryan, 1970) through self-efficacy to predict level of entrepreneur intention of an individual and then predict their choices and behaviour to choose entrepreneurship as a career (Bird, 1988). As a conclusion, the theory from Bird (1988) is the basis of the research conducted by the researcher to find out whether creativity and entrepreneurial intention contribute to the conduct of entrepreneurship career selection among final year students of Bachelor of Engineering.

4. Entrepreneurship Career Behavior Theory

Human behavior can be described as an act done and expressed as well as has more than one dimension that can be observed, illustrated, measured, and recorded based on the period and strength of the form of behavior that has been exhibited (Miltenberger, 2001). Indirectly, the behaviour can influence and be influenced by the surrounding systematically through a series of events occurring every individual (Miltenberger, 2001).

While in the entrepreneurial process, states that it is not a personality trait because the individual’s decision to venture into entrepreneurship is lean more towards a behavioral process combined with innovation factors. This is in line with (Bird, 1988) that relate entrepreneurial behavior to innovation.

However, (Bird, 1988) defined entrepreneurship career behaviour as a chance or an additional, risk-taking, creative activity while generating, developing, and moving ideas to one entrepreneur organisation described entrepreneur orientation as a reflection of one organisation repeated behaviour like innovation, proactive, and risk-taker. This matter aligned with opinions. They stated that there were three types of entrepreneurship behaviour; increase efficiency, exploit new market opportunities and improve the value of money earned from innovation.

5. Entrepreneurship Education and Entrepreneurial Intention

Based on a number of recent studies, entrepreneurial intention and entrepreneurial entrepreneurship variables were chosen to indicate that formal or informal entrepreneurship education was one of the important factors in educating and motivating students in institutions of higher learning in various fields of entrepreneurship (Daniel Yar Hamidi et al., 2008); (Ioana Panc et al., 2012); (Marcela et al., 2012); (Nor Hafiza and Binti Othman, 2012);
This entrepreneurship education can also be carried out by means of attractive teaching and learning techniques, skilled and experienced instructors and support from government and private agencies (Daniel Yar Hamidi et al., 2008); (Ioana Panc et al., 2012); (Marcela et al., 2012); (Nor Hafiza and Binti Othman, 2012); (Salmah et al., 2009).

The educational factors studied are based on the variables of entrepreneurship programs that have been included. This is because researchers agree with Gist and Mitchell (1992) that both knowledge sources are formal and informal education. This is also parallel with Amabile's (1988) argument that education provides exposure to various experiences, views, and knowledge base, strengthens the use of different problem-solving skills and critical experiments on innovative tasks. This statement is also in line with the statements of which are individual personal characteristics such as age, gender, educational background and family and experience as one of the key variables to influence the involvement of the community in entrepreneurship.

6. Research Objective

1. Recognize whether there is a significant difference in entrepreneurial entrepreneurial intention of final year of Bachelor of Engineering in UTM, UTHM, and UTeM according to entrepreneurship education.

2. Identify whether there is a significant relationship between the entrepreneurial intention and the entrepreneurial career choice of final year of Bachelor of Engineering in UTM, UTHM, and UTeM.

7. Methodology

The design used in this research is a descriptive and inferential study. The tools used to collect data from the respondents are questionnaires. This coincides with the statement of where descriptive research is a study which aimed at describing an ongoing phenomenon. Sekaran (2003) stated that the questionnaire was an efficient data collection mechanism when the researchers knew exactly what was needed from the study. Wiersma (1995) stated that more data obtained from the respondents in a short time by using the questionnaire.

This study survey design is also a quantitative study procedure for obtaining information regarding behavior, opinion, or characteristics in a population (Cresswell, 2008). The researcher selected a stratified random sampling technique to select a sample of the study. As suggested by that stratified random sampling is able to provide more precise sample validity due to the size distribution of the same sample for each stratum. In this study, the population of the study was dictated to the sub-population according to the engineering faculty. After the sample selection was randomly performed, the researchers used the simple random sampling technique to ensure the same opportunities were given to each sample framework.

In determining the sample size, the determination table for Krejcie and Morgan (1970) was selected. Referring to the determination table, the sample size for the population is between 3500 and 4000 is 346. Meanwhile, Sekaran (2003) states that the sample size of more than 30 and less than 500 is appropriate for a study, suggests that researchers should select samples more than what they need. Furthermore, Cresswell (2008) argues that larger sample sizes can reduce sampling errors. Therefore, based on the opinions and recommendations of Cresswell (2008), Sekaran (2003), and Krejcie and Morgan (1970), the researcher selected a large sample of 450 persons. However, researchers have distributed 550 survey forms to ensure that the collected data is sufficient in the event of a breakdown in the questionnaire. As an example, respondents did not return the questionnaire or did not answer the questionnaire completely. A complete questionnaire filled in is a total of 462 survey forms. Thus, the return of the questionnaire, which is 84 percent, is satisfactory and meets the target of over 80 percent as suggested.

Population in this research is referring to 462 Bachelor in Engineering final year students of Malaysia’s south-region universities such as Universiti Teknologi Malaysia (UTM), Universiti Tun Hussein Onn Malaysia (UTHM), and Universiti Teknikal Malaysia Melaka (UTeM). This is parallel with Cresswell (2008), in which population is referring to a huge group of individuals who appear to have similar characteristics. Meanwhile, targeted population is referring to a group of individuals from the same population which have similar characteristics that can be explored.

The reliability of questionnaire for this pilot study was tested by using Alpha Cronbach from Statistical Packages for Social Science 20.0 (SPSS 20.0) software which is the reliability coefficient. It shows the research items are related to each other states that Alpha Cronbach is a coefficient of reliability for pilot studies conducted. The overall alpha value obtained for the constructs of entrepreneurial desires is 0.854. This shows that every aspect of this research instrument has a Cronbach Alpha value of more than 0.8. Referring to Sekaran (2003), the alpha value (reliability correlation coefficient) greater than 0.80 is a high reliability value. Sekaran (2003) also notes that Alpha Cronbach's value less than 0.6 is less reliable, while value 0.7 is acceptable. Thus, the overall value of Alpha Cronbach obtained in this pilot study exceeds 0.8 and has high reliability.

<table>
<thead>
<tr>
<th>Range (+ or -)</th>
<th>Correlation Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.70 and above</td>
<td>Highest</td>
</tr>
<tr>
<td>0.50 until 0.69</td>
<td>High</td>
</tr>
<tr>
<td>0.30 until 0.49</td>
<td>Average</td>
</tr>
<tr>
<td>0.10 until 0.29</td>
<td>Weak</td>
</tr>
<tr>
<td>0.00 until 0.09</td>
<td>Can be ignored</td>
</tr>
</tbody>
</table>


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Pearson correlation is used as it measures the extent to which the relationship between variables or relationships of variables using the scale and ratio. Referring to the relationship between the variables is significant when the value of p <0.05.

8. Research Data and Analysis

8.1. Profile’s Experiences in Attending Entrepreneurship Courses / Programs

Table-2. The frequency distribution and percentage of students who have attended entrepreneurship courses or programs

<table>
<thead>
<tr>
<th>Entrepreneurship Courses / Programs</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>229</td>
<td>49.6</td>
</tr>
<tr>
<td>No</td>
<td>233</td>
<td>50.4</td>
</tr>
</tbody>
</table>

Based on Table 2, the frequency distribution and percentage of students who have attended entrepreneurship courses or programs have a slight difference in which students who attended entrepreneurship courses were 49.6 per cent for 229 students. Meanwhile, for students who have never attended entrepreneurship courses or programs are 50.4 per cent for 233 students.

Table-3. The frequency distribution and percentage of students’ opinion on the contribution of entrepreneurship or programs towards entrepreneurship intention

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No contribution</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>Little contribution</td>
<td>64</td>
<td>13.8</td>
</tr>
<tr>
<td>Slight contribution</td>
<td>109</td>
<td>23.4</td>
</tr>
<tr>
<td>Abundant contribution</td>
<td>46</td>
<td>9.9</td>
</tr>
<tr>
<td>Generous contribution</td>
<td>5</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Based on Table 3, the frequency distribution and percentage of students' opinion on the contribution of entrepreneurship courses or programs to entrepreneurship intention have a significant difference for students who think there is a small contribution of 23.4 percent for 109 students. The second largest percentage is for students who think there is little contribution to entrepreneurship courses or entrepreneurship programs, ie 13.8 percent for 64 students. However, for students who think entrepreneurship courses or programs provide a lot of contributions to their entrepreneurial intention are 9.9 percent for 46 students. Meanwhile, students who think that entrepreneurship courses or programs have no contribution of 1.5 per cent for seven students differ slightly with students who think entrepreneurship courses or programs give such a large contribution to their entrepreneurial intention i.e. 1.1 per cent for 5 students. Overall, even though a group of students who think the entrepreneurship course or program gives some contribution to entrepreneurial intentions is the largest group but there are also a few small groups of students who think entrepreneurship courses or programs contributed or vice versa to their entrepreneurial intentions.

8.2. Significant Differences in Analysis of the Entrepreneurial Intention Level In UTM, UTHM, and Utem Engineering Students Based On Entrepreneurship Education

This section answered research question (5.1) “Is there a significant difference in the level of entrepreneurial intention in UTM, UTHM, and UTeM based on entrepreneurship education?”

General Hypothesis (Hₐ5.1):

“There is no significant difference in the level of entrepreneurship intention of engineering students in UTM, UTHM, and UTeM based on entrepreneurship education”.

Background profile analysis of 229 student’s experience without attending any entrepreneurship course (50.4 percent) is higher than those who have attended the entrepreneurship course of about 233 students (49.6 percent). This is parallel with the study of Nor Aishah Buang dan Ruhizan Mohd Yassin (2008) which found that too few entrepreneurship courses were given to students from majors such as engineering majors and science majors. In addition, they are also not given the opportunity to pursue entrepreneurial education. This opinion was also supported by the study conducted by which states that there are only four public higher education institutions offering entrepreneurial courses for students at the Faculty of Engineering not included in UTM, UTHM, and UTeM.

This is also in line with the students’ perceptions that entrepreneurship courses increase their entrepreneurial aspiration of 109 students (23.4 per cent), followed by students who express entrepreneurial entrepreneurship. Entrepreneurship is giving a small contribution to their entrepreneurial intention as much as 13.8 per cent (64 per cent student). However, there were 46 students (9.9 percent) who stated that entrepreneurship courses contributed much to their entrepreneurial intentions. However, a total of 7 students (1.5 percent) stated that entrepreneurship courses did not contribute to their entrepreneurial intentions.
Based on table 4, it shows the findings of Levene test conducted on entrepreneurship education to ensure variants and co-variants are homogeneous between groups. It was found that the variance and co-variants of the variables were the same through the test (F = 0.20, p = 0.888 > 0.05). Thus, One-way ANOVA test can be continued.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Entrepreneurship Education Group</th>
<th>Min (JKD)</th>
<th>Squared Total (MKD)</th>
<th>dk (degrees freedom @ df)</th>
<th>Squared Min (MKD)</th>
<th>F</th>
<th>Sig. (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Intention</td>
<td>Exist</td>
<td>37.403</td>
<td>59.126</td>
<td>2</td>
<td>29.563</td>
<td>0.784</td>
<td>0.457</td>
</tr>
<tr>
<td></td>
<td>Nonexistent</td>
<td>37.171</td>
<td>17277.52</td>
<td>458</td>
<td>37.274</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Then, table 5 displayed a set of One-Way ANOVA test results conducted earlier. A group of respondents who used to attend an entrepreneurial course as well as entrepreneurial programme managed to acquire higher min value compared to those who never attended such course or programme. F statistic was 0.784 with 0.457 significant value and this value is above the 0.05 par level. These results demonstrate that there was no obvious differences between entrepreneurial intention and entrepreneurship education significantly (F = 0.784 dan p = 0.457 > 0.05). Thus, the null hypothesis is accepted. This means that the level of entrepreneurial intention is similar to the respondents who have attended entrepreneurship courses with groups who have never attended entrepreneurship courses.

Inferential analysis findings show that there is no significant difference between entrepreneurial intention and entrepreneurship education significantly. This is evidenced by the value of F obtained is 0.784 and the p value is 0.457> 0.05. This value also implies that the level of entrepreneurial intention is similar to the respondents' groups who have attended entrepreneurship courses with groups who have never attended entrepreneurship courses. This finding shows that although they are from different courses of study and different backgrounds of entrepreneurship education, students still have a desire or tendency to venture into entrepreneurship (Dwi Riyanti, 2007); (Ioana Panc et al., 2012); (Marcela et al., 2012); (Nor Hafiza and Binti Othman, 2012); (Nihan et al., 2012); (Nor Fadhilah Nasharudin and Halimah Harun, 2010); (Nor Aishah Buang dan Ruhizan Mohd Yassin, 2008); (Salmah et al., 2009). Therefore, it can be concluded that there is a difference in entrepreneurial intention based on the background of entrepreneurship education.

9. Conclusion

As a whole, this research displayed a formation of entrepreneurial intention through entrepreneur education. The finding of this study also has significant implications for the implementation of entrepreneurship education programs in Malaysia. Implications of this research are shown on the implementation of entrepreneurial development programs combined with entrepreneurship programs or courses involving several levels from primary, secondary, technical and vocational colleges, tertiary levels and operations by government agencies or private parties in Malaysia. In the context of this study, entrepreneurship development needs to be better planned so that the number of entrepreneurs can not only be enhanced but can also be established to become resilient and competitive entrepreneurs globally. Specifically, this study also has important implications for the present and ongoing entrepreneurship education programs. This implication can be seen through an entrepreneurial education program that is continuously carried out on the development of entrepreneurship in the hope that many young people are eager to venture into entrepreneurship so as to create a society in the 21st century.

References


Nor Hafiza and Binti Othman (2012). Impak globalisasi dan tahap keinginan keusahawanan pelajar universiti terhadap tingkah laku pemilihan kerjaya Keusahawanan.


