

The Role of Higher Education to Create Entrepreneurial Intent

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INTRODUCTION AND RESEARCH PROBLEM

Entrepreneurship is the ability to organize, operate and assume the risk of a business venture. Economic progress of a country heavily relies on the ability of its people to generate income locally or internationally through entrepreneurship. Thus, economically, entrepreneurship will result in employment opportunity creation which in turn will generate income along with improved standards of living with multiplying effects on the economy. Furthermore, higher start-up rates will contribute to economic prosperity of a country. “Graduate entrepreneurship in the UK and around the globe is increasingly being seen as a vital source of competitiveness and the engine for economic growth and development” (Nabi and Linan, 2011). However, the role of graduate entrepreneurship has often been underestimated and the number of graduates moving for an entrepreneurial career is very less in Sri Lanka. The graduate unemployment in Sri Lanka is also quite high. Employability of university undergraduates is one of the widely discussed topics today. Many graduates passing out from the state universities are quite risk-averse and many are persistent on getting jobs in the public sector. Each year, thousands of graduates enter the public sector despite the low salary scales and other incentives. Graduates entering to

entrepreneurship career not only lessen the burden on the government but also create more job opportunities in the economy by boosting overall economic activity. Many authors have identified entrepreneurial intentions as a means to better explain and predict entrepreneurship (Bird, 1988; Krueger et al., 2000). In particular, entrepreneurship education can be considered as one of the key instruments to increase the entrepreneurial attitudes of both potential and nascent entrepreneurs. Thus, this paper attempts to measure entrepreneurial intention levels of Sri Lankan state university undergraduates and investigate the role of entrepreneurial education in creating entrepreneurial intent.

METHODOLOGY

The study is predominantly quantitative in nature. The entrepreneurial intentions questionnaire (EIQ) has been carefully developed and administered among 486 final year undergraduates across the country to draw conclusions about the Sri Lankan state university undergraduates. A previously validated tool by various scholars in the field (e.g., Dinis et al., 2013; Solesvik, 2013; Linan and Chen, 2006) was employed to measure the levels of entrepreneurial intentions. Sampling frame has been carefully selected in a way that it represents the entire state university sector. The universities, whose annual intake is more than 1,500 viz. Colombo, Peradeniya, Sri Jayewardenepura, Kelaniya, Ruhuna, Jaffna and Moratuwa Universities, and Uva-Wellassa University which offers industry oriented degree programmes have been selected to the sampling frame. Furthermore, it consists of the major subject disciplines of Arts, Management, Bio Science, Physical Science, Engineering, Agriculture and Industry oriented study programmes. A joint sampling technique has been employed by combining judgement sampling, proportionate sampling and convenient sampling to draw the final sample. The sample size from each university was drawn in proportionate to the annual intake of 2014. That was further scrutinized according to the number of students

enrolled to different subject disciplines to increase the representativeness.

RESULTS AND FINDINGS

Majority of respondents were females which constitute 55.6 percent of the study sample while males representing 44.4 percent. The sample was drawn from the final year undergraduates and in cases of absences of enough elements in the sample, their immediate juniors were selected as respondents. Thus, more than 95 percent of the participants were 23 years or above. Moreover, the vast majority of the respondents were Sinhala Buddhists while having some representative from other ethnic groups as well.

The researchers attempted to compare entrepreneurial intention levels of undergraduates in different universities. The robust tests of mean differences of Welch and Brown – Forsythe suggest that there is no significant difference of entrepreneurial intentions levels based on the universities they are attached to ($p = .121$ and $.171$ respectively). However, the universities of Ruhuna and Jaffna recorded comparatively higher figures for entrepreneurial intentions compared to other universities. Majority of undergraduates in University of Ruhuna come from the Southern Province. Similarly, majority of University of Jaffna come from the Northern Province. This inspired the researchers to think that there could be some relationship between the respondents' native places (native places have not been captured in the questionnaire) and entrepreneurial intention levels.

The following table summarizes descriptive statistics based on respondents' subject disciplines.

Table 1: Entrepreneurial Intentions Vs Subject Disciplines

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for | | | |
|---------------------|-----|--------|-------------------|------------|-----------------------------|-------------|------|------|
| | | | | | Mean | | Min | Max |
| | | | | | Lower Bound | Upper Bound | | |
| Arts | 130 | 4.2631 | 1.03498 | .09077 | 4.0835 | 4.4427 | 1.83 | 7.00 |
| Management/Commerce | 131 | 4.6137 | 1.09030 | .09526 | 4.4252 | 4.8021 | 1.83 | 7.00 |
| Bio-Science | 44 | 4.1966 | 1.11138 | .16755 | 3.8587 | 4.5345 | 2.17 | 6.67 |
| Physical Science | 65 | 4.1377 | 1.06967 | .13268 | 3.8727 | 4.4028 | 1.50 | 6.50 |
| Engineering | 38 | 4.3942 | 1.26200 | .20472 | 3.9794 | 4.8090 | 1.83 | 6.67 |
| IT/Computer Science | 34 | 4.6324 | 1.10232 | .18905 | 4.2477 | 5.0170 | 2.50 | 6.33 |
| Agriculture | 24 | 4.4722 | 1.23815 | .25274 | 3.9494 | 4.9950 | 2.67 | 6.83 |
| Other Industrial | 20 | 4.5333 | 1.13761 | .25438 | 4.0009 | 5.0658 | 2.83 | 6.83 |
| Total | 486 | 4.3923 | 1.10755 | .05024 | 4.2936 | 4.4911 | 1.50 | 7.00 |

Source: Survey Data

Shapiro-Wilk test has been conducted to test the normality of independent variables. Test statistics obtained for different subject disciplines were, $\alpha = 0.05$, given that $p = .524$ for Arts, $p = .279$ for Management/Commerce, $p = .633$ for Biological Science, $p = .691$ for Physical Science, $p = .254$ for Engineering, $p = .090$ for IT/Computer Science, $p = .054$ for Agriculture and $p = .246$ for Industrial Oriented degrees. With these results, it can be concluded that entrepreneurial intention levels of each of these subject disciplines are normally distributed.

The assumptions of homogeneity of variances was tested and found tenable using Levene's test $F(7, 478) = .734$, $p = .0643$ ($p > 0.05$). Analysis of variance (ANOVA) test indicated that at least one subject discipline's mean score has a significantly different entrepreneurial intention level with respect to other disciplines. ($\alpha = 0.1$, $p = 0.052$).

The post hoc test of Least Significant Difference (LSD) has been administered to investigate which disciplines have significantly different intention levels from each other. According to LSD statistics, entrepreneurial intention levels of Management/Commerce undergraduates were significantly higher than Arts, Biological Science and Physical Science undergraduates ($\alpha = 0.05$, mean differences between Management and Arts, Management and Physical Science, Management and Biological Science were 0.35053^* , 0.41710^* and 0.47595^* respectively). Moreover, the entrepreneurial intention levels of IT/Computer Science undergraduates were significantly higher than Physical Science undergraduates ($\alpha = 0.05$, mean differences between IT/Computer Science and Physical Science was 0.49464^*).

Nearly 60 percent of the respondents had taken course/courses that could be considered as entrepreneurial education at their universities. Furthermore, respondents were categorized into four different levels based on their entrepreneurial education as shown in the following table;

Table 2: Entrepreneurial Intentions Vs Entrepreneurship Education at the University

| | Entrepreneurial Intentions | | | | | | | |
|---|----------------------------|-------|----------------|------------|----------------------------------|-------------|------|------|
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Min | Max |
| | | | | | Lower Bound | Upper Bound | | |
| Special degree in Entrepreneurship | 14 | 5.479 | 0.931 | .248 | 4.9415 | 6.0169 | 3.67 | 7.00 |
| Entrepreneurship as a subject/s | 138 | 4.558 | 1.023 | .087 | 4.3857 | 4.7302 | 2.33 | 7.00 |
| Entrepreneurship as a part of a subject/s | 139 | 4.422 | 1.1234 | .095 | 4.2337 | 4.6106 | 1.83 | 6.83 |
| Never learnt about entrepreneurship | 193 | 4.164 | 1.092 | .078 | 4.0097 | 4.3198 | 1.50 | 7.00 |
| Total | 484 | 4.388 | 1.1038 | .050 | 4.2902 | 4.4874 | 1.50 | 7.00 |

Source: Survey Data

Shapiro-Wilk test has been administered to test the normality of each category. With the test statistics for the above categories, where $\alpha = 0.05$, given that $p = 0.835$ for who are reading for a special degree in entrepreneurship, $p = 0.140$ for who have taken entrepreneurship as a subject/s, $p = 0.102$ for who have taken entrepreneurship as a part of a subject, $p = 0.276$ for the undergraduates who have never learned about entrepreneurship, it can be concluded that entrepreneurial intention levels of each of the categories are normally distributed. Therefore, the assumption of normality has been met for this sample. The assumption of homogeneity of variances was tested and found tenable using Levene's test $F(3, 480) = .0651, p = 0.583 (p > 0.05)$. ANOVA test was conducted to evaluate the null hypothesis that there is no difference between levels of entrepreneurial intentions of undergraduates based on their levels of entrepreneurial education ($N=483$). The ANOVA was significant, $F(3,483) = 8.727 p=.000$. Thus, there is significant evidence to reject the null hypothesis. The finding was further substantiated by robust tests of Welch and Brown-Forsythe which indicates significant differences of means ($p = .000$ and $.000$ respectively). LSD has been administered ($\alpha = 0.01$) to further examine which groups have a significantly different mean score from each other. According to test statistics, undergraduates who were reading for a special degree in entrepreneurship had significantly higher entrepreneurial intention levels when compared all other groups. Moreover, entrepreneurial intention levels were significantly lower in undergraduates who have never learnt entrepreneurship when compared other groups. No statistically different mean scores have been recorded for the undergraduates who have learnt entrepreneurship as a separate subject/s and who learnt as a part of a subject/s.

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This study provide evidence for policy makers to take necessary actions to either enhance existing curriculum by introducing new Entrepreneurship course modules, promoting special degrees in Entrepreneurship or at least make it mandatory for all undergraduates to follow a non-credit course on Entrepreneurship as important measure/s to increase Entrepreneurial intentions among graduates. For instance, it was evident that entrepreneurial intention levels of Science and Engineering undergraduates were comparatively lower than IT/Computer Science, Management and Agriculture undergraduates. Specifically, Physical Science students demonstrated lowest mean score for the entrepreneurial intention level. A mandatory course on Entrepreneurship can be introduced to all Engineering and Science undergraduates as a mean to foster their entrepreneurial mind-set. That can be employed as a mechanism to inculcate an innovative culture among our graduates and eventually employ them for the development of country's industrial sector. Recognising the importance of entrepreneurial education revealed by this study, it is imperative to take appropriate measures to uplift entrepreneurial education in the country. Since youth and children are county's future potential entrepreneurs, it is essential to teach them how to use their creativity, to trust their ideas and to have self-confidence to try innovative approaches to solve problems. Thus, researchers believe that this grooming should start from school education itself.

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