

Undergraduates entrepreneurial intention: Holistic determinants matter

Tan Owee Kowang¹, Siti Zulaiha Binti Abdulah Apandi², Ong Choon Hee³, Goh Chin Fei⁴,
Mohd Saiful Izwaan Saadon⁵, Mohamad Rosni Othman⁶

^{1,2,3,4}Azman Hashim International Business School, Universiti Teknologi Malaysia, Johor, Malaysia

^{5,6}Faculty of Maritime Studies, Universiti Malaysia Terengganu, Terengganu, Malaysia

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ABSTRACT

The role of entrepreneurship in job creation and unemployment reduction is well established by prior studies. Hence, one of the ways to address the unemployment issue among young graduates in Malaysia is to explore how entrepreneurial intention could be embraced into the broader context of the country's education system. Empirical research found that prior studies on entrepreneurship education in Malaysia tends to focus on reviewing educational policies, issue and challenges. The concept of the entrepreneurial intention determinants beyond entrepreneurial education remains ambiguous. Hence, this study advances the discussion in entrepreneurship education by reviewing determinants for entrepreneurial intention from holistic perspective by integrating Model of Personality Traits and the theory of planned behavior (TPB). Five determinants for entrepreneurial intention are identified from literature review, which are entrepreneurship attitude, subjective norm, behavior control, entrepreneurship education and personality traits. The study is quantitative based, 360 questionnaires were distributed to the undergraduates from three faculties of a public university in Malaysia, with 199 responded. Data was analyzed via Pearson correlation and ANOVA analysis. Finding from the study suggested all the five entrepreneurial determinants are significantly correlated with entrepreneurial intention, and there is no significant difference on entrepreneurial intention based on faculty. However, one of the remarkable finding is Entrepreneurship Education is viewed as determinant with the lowest correlation coefficient with entrepreneurial intention. The implication of this finding is perhaps the content of entrepreneurial education shall emphasize on cultivating students' entrepreneurial attitude, behavioral and personality rather than the theoretical part of entrepreneurial and entrepreneurship.

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Corresponding Author:

Tan Owee Kowang

Azman Hashim International Business School

Universiti Teknologi Malaysia

81310 Johor Bahru, Johor, Malaysia

Email: oktan@utm.my

1. INTRODUCTION

Entrepreneurship is one of the most important attributes for economic development. The increase in entrepreneurial activity creates better opportunity for the various sectors of society, such as generation of employment opportunities, promotes capital formation, fosters balanced economic development and endorses development of managerial talent [1]. Whereas, Labor Force Report released by Department of Statistics

Malaysia reveals that the unemployment rate in Malaysia increased to 3.8% in March, 2020. According to Department of Statistics, the March unemployment rate has yet to reflect the impact of the Covid-19 outbreak and the movement control order (MCO), which will only be seen in April's unemployment data. In addition, according to 2019 Malaysia Graduate Tracer Study report released by the Ministry of Education, Malaysia, 60% of the graduates in Malaysia remain unemployed a year after graduation.

The role of entrepreneurship in job creation and unemployment reduction is well established by prior studies. Research done by prior scholar [2, 3] suggested that entrepreneurial activity and unemployment are inversely related, i.e., increased of entrepreneurial activity reducing unemployment. Hence, one of the ways to address the unemployment issue among young graduates is to explore how entrepreneurial intention could be embraced into the broader context of the country's education system.

Entrepreneurial intention has been viewed by prior scholars as a behaviors and skill that can be learned and trained through formal education system [4-6]. As such, entrepreneurship had been made as compulsory subjects for undergraduate programs in Malaysia's higher learning institutions (HLI) since 1980s. Entrepreneurship subjects in HLIs integrates both entrepreneurial theory and practical within and beyond classroom environments with the ultimate aim to promote entrepreneurial intention among undergraduate [4].

Empirical research found that prior studies on entrepreneurial education in Malaysia tends to focus on reviewing issue and challenges, revealing shortcomings in practice, profiling educational policies as well as factors affecting entrepreneurial intentions from education system perspective. However, the concept of the entrepreneurial intention determinants beyond entrepreneurial education remains ambiguous. As such, this study advances the discussion in entrepreneurship education by reviewing determinants for entrepreneurial intention from holistic perspective by integrating Model of Personality Traits, the theory of planned behavior (TPB) with education system determinants. In addition, the paper also aims to assess is there any difference on entrepreneurial intention based on the domain of university's programs (i.e., faculties).

2. LITERATURE REVIEW

2.1. Entrepreneurial intention

Intention is a subjective judgment about how someone will act to do something in the future, and is defined as the desire to enter themselves into a specified behavior [7]. Meantime, entrepreneurs are individuals who aim to become self-employed and is a way for them to achieve their personal success [8]. Hence, entrepreneurial intention could be referred as the desires or wishes of an individual to start a new business. As such, entrepreneurial intention in this paper is defined as the desire of the undergraduates to approach the world of entrepreneurship, while the intention level is assessed based on the measurement model proposed by prior scholars [9]. The study of entrepreneurial intention offers valuable movement for researchers to recognize the determinants that driving undergraduates' intention toward entrepreneurship [8].

2.2. Entrepreneurial education

Entrepreneurship education refers to the syllabus or courses that expose students with entrepreneurial capabilities, knowledge and skills [10]. The nature of entrepreneurial is unpredictable, full of risk and challenges [11], research done by prior scholar suggested that these are the main reasons that diminished undergraduates' entrepreneurial intentions, especially for individual who lack of risk-against behavior. Entrepreneurial education has been viewed by prior researchers as a formal training platform that prepared undergraduate to explore entrepreneurial world. Entrepreneurial education exposes undergraduates to business development process, business management knowledge and skill, such as human resources management, financial management, risk management, as well as the process of complex decision makings [12]. As the result, prepared undergraduate to deal with the risk and challenges that potential faced in the entrepreneurial world. Studies done by prior researchers also suggested that entrepreneurship education is one of the most important determinants to create student's desire towards entrepreneurship and leading to entrepreneurial [13]. Entrepreneurship education is not only about learning how to do a business, it is also about enhancing creative thinking and encouraging a powerful sense of self-worth and accountability [14].

2.3. Model of personality trait

Personality traits can be defined as a stable characteristic or patterns of an individual response to certain situation. It reflects the individual's patterns or characteristics of thoughts, feelings, and behaviors. Finding from literature review reveals that the personality traits of an entrepreneur are portrayed by the characteristics of high desire for achievement, locus of control and risk-taking inclination [2, 9, 15].

2.3.1. Desire for achievement

Previous studies provide empirical evidence on the association between the desire for achievement and entrepreneurial intention. High desire of achievement could be referred to as a stable characteristic of acquires satisfaction through accomplishment of higher levels of excellence, which it could be driven by the achievement of satisfaction, financial gain and/or public recognition [16].

2.3.2. Locus of control

Locus of controls of an individual refers to the individual perception on how well he or she had controlled over the situations and experiences that affect his or her lives. The perception is dependent on the individual's understanding of the social environment and the knowledge gained from different situations. The locus of control of an individual can be either external or internal [17]. Individual with interior locus tend to assume the future life's provision is driven by their own actions, while individual with external locus of control viewed external environment determine the future life provision. Research done by prior scholar suggested that individuals who have greater internal locus of control are considered to be have higher likelihood of becoming an entrepreneur [18].

2.3.3. Risk-taking inclination

Risk-taking inclination is associated with a situation of decision making in undetermined conditions [19]. Study done by prior researcher [20] stated that risk-taking inclination is significantly correlated with entrepreneurial intention. The nature of entrepreneurial world is risky, hence individual with higher level of risk-taking inclination tends to attached with the characteristics of adventurous, daring, optimistic and energetic, which is one of the key determinants for entrepreneurial success [21].

2.4. Theory of Behaviour Plan (TBP)

Based on the Theory of Behavior Plan (TBP), an individual's intention to engage in a specific behavior at a specific time and place could be predicted by a set of individual beliefs. This individual belief is influence by how the individual view the value of the behavior, assessing the risks and benefits of outcome. Within the context of entrepreneurial intention, the set of individual beliefs referred to the individual's attitudes, subjective norm and perceived behavioral control.

2.4.1. Entrepreneurial attitude

Prior scholar [22] defined entrepreneurial attitude as the scope to which the person realized that there are great chances for them to create a new business, or the degree on their attachment towards high status of entrepreneurs. Entrepreneurial attitude also could be viewed as the behavior as the someone's interest for being self-employed and is positive and strongly correlated with entrepreneurial intentions [23].

2.4.2. Subjective norm

Subjective norm refers to factors that drive the behavior of entrepreneurship due to the pressure from family, society and/or friends. There are mixed findings by prior researchers in regard with subjective norm. Some of the researchers found that subjective norm is inconsiderable to predict entrepreneurial intention [23], some others researchers found that subjective norm is associated with entrepreneurial intention [24]. On the other hand, some previous researchers completely disregard this variable in measuring entrepreneurial intention. However, according to prior scholar [25], family is among one of the most important social unit in shaping one's behavior to be entrepreneur.

2.4.3. Perceived behavioral control

Intention is viewed as the outcome of perceived self-efficacy; it is driven by the perceived behavioral control [26]. Hence, perceived self-efficacy and perceived behavioral control could also refer as the self-control over behavior [27] Study conducted by prior scholar [28] revealed that students who with greater entrepreneurial intention tend to have a higher score on perceived behavioral control, and individual with higher entrepreneurial control beliefs will drive to greater entrepreneurial intention [29].

2.5. Research framework

The research framework for this study is developed by integrating Theory of Behavior Plan (TBP), Model of Personality Traits and entrepreneurship education as the determinants of entrepreneurial intention among undergraduate within public university in Malaysia. As such, the research framework consists of five independent variables which are attitude toward the behavior, subjective norms, perceived behavioral control, and entrepreneurial education and personality traits as shown in Figure 1. Based on the research framework, six hypotheses are developed in line with the research objectives as shown in Table 1.

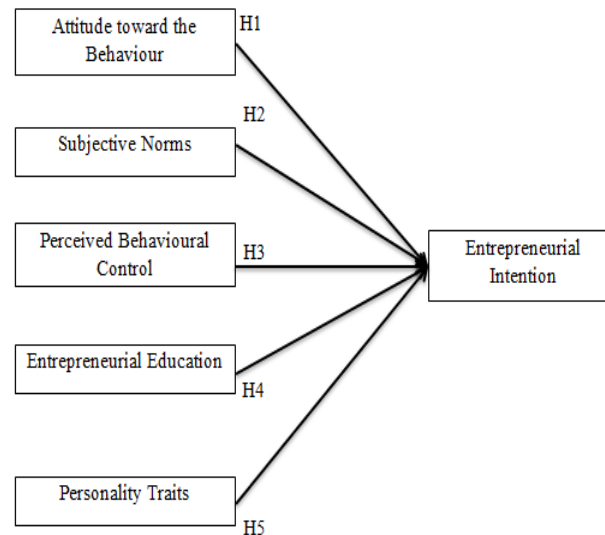


Figure 1. Research framework

Table 1. Research hypotheses

H1	H2	H3	H4	H5	H6
Undergraduates' attitude toward behaviour is significant and positively related to undergraduates' entrepreneurial intention	Undergraduates' subjective norm is significant and positively related to undergraduates' entrepreneurial intention	Undergraduates' behavioural control is significant and positively related to undergraduates' entrepreneurial intention	Undergraduates' entrepreneurial education is significant and positively related to undergraduates' entrepreneurial intention	Undergraduates' personality traits are significant and positively related to undergraduates' entrepreneurial intention	There is significant difference on entrepreneurial intention among undergraduates from different faculties

3. RESEARCH METHOD

This study is quantitative based, the agreement level on the determinants that affecting entrepreneurial intention, as well as the perceived entrepreneurial intention level of undergraduates within one of the private universities in Malaysia are assessed via structured questionnaire. The following sections summarize the research methodology adopted in this study.

3.1. Population and sample

The targeted respondents for this study are local students within one of the public universities in Malaysia. As such, the population for this study made up of 586 students from three faculties who had just completed the university Entrepreneurship module on previous semester, whereby 312 students are engineering students while 273 are from school of social science and management. Sample size is determined based on Morgan and Krejcie Table [30], which suggested 234 students should be selected from the population. In addition, by taking into consideration that the average response rate for survey involved university students in Malaysia was approximately 65%, the targeted questionnaires to be distributed will be $(234/0.65)$ 360, or 120 questionnaires for each faculty.

3.2. Research instrument

The questionnaire used in this study consist of three sections. Section A is to collect the respondent demographic information, Section B assesses the agreement level placed by the respondents on the five determinants for entrepreneurial intention, while Section C measures the respondents entrepreneurial intention level. The assessment was done via 5-points scales from "1" representing "Strongly disagree" to "5" indicating "Strongly agreed".

3.3. Analysis tool

3.3.1. Normality and reliability test

The normality and reliability of data collected from questionnaire sections B and C are assessed via Skewness & Kurtosis value and Cronbach Alpha respectively. Skewness & Kurtosis range of +/- 3 represents data is normally distributed. Meantime, Cronbach Alpha reliability value of greater than 0.60 is suggested to be adequate for testing the reliability of variables [31].

3.3.2. Pearson correlation test

Pearson Correlation is used in this study to address research objective 1 as well as hypotheses 1 to 5 (i.e., to assess the relationship between determinants of entrepreneurial intention and the level of entrepreneurial intention). Hypothesis are tested at significant level of 5%, while the strength of correlation is evaluated via level of correlation coefficient with the reference as shown in Table 2.

Strength of relationship	r
Very weak	0.00-0.19
Weak	0.20-0.39
Moderate	0.40-0.59
Strong	0.60-0.79
Very strong	0.80-1.00

3.3.3. ANOVA test

ANOVA test is applied to address research objective 2 and hypothesis 6, which is to explore is there any difference on the mean of entrepreneurial intention among the 3 faculties under study, which are faculty of engineering, social science and management. The ANOVA test is also done at significant level of 0.05 [31].

4. RESULT AND DISCUSSION

A total of 360 questionnaires were distributed with 199 responded which contributed to the respond rate of 55.3%. All questionnaires are screened and there is no issue of missing value across all the 199 returned questionnaires.

4.1. Normality and reliability test

Descriptive analysis was done on data collected from section B and C of questionnaire to generate the statistical value of Skewness, Kurtosis and Cronbach's Alpha. The statistic Skewness and Kurtosis value of all determinants and entrepreneurial intention level are within -2 and +2 which suggested that all numerical data collected are normally distributed [31]. In addition, the Cronbach's Alpha for all the independent and dependent variables are above 0.70 suggests that data collected are reliable and can be proceed for further analysis.

4.2. Address research objective 1

To address research objective 1 (i.e., to determine the relationship between holistic entrepreneurial determinants and entrepreneurial intention of undergraduates within a public university in Malaysia), Pearson correlation is used to test the correlation and strength of relationship between each independent variable (i.e., determinants of entrepreneurial intention) and dependent variable (entrepreneurial intention level). Result of Pearson correlation test at significant level of 0.05 is summarized in Table 3.

Research hypothesis	Correlation coefficient (r)	Significant	Results
H1	.812	.000	Supported
H2	.676	.002	Supported
H3	.708	.000	Supported
H4	.407	.043	Supported
H5	.735	.000	Supported

As refers to Table 3, the significant value for all correlation test is less than 0.05 suggested that the relationship between all the determinants of entrepreneurial intention (which are attitude, subjective norm, behavior control, entrepreneurship education and personality traits) with level of entrepreneurial intention are

significant, with correlation coefficient of positive 0.407 (moderate correlation) to 0.812 (very strong correlation). This finding echoed the finding revealed by prior scholars [19, 22, 27] which suggested that an individual's intention of performing a behavior is related to the individual's personality traits, behaviors as well as knowledge and skill learnt from the education system.

Finding from this study suggested that within the context of undergraduates within public university in Malaysia, entrepreneurial attitude is the most significant determinant that correlated with entrepreneurial intentions, with a "very strong" correlation coefficient of 0.812. Whereby subjective norm, behavior control and personality traits are suggested by respondents as strongly correlated with entrepreneurial intention. However, one of the interesting finding from this study is entrepreneurship education is viewed by undergraduate as determinant with moderate correlation with entrepreneurship intention. Entrepreneurship education is commonly viewed as the platform for students to gain the formal entrepreneur related knowledge and skill [23, 32-34]. Finding from this study suggested that perhaps education system might be not the main determinant to promote entrepreneur intention, instead, individual behavior and personality traits are the fundamental drivers for entrepreneurial intention, entrepreneur education is just served as a supporting system to enhance the entrepreneur knowledge and skill. The finding also echoes the study done by prior scholar [35, 36] which revealed that the effects of entrepreneurship education toward entrepreneurial intention is less significant as compared with attitude toward behavior [35] and personality trait of need for achievement, risk-taking propensity and internal locus of control [36]. As such, perhaps the content or syllabus of entrepreneurship education should consider to go beyond scope of entrepreneurship, and explore how to integrate behavioral and personality trait related components into the syllabus in order to promote entrepreneurial intention.

4.3. Address research objective 2

Data collected in section 3 of questionnaire (i.e., entrepreneurial intention level) is analyzed via ANOVA test to assess is there any difference on entrepreneurial intention based on Faculty. Homogeneity of variance is assumed for ANOVA test, as such, prior to ANOVA test, comparison of entrepreneurial intention variance among the three demographics (i.e., faculty of engineering, social sciences and management) need to be performed via Levene test at significant level of 0.05. The analysis result of Levene test is shown in Table 4.

Table 4. Levene test result

Levene statistic	Sig.
.266	.850

As refer to Table 4, the significant value of 0.850 (i.e., more than 0.05) suggested that there is sufficient evidence to support that variance of entrepreneurial intention for the three demographic or faculties are equal. As such, ANOVA test can be done accordingly. Result of ANOVA test is shown in Table 5.

Table 5. ANOVA analysis

	Sum of squares	df	Mean square	F	Sig.
Between groups	1.276	2	0.638	0.739	0.687
Within groups	169.148	196	0.863	-	-
Total	170.424	198	-	-	-

Based on analysis result of ANOVA as shown in Table 5, the significance value for the ANOVA test is 0.687, which is higher than 0.05. This suggested that there is no significant difference in term of undergraduates' entrepreneurial intention based on faculty. The finding is in line with the study done by prior scholar which revealed that demographic made no significant difference toward entrepreneurial intention [37]. Whereas, the teaching approach used to deliver the entrepreneurship courses might affect the level of entrepreneurial intention [38]. Hence, the insignificant difference of undergraduates' entrepreneurial intention among the three faculties is perhaps due to the entrepreneurship modules offered by the university to the three faculties is universal, in addition, the module is organized and managed by the same group of lecturers.

5. CONCLUSION

Finding from the study suggested all the five holistic entrepreneurial intention determinants (entrepreneurial attitude, subjective norms, perceived behavioral control, entrepreneurial education, and personality traits) are significantly correlated with entrepreneurial intention at significant level of 0.05. However, one of the remarkable finding is the correlation coefficient for factor "Entrepreneurial Education" is the lowest among all. The implication of this finding is perhaps the education of entrepreneurial education shall emphasize on cultivating students' entrepreneurial attitude, behavioral and personality rather than the theoretical part of entrepreneurial and entrepreneurship.

Entrepreneurship courses in the university under study are delivered to all the faculties by approximately 12 lecturers, based on the same course module and managed by the Panel of Entrepreneur. Finding from the research reveals that there is no significant difference in term of students' entrepreneurial intention across all the three faculties. The implication of finding is the teaching model of delivering entrepreneurship courses (common module, managed by a group of lecturers across the university) is the approach that could be adopted by other subject to enhance the consistency of teaching and learning process.

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