

THE INFLUENCE OF ENTREPRENEURIAL SKILLS ON BUSINESS START-UP INTENTION AMONG BUMIPUTRA STUDENTS

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ABSTRACT: Entrepreneurial education has been offered to university students for years. However, to what extent the entrepreneurial skills that students obtain from entrepreneurial education affect their business start-up intention is unknown. This study was geared towards examining the influence of entrepreneurial skills, i.e.: creativity, innovation and opportunity finding (CIO) on Bumiputra students' business start-up intention. A total of 252 Bumiputra students from a Malaysian public university were used as samples through self-administered questionnaire. Based on the analysis performed, creativity and innovation were found to positively and significantly influence Bumiputra students' business start-up intention. Meanwhile, opportunity finding was not significant. Therefore, it is important to develop creative and innovative individuals in encouraging entrepreneurship. This study further suggests that tertiary education institutions should consider using non-classroom learning approach in conducting entrepreneurial training such as learning entrepreneurship through experiential learning. The teachers or trainers should be deemed as facilitators rather than traditional knowledge givers. Lastly, the government is urged to promote a more entrepreneur-friendly business environment.

KEYWORDS: *Creativity; Entrepreneurship; Innovation; Intention; University Students*

1.0 INTRODUCTION

In Malaysia, the government has exerted various efforts to promote entrepreneurship as a career among the Malaysians, specifically the youths. In doing so, entrepreneurship has been offered as an academic course to tertiary students in most universities. The main purpose of offering entrepreneurial education is to equip the students with sufficient and competitive entrepreneurial skills. It is hoped that the students would turn up as entrepreneurs after their graduation or become entrepreneurial individuals. Although many efforts have been put forth, developing young entrepreneurs is still considered a challenging task because university graduates are not showing much interest in starting up their own business [1]. Becoming an entrepreneur is not a simple move. An entrepreneurial process does not only associate with solving managerial problems, but it is a more complex process which requires the application of entrepreneurial skills [2]. Entrepreneurial skills are important for an individual to involve in entrepreneurship and manage a successful business. The decision to become an entrepreneur is always an intentional and planned behavior [2-3]. Malaysian universities have spent a lot of resources on providing entrepreneurship courses and programs for their students. However, to what extent the entrepreneurial skills influence the students' intention to start a business still remains unanswered. Specifically, the influence of entrepreneurial skills on university students' intention to start up own business has not been widely assessed in the local context.

From the extant pieces of literature, several local studies have examined students' entrepreneurial intention [4-6]. According to behavioral intention theory, skills are considered capabilities which affects a person's behavioral intention. However, not many previous studies have examined entrepreneurial skills. In addition, most local studies which used students as a subject of the study did not cluster the sample into an appropriate group for example; they studied the students' intention from all races [5, 7-8]. Specifically, Bumiputra or "sons of the soul" should not be overlooked in understanding entrepreneurship in Malaysia [9]. Bumiputra which consists of Malays and other local natives such as Kadazan, Iban and Dusun forms the dominated population in Malaysia. It is indeed a group of people who require further investigation on their intention to start a business. As such, this study focuses on Bumiputra students.

Due to the above limitations and gaps, this study was to examine the influence of entrepreneurial skills on Bumiputra students' business start-up intention. It is hoped that this study can flourish the literature

on entrepreneurship and shed some lights on Bumiputra students' entrepreneurial intention.

1.1 Business Start-Up Intention

Intention to start-up a new business is closely related to entrepreneurship. Intention to start-up a business is compatible with entrepreneurial intention. Some researchers have used these two words interchangeably [10]. In addition, "intention to create new venture" and "entrepreneurial intention" could be used simultaneously [11]. Entrepreneurial intention can be referred as a person's intention to set up his/her own business in the future [12]. Focusing on intention is viable because it is difficult to measure actual behavior in a research [13].

Over the years, researchers have agreed that intention to start-up a business is affected by various factors such as entrepreneurial knowledge and skills [14]. Specifically, women entrepreneurs could use the business-related skills and knowledge to start new ventures and also start multiple businesses [15-16]. In addition, perceived entrepreneurial skills demonstrated a positive role in explaining the entrepreneurial intention of university students [17]. Intentional model argued that perceived feasibility is important in influencing a person's intention. Perceived feasibility can be explained as the ability or knowledge that is possessed by an individual. However, most studies that have adopted the model did not identify a specific type of feasibility. This study examined a specific type of feasibility namely entrepreneurial skills.

1.2 Entrepreneurial Education and Skills

Universities in the globe are offering various entrepreneurial courses to their students, ranging from full-time programs to part-time short courses. This is because entrepreneurship can be taught and learned through entrepreneurial education in various ways. Entrepreneurial training is an important element in the entrepreneurship development process [18]. Certain entrepreneurial qualities such as having entrepreneurial parents and innate risk-taking propensity cannot be taught but certain entrepreneurial competencies can be trained [19]. Entrepreneurial skills can be acquired [20] and one can obtain the said skills through well-designed entrepreneurial courses and training [21]. Specifically, women entrepreneurs have successfully gained new skills and knowledge relevant to running a business from entrepreneurial training [15]. In addition, students' entrepreneurial skills could be

successfully improved through interaction with real business people in various live-projects [22]. The finding showed that entrepreneurial skills are learnable. Mastering entrepreneurial skills are one of the outcomes of those entrepreneurial programs or courses. As universities are playing a role in providing competitive entrepreneurship education [23], they can provide formal and informal entrepreneurial education to learners in order to equip them with the necessary knowledge and skills [24-25].

Entrepreneurial skills are basic skills critical to start, manage, develop and create a successful business [20]. Specifically, entrepreneurial skills are important abilities that help entrepreneurs to integrate practices in achieving a business objective [21]. Moreover, entrepreneurs also need those skills to compete with competitors and survive in the industry. To date, there is still no consensus on the elements of entrepreneurial skills. For instance, researchers categorized entrepreneurial skills that women entrepreneurs learn from an entrepreneurial training into risk propensity, creativity and innovation, opportunity identification, role model, networking, leadership, motivation, attitude, social skills and business start-up skills [15]. Extant study has also identified several substantial entrepreneurial skills, such as critical thinking, problem-solving, risk-taking, innovation, creativity, and collaboration [26]. In addition, entrepreneurial skills can be measured as market awareness, creativity, and flexibility [27]. This study only examined three entrepreneurial skills which can be learned through entrepreneurial training namely creativity, innovation and opportunity finding (CIO) [28].

Creativity could change a symbolic domain in a culture. New songs, new ideas, and new machines are examples of outcomes from creativity [29]. It also refers to something new, such as a new solution, method, device or artistic object. Meanwhile, innovation can be explained as the capacity to introduce new processes, products or ideas to existing practices in an organization [30] in order to increase the organizational performance or effectiveness [31]. Creativity and innovation are closely related to the development of a particular business especially in today's knowledge economy which emphasizes on production and distribution of knowledge and information [32]. Creativity and innovation are also playing a significant role in affecting a person's entrepreneurial intention. For instance, innovativeness is significantly correlated to the entrepreneurial intention of university students [33]. Another study also found that students who complete their entrepreneurial courses are more creative and innovative, and show higher entrepreneurial intent than before [34]. Meanwhile, opportunity finding can be

delineated as identification of vacuums or openings in a changing market or business environment [28]. It is an important ability which differentiates a successful entrepreneur from a non-entrepreneur [35]. As stated by some scholars, one of the fundamental entrepreneurship research questions is “why, when and how some people, and not others, discover and exploit opportunities” [36]. The statement shows that people possess different ability in recognizing business opportunity, and entrepreneurs are those who are able to do so.

Based on the above discussion, the following framework and hypotheses are suggested for this study:

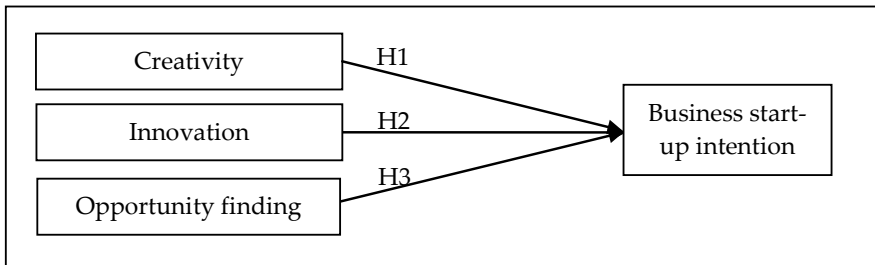


Figure 1: Research model

H1: Creativity significantly influences business start-up intention.

H2: Innovation significantly influences business start-up intention.

H3: Opportunity finding significantly influences business start-up intention.

2.0 METHODOLOGY

The population of this study comprised Bumiputra undergraduate students who registered in full-time Bachelor’s degree programs in a Malaysian public university. The students were from different faculties in the university, hence, proportionate stratified sampling was performed in this study to ensure the sufficient number of students was selected from each faculty. The selected samples must not start or own any businesses at the time data was collected. A total of 350 questionnaires were distributed to respondents and only 273 were returned. However, after the data screening process, 252 questionnaires were deemed usable. Thus, the response rate was 72%. Data were collected through self-administered questionnaires using closed-ended questions in a classroom setting.

All questions were adapted from previous studies [37-39] to ensure items' reliability and validity. Respondents were required to indicate their ratings based upon a five-point Likert scale, ranging from 1-Strongly Disagree to 5-Strongly Agree. Likert scale was appropriate in understanding people's perceptions. As the respondents were well-versed in English, no translation of the questionnaire was required.

3.0 RESULTS AND DISCUSSION

3.1 Background of Respondents

A total of 252 completed and usable responses were analysed to determine the respondents' profile. Most respondents were female (n=167; 66.27%) and from social sciences field of studies (n=221; 87.70%), such as business and management, accounting, mass communication and hotel and tourism management. Most students had part-time working experience (n=174; 69.05%). It is also worth mentioning that nearly half of the respondents' parents owned a business (n=132; 52.38%).

3.2 Reliability, Mean, Standard Deviation and Pearson Correlation

The values of internal consistency, mean, standard deviation and Pearson correlation coefficient (r) are summarised in Table 1. The items measuring the variables were deemed reliable and excellent because the Cronbach's alpha values for each of the variable was well above 0.70. In terms of entrepreneurial skills, innovation was rated the highest (m=4.20; SD=0.52), followed by opportunity findings (m=4.16; SD=0.54) and creativity (m=4.11; SD=0.63). In addition, the students also agreed that they possessed business start-up intention (m=3.64; SD=0.51).

Table 1 also depicts the Pearson correlation coefficient (r) between pairs of variables. All pairs of variables were found to have significant associations between one and another ($0.43 \leq r \leq 0.64$; sig < 0.01). The greatest r -value was recorded by two pairs of variables, namely creativity-innovation ($r=0.64$) and creativity-opportunity finding ($r=0.64$), while the lowest r -value was found between opportunity finding and business start-up intention ($r=0.43$). None of the r -values was greater than 0.70, hence, multicollinearity did not exist [40].

Table 1: Descriptive analysis and Pearson correlation

	α	Mean	Std. Dev	CR	IN	OF	BSI
CR	0.84	4.11	0.63	1			
IN	0.83	4.20	0.52	0.64**	1		
OF	0.83	4.16	0.54	0.64**	0.59**	1	
BSI	0.79	3.64	0.51	0.46**	0.45**	0.43**	1

CR: creativity; IN: innovation; PF: opportunity finding; BSI: business start-up intention

**Correlation is significant at the 0.01 level (2-tailed)

3.3 Multiple Regressions Analysis

This study performed a multiple regressions analysis to examine the hypotheses. Multiple regressions analysis requests that data should be normally distributed with non-existence of multicollinearity. The data achieved normality because both Kolmogorov-Smirnov (K-S) test and Shapiro-Wilk (S-W) test were found to be not significant (K-S, sig.=0.13) (S-W, sig.=0.27). In addition, non-multicollinearity was also found because VIF values were below 10 and tolerance values were greater than 0.1 (Table 2) [40].

The results from multiple regressions analysis (Table 2) further indicated that the model was statistically fit (F-statistic=18.84; p-value<0.01). The R-squared value was 0.47 (47%) which signified that creativity, innovation and opportunity finding explained business start-up intention as much as 47%. Meanwhile, other variables explained 53% of the variation in business start-up intention. The R-squared value could be considered as respectable because it was above 0.4 [40].

All the three factors positively influenced business start-up intention. However, in terms of their significance, creativity ($\beta=0.41$; p-value<0.01) and innovation ($\beta=0.27$; p-value<0.05) were found to significantly influence business start-up intention. A non-significance result was recorded for opportunity finding ($\beta=0.12$; p-value>0.05). As such, creativity was identified as more important than innovation in influencing business start-up intention. As for the hypotheses testing results, the statistical results proved that H1 and H2 were supported, while H3 was not supported.

Table 2: Multiple regressions analysis

Model	Standardized Beta	t	Sig.	Tolerance	VIF
CR	0.41	3.32	<0.01	0.32	2.87
IN	0.27	2.23	0.03	0.56	2.11
OF	0.12	1.16	0.25	0.27	1.35
F-statistics	18.84 (p-value<0.01)				
R-squared	0.47				

CR: creativity; IN: innovation; PF: opportunity finding

Dependent variable: BSI: business start-up intention

3.4 Discussion

Statistical results confirm that creativity and innovation play a positive and significant role in affecting students’ business start-up intention. The findings support previous studies’ notion that creativity and innovation are two important elements in developing successful entrepreneurial individuals [33-34]. Apart from the traditional entrepreneurial and business knowledge that students learn from the lectures, students nowadays have many chances and various channels to access new information. For instance, they could easily obtain new information from a variety of Internet sources such as search engines and social media sites. The acquisition of new information helps to stimulate their thinking, have more creative ideas and spark more new ideas. Innovations are building blocks of the future economy [2]. Specifically, new developments in technology are important for the country to leap-frog others and create a better economy [41]. Creativity and innovation are inter-related. Students are able to acquire new information and new knowledge to generate new ideas, gearing toward innovativeness. They possess both creativity and innovation which in turn, influence their business start-up intention. Nevertheless, opportunity finding is not a significant factor which affects business start-up intention in this study. This might be attributed to the fact that respondents are full-time university students. They might not have enough skills and experience in analyzing environmental situation. They could also be less sensitive to the real business environment. This is probably because they mainly receive classroom or traditional pedagogical type of entrepreneurial training. Furthermore, lack of usable resources could also be a reason that they are not able to recognize a business opportunity.

4.0 CONCLUSION

The aim of this study is to identify the influence of entrepreneurial skills namely creativity, innovation and opportunity finding (CIO) on Bumiputra students' business start-up intention. Based on the analysis, creativity and innovation are the two significant factors that influence Bumiputra student's business start-up intention. This study contributes to both literature and practice. For instance, it adds to the existing literature by focusing on the relationship between CIO and intention. It also shed lights on Bumiputra university students' business start-up intention.

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REFERENCES

- [1] N. Mohamad, H.E. Lim, N. Yusof, M. Kassim and H. Abdullah, "Estimating the choice of entrepreneurship as a career: the case of Universiti Utara Malaysia", *International Journal of Business and Society*, vol. 15, no. 1, pp. 65-80, 2014.
- [2] R.D. Hisrich, M.P. Peters and D.A. Shepherd, *Entrepreneurship*, 10th ed. New York: McGraw-Hill, 2017.
- [3] N.F. Krueger, M.D. Reilly and A.L. Carsrud, "Competing models of entrepreneurial intentions", *Journal of Business Venturing*, vol. 15, no. 5-6, pp. 411-432, 2000.
- [4] Y.K. Ooi, C. Selvarajah and D. Meyer, "Inclination towards entrepreneurship among university students: an empirical study of Malaysian university students", *International Journal of Business and Social Science*, vol. 2, no. 4, pp. 206-220, 2011.
- [5] A.Y. Md Yasin, N.A.A. Nik Mahmood and N.A. Nik Jaafar, "Students' entrepreneurial inclination at a Malaysian polytechnic: a preliminary investigation", *International Education Studies*, vol. 4, no. 2, pp. 198-207, 2011.
- [6] Z.M. Zain, A.M. Akram and E.K. Ghani, "Entrepreneurship intention among Malaysian business students", *Canadian Social Science*, vol. 6, no. 3, pp. 34-44, 2010.

- [7] T. Moi, Y.L. Adeline and M.L. Dyana, "Young adult responses to entrepreneurial intent", *Journal of Arts, Science & Commerce*, vol. 2, no. 3, pp. 37-52, 2011.
- [8] A.M. Nasurdin, N.H. Ahmad and C.E. Lin, "Examining a model of entrepreneurial intention among Malaysians using SEM procedure", *European Journal of Scientific Research*, vol. 33, no. 2, pp. 365-373, 2009.
- [9] C. Boulton and P. Turner, *Mastering Business in Asia: Entrepreneurship*. Singapore: John Wiley and Sons, 2005.
- [10] C.L. Shook and C. Bratianu, "Entrepreneurial intent in a transitional economy: an application of the theory of planned behavior to Romanian students", *International Entrepreneurship Management Journal*, vol. 6, no. 3, pp. 231-347, 2010.
- [11] M. S. Schwartz, "Beyond the bottom line: a shifting paradigm for business," in *Doing well and good: the human face of the new capitalism*, J. Friedland, Ed. Charlotte, North Carolina: Information Age Publishing, 2009, pp. 131-147.
- [12] M. van Gelderen, M. Brand, M. van Praag, W. Bodewes, E. Poutsma and A. van Gils, "Explaining entrepreneurial intentions by means of the theory of planned behavior", *Career Development International*, vol. 13, no. 6, pp. 538-559, 2008.
- [13] J. Wu, "The impact of corporate supplier diversity programs on corporate purchasers' intention to purchase from women-owned enterprises: an empirical test", *Business & Society*, vol. 49, no. 2, pp. 359-380, 2010.
- [14] H.C. Koh, "Testing hypotheses of entrepreneurial characteristics: a study of Hong Kong MBA students", *Journal of Managerial Psychology*, vol. 11, no. 3, pp. 12-25, 1996.
- [15] M. Botha, G. Nieman and J. van Vuuren, "Enhancing female entrepreneurship by enabling access to skills", *Entrepreneurship Management*, vol. 2, no. 4, pp. 479-493, 2006.
- [16] M. Botha, G. Nieman and J. van Vuuren, "Measuring the effectiveness of the Women Entrepreneurship Programme on potential, start-up and established women entrepreneurs in South Africa", *South African Journal of Economic and Management Sciences*, vol. 10, no. 2, pp. 163-183, 2007.
- [17] F. Linan, "Skill and value perceptions: how do they affect entrepreneurial intentions?", *International Entrepreneurship and Management Journal*, vol. 4, no. 3, pp. 257-272, 2008.
- [18] J.A. Timmons, *New Venture Creation*, 5th ed. Burr Ridge: Irwin McGraw-Hill, 1999.
- [19] L.A. Marques and C. Albuquerque, "Entrepreneurship education and the development of young people life competencies and skills", *ACRN Journal of Entrepreneurship Perspectives*, vol. 1, no. 2, pp. 55-68, 2012.

- [20] S. S. Adeyemo, "Understanding and acquisition of entrepreneurial skills: a pedagogical re-orientation for classroom teacher in science education", *Journal of Turkish Science Education*, vol. 6, no. 3, pp. 57-65, 2009.
- [21] M. Lackeus, "Developing entrepreneurial competencies: an action-based approach and classification in education", M.S. Thesis, Department of Technology Management and Economics, Chalmers University of Technology, Gothenburg, Sweden, 2013.
- [22] J. Chang and A. Rieple, "Assessing students' entrepreneurial skills development in live projects", *Journal of Small Business and Enterprise Development*, vol. 20, no. 1, pp. 225-241, 2013.
- [23] A. Hofer, *Promoting successful graduate entrepreneurship at the Technical University Ilmenau, Germany*. Paris: OECD Publishing, 2013.
- [24] L. Pittaway and J. Cope, "Simulating entrepreneurial learning: integrating experiential and collaborative approaches to learning", *Management Learning*, vol. 38, no. 2, pp. 211-233, 2007.
- [25] C. Claudia, "The role of extracurricular activities and their impact on learning process", *Management*, vol. 26, no. 125, pp. 1143-1148, 2014.
- [26] T.M. Cooney, *Entrepreneurship skills for growth-oriented businesses*. Copenhagen: Danish Business Authority, 2012.
- [27] H. Oosterbeek, M. Praag and A. Ijsselstein, "The impact of entrepreneurship education on entrepreneurship skills and motivation", *European Economic Review*, vol. 54, no. 3, pp. 442-454, 2010.
- [28] A.J. Antonites and J.J. van Vuuren, "Inducing entrepreneurial creativity, innovation and opportunity-finding skills", *South African Journal of Economic and Management Sciences*, vol. 8, no. 3, pp. 255-271, 2005.
- [29] C. Mihaly, "Flow and creativity", *NAMTA Journal*, vol. 22, no. 2, pp. 60-97, 1997.
- [30] R.F. Hurley and G.T.M. Hult, "Innovation, market orientation, and organizational learning: an integration and empirical examination", *The Journal of Marketing*, vol. 62, no. 3, pp. 42-54, 1998.
- [31] F. Damanpour, "Organizational innovation: a meta-analysis of effects of determinants and moderators", *Academy of Management Journal*, vol. 34, no. 3, pp. 555-590, 1991.
- [32] K.K. Sarri, I.L. Bakouros and E. Petridou, "Entrepreneur training for creativity and innovation", *Journal of European Industrial Training*, vol. 34, no. 3, pp. 270-288, 2010.
- [33] D.L. Bolton and M.D. Lane, "Individual entrepreneurial orientation: development of a measurement instrument", *Education + Training*, vol. 54, no. 2/3, pp. 219-233, 2012.

- [34] S. Robinson and H.A. Stubberud, "Elements of entrepreneurial orientation and their relationship to entrepreneurial intent", *Journal of Entrepreneurship Education*, vol. 17, no. 2, pp. 1-12, 2014.
- [35] A. Ardichvili, R. Cardozo and S. Ray, "A Theory of entrepreneurial opportunity identification and development", *Journal of Business Venturing*, vol. 18, no. 1, pp. 105-123, 2003.
- [36] S. Shane and S. Venkataraman, "The promise of entrepreneurship as a field of resear", *Academy of Management Review*, vol. 25, no. 1, pp. 217-226, 2000.
- [37] A. Khedhaouria, C. Gurău and O. Torrès, "Creativity, self-efficacy, and small-firm performance: the mediating role of entrepreneurial orientation", *Small Business Economics*, vol. 44, no. 3, pp. 485-504, 2015.
- [38] S.G. Scott and R.A. Bruce, "Determinants of innovative behavior: a path model of individual innovation in the workplace", *Academy of Management Journal*, vol. 37, no. 3, pp. 580-607, 1994.
- [39] F. Liñán and Y.W. Chen, "Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions", *Entrepreneurship Theory and Practice*, vol. 33, no. 3, pp. 593-617, 2009.
- [40] J. Pallant, *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*, 4th ed. Australia: Allen & Unwin, 2011.
- [41] A. Abdullah and Z. Safari, "Industry collaboration program (ICP): empowering technology development for national economic growth", *Journal of Advanced Manufacturing Technology*, vol. 12, no. 1(2), pp. 159-172, 2018.