



THE INFLUENCE OF ENTREPRENEURSHIP
EDUCATION ON MALAYSIAN GRADUATES

BY

AINON JAUHARIAH BINTI ABU SAMAH

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International Islamic University Malaysia

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ABSTRACT

The potential economic benefits of entrepreneurship have tempted governments and education institutions to embed entrepreneurship in the formal education system. Although past studies have failed to conclusively link education and entrepreneurial behavior, there seems to be a general belief that entrepreneurship education increases students' intention to become entrepreneurs, help them to identify opportunities and increase the number of business they start. However, there is no standard model to depict the relationship between entrepreneurship education and entrepreneurship. Hence, determination of entrepreneurship education's impact on students is challenging and results of impact studies can be misleading and/or incomparable from one to another. The current study combines the ideas of trait and behavioral school of thoughts to develop a model which relates entrepreneurship education and graduate entrepreneurship. The trait approach seems to indicate that entrepreneurship is the privilege of those who are born with certain characteristics and education will not help to create entrepreneurs. Behaviorists, in contrast argue that entrepreneurship is a rational action. Since education can condition one's thinking process, it is deduced that entrepreneurship education can result in entrepreneurship. However, one's thinking capacity is limited and often times, personality influences even the most rational decision maker. Considering the above, the current study extends the Theory of Planned Behavior (TPB) to test the impact of entrepreneurship education on university graduates. The suggested model proposes that entrepreneurship education is a premeditated act and the relationship between entrepreneurship education and intention to become an entrepreneur is mediated by subjective norm (SN), attitude towards entrepreneurship (ATE) and perceived entrepreneurial control (PEC). Entrepreneurship education is also hypothesized to influence proactiveness. To address the methodological gap in the extant literature whereby only entrepreneurial intention is often tested instead of the actual act of founding a business, this study adopts a mixed-method approach, combining a pre and post-test survey method with a qualitative interview. Data for the pre-test survey were drawn using stratified sampling of five public universities and four private universities of different categories. Respondents of the survey are final semester undergraduate students of full-fledged bachelor of entrepreneurship program, business program students with at least one entrepreneurship course in their program requirement and students of programs which have no entrepreneurship course at all. The respondents to the pre-test survey were again approached between six to 36 months after graduation to test whether their views towards entrepreneurship have changed. The results of both surveys confirm the hypothesized relationship between entrepreneurship education and SN, ATE, PEC and proactiveness but the mediation effect of SN, ATE and PEC in the relationship between entrepreneurship education and entrepreneurial intention is only partial. Surprisingly, moderation tests show that it is business program which moderates the relationship between SN, ATE, PEC and proactiveness to entrepreneurial intention and not full-fledged entrepreneurship program. Interviews with selected respondents of the two surveys further reveal that business students are more alert of opportunities available and are quicker to capitalize on them compared to their counterparts from full-fledged entrepreneurship degree program. The latter are found to be more timid and too careful in weighing their business start-up options.

خلاصة البحث

لقد أغرت الفوائد الإقتصادية المحتملة لريادة الأعمال الحكومات والمؤسسات الحكومية لتضمين ريادة الأعمال في نظام التعليم الرسمي. وعلى الرغم أن الدراسات السابقة فشلت في الربط بشكل حاسم بين التعليم وسلوك ريادة الأعمال، إلا أنه يبدو أن هناك اعتقاد عام أن تعليم ريادة الأعمال يزيد من رغبة الطلاب في أن يصبحوا رواد أعمال، كما يساعدهم على تحديد الفرص وزيادة عدد الأعمال التي يبدؤونها. ومع ذلك، ليس هناك نموذج معياري لتصوير العلاقة بين تعليم ريادة الأعمال وريادة الأعمال. لذلك، تحديد أثر تعليم ريادة الأعمال على الطلاب هو عبارة عن تحدي ونتائج دراسات التأثير قد تكون مضللة و/أو غير قابلة للمقارنة من واحدة لأخرى. تجمع الدراسة الحالية أفكار مدرسة السلوك والسمات للأفكار لتطوير نموذج يربط تعليم ريادة الأعمال وخريج ريادة الأعمال. يبدو أن طريقة السمعة تشير أن ريادة الأعمال هي منحة لأولئك الذي يولدون بصفات معينة وأن التعليم لن يساعد على خلق رواد أعمال. وعلى العكس من ذلك فإن السلوكيين يجادلون بأن ريادة الأعمال هي عمل عقلائي. وحيث أن التعليم يمكنه أن يكيف عملية تفكير الشخص، يستنتج من ذلك أن تعليم ريادة الأعمال يمكنه أن ينتج ريادة أعمال. ومع ذلك، فإن قدرة الشخص على التفكير محدودة وفي أغلب الأحيان تؤثر الشخصية حتى على أكثر شخص عقلائي في اتخاذ القرار. وبالنظر لما ذكر أعلاه، توسع الدراسة الحالية نظرية السلوك المخطط لاختبار تأثير تعليم ريادة الأعمال على خريجي الجامعة. يوحي النموذج المقترح أن تعليم ريادة الأعمال هو تصرف سابق التصميم وأن العلاقة بين تعليم ريادة الأعمال والرغبة في أن يصبح الشخص رائد أعمال يتوسطهما معيار شخصي، والموقف تجاه ريادة الأعمال وسيطرة ريادة الأعمال الملاحظة. كما أنه يفترض أن تعليم ريادة الأعمال تؤثر على القدرة الاستباقية. ومعالجة الفجوة المنهجية في الدراسات المتزامنة حيث تختبر الرغبة لريادة الأعمال فقط غالبا بدلا من التصرف الحقيقي لتأسيس عمل، تبنت هذه الدراسة منهجية الطريقة-المختلطة، بتركيب طريقة قبل وبعد المسح مع مقابلة نوعية. البيانات لاختبار ما قبل المسح تم جمعها باستخدام عينة الطريقة الشرائحية من خمس جامعات حكومية وأربع جامعات خاصة لمجموعات مختلفة. الذين تم اختيارهم كمستجيبين هم طلاب جامعيين في آخر فصل دراسي لبرنامج ريادة أعمال متكامل، وطلاب برنامج الأعمال التجارية مع مادة ريادة أعمال واحدة على الأقل في متطلبات برنامجهم وطلاب في برامج ليس فيها أي مادة ريادة أعمال نهائيا. ومن ثم تم الاقتراب من المستجيبين لاختبار ما قبل المسح بين ستة إلى 36 شهرا بعد التخرج لاختبار فيما إذا كانت آرائهم باتجاه ريادة الأعمال قد تغيرت. أكدت نتائج كلا المسحين العلاقة الافتراضية بين تعليم ريادة الأعمال والمعيار الشخصي والموقف تجاه ريادة الأعمال وسيطرة ريادة الأعمال الملاحظة والقدرة الاستباقية ولكن تأثير التوسط للمعيار الشخصي والموقف تجاه ريادة الأعمال وسيطرة ريادة الأعمال الملاحظة في العلاقة بين تعليم ريادة الأعمال والرغبة في ريادة الأعمال كان جزئيا فقط. ومما كان مفاجئا، أن اختبارات التوسط أظهرت أن برنامج الأعمال التجارية هو الذي يتوسط العلاقة بين المعيار الشخصي والموقف تجاه ريادة الأعمال وسيطرة ريادة الأعمال الملاحظة والقدرة الاستباقية إلى الرغبة في ريادة الأعمال وليس برنامج ريادة الأعمال الكامل. وقد كشفت مقابلات إضافية مع مستجيبين مختارين من كلا المسحين أن طلاب الأعمال التجارية أكثر يقظة للفرص المتوفرة وأسرع للاستفادة منها بالمقارنة مع قرنائهم من برامج درجة ريادة الأعمال الكاملة. لقد وجد أن الأخيرين أكثر خوفا ولهم عناية فائقة في وزن اختيارات أعمالهم الأولية.

APPROVAL PAGE

The thesis of Ainon Jauhariah Binti Abu Samah has been approved by the following:

Azura Omar
Supervisor

Suhaimi Mhd Sarif
Co-Supervisor

Arif Hassan
Internal Examiner

Kalsom Abd Wahab
External Examiner

Saridan Abu Bakar
External Examiner

Assoc. Prof. Dr. Adlina Ariffin
Chairman

DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Ainon Jauhariah Binti Abu Samah

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CHAPTER ONE

INTRODUCTION

This chapter preambles an attempt to study the impact of entrepreneurship education on graduate entrepreneurship intention and graduate business start-up process in Malaysia. Graduate entrepreneurship in this study is operationalized as formation of new business by graduates within six to 36 months after graduation from bachelor's degree programs. The chapter begins with a snapshot of entrepreneurship benefits and the subsequent interest of scholars in understanding the characteristics of entrepreneurs, entrepreneurial intention and the process of becoming an entrepreneur. The discussion is followed by an outlook of entrepreneurship in education systems, graduate entrepreneurship phenomenon and Malaysia's experience with entrepreneurship. The chapter also outlines the research problem, significance of the study and research questions.

1.1 INTRODUCTION

Entrepreneurship is an intricate phenomenon encompassing multiple activities from opportunity recognition (Renko, Shrader & Simon, 2012) to business formation (Bosma, Hessels, Schutjens, Van-Praag & Verheul, 2011; Low & MacMillan, 1988). Although in the context of this research, Low & MacMillan's (1988) definition of entrepreneurship (i.e. formation of a new business) is adopted it should be noted that in the extant literature the debate on how entrepreneurship is to be specified still continues. Nonetheless scholars since Schumpeter and Kirzner have had a united view on the importance of having entrepreneurs to spur countries' economic growth (see for instance Heinonen & Hytti, 2016; Hafer, 2013). According to Taalia (2010), without

entrepreneurs there will not be any innovation as they are the ones who make the calculated risks of developing new technologies or introducing them into business processes (Galindo & Mendez-Picazo, 2013). Korsgaard, Anderson & Gaddefors (2016) iterated that entrepreneurship is often seen as the source of economic renewal due to entrepreneurs' attempt to maintain business sustainability and to create competitive edge amidst market competition.

There has been a plethora of evidence of entrepreneurial benefits on the economy (see for example Iglesias-Sanchez, 2016; Venugopal, 2016; Hall, Deneke & Lenox, 2010; Leeson & Boettky, 2009; Minniti & Levesque, 2008; Hegarty & Jones, 2008; Nabi, Holden & Walmsley, 2006). They range from new enterprise formation (Lackeus & Middleton, 2015; Taormina & Lao, 2007; Zhang & Yang, 2006) to job creation or alternative employment option (Owusu-Mintah, 2014; Askun & Yildirim, 2011; Fairlie & Holleran, 2011; Ghasemi et. al., 2011; Zhao, 2011; Wdowiak, Almer-Jarz & Breitenecker, 2009) as well as innovation (Galindo & Mendez-Picazo, 2013; Anderson, 2011; Cheung, 2008; Luthje & Franke, 2003).

Given the economic benefits of entrepreneurship, it is not surprising that developing entrepreneurs has become a national agenda in many countries (Heinonen & Hytti, 2016; Pinho & Sampaio de Sa, 2014). Not doing so, according to Edoho (2016) in citing the example of African countries, may result in poverty and high cases of unemployment. Nonetheless, researchers like Llewellyn & Wilson (2003) and more recently Bouette & Magee (2015) stressed that knowledge of entrepreneurs' profile is necessary to assist policy makers to better support entrepreneurship. This is perhaps the reason for entrepreneurship scholars' forty-year fixation on profiling entrepreneurs (Nicolaou & Shane, 2008).

The search for 'who entrepreneurs are' has initially been done by exploring their personality traits. Chapman & Brown (2014) and Danzinger, Rachman-Moore & Valency (2008) suggested that individuals have a career anchor i.e. personality characters that match certain occupation. Once a person has found the fit between his character and the job, the individual is not likely to change his occupation (Krieshok, Black & McKay, 2009). Thus personality is a good indicator to know who will become an entrepreneur and who to remain as one. According to Luca, Cazan & Tomulescu (2013), facets of personality like achievement motivation, locus of control, risk taking propensity, proactiveness and tolerance to ambiguity are among the commonly highlighted characteristics associated with entrepreneurs. Other pro-entrepreneurship psychological traits that have often been tested are extraversion (Nicolaou & Shane, 2008) and innovativeness (Smith, Bell & Watts, 2014; Fairlie & Holleran, 2012).

Nonetheless efforts on understanding entrepreneurs from the perspective of personality have not been overly fruitful as research findings have failed to converge (Gartner, 1989; Keril, 2012). Rauch & Frese's (2007) meta-analysis for instance showed that need for achievement, generalized self-efficacy, tolerance to stress, proactiveness and need for autonomy correlated with business creation and success. Conversely, De Phillis & Reardon (2007) found that need for achievement was a non-significant personality dimension for entrepreneur in certain cultures while Soo & Poh (2004) showed need for autonomy to be an insignificant personality trait for entrepreneurs. On another extreme, Engle & Schmidt (2011) reported that there was no statistically significant difference between personality traits of entrepreneurs and those of sales representatives in their USA sample. Engle & Schmidt's (2011) findings basically support Gartner's (1989) suggestion that from the personality point of view,

entrepreneurs are not as unique as they are thought to be. Hence knowing their personalities may not be helpful in understanding how do they become entrepreneurs.

Although personality is still being studied in relation to entrepreneurship, the issues mentioned above have to a certain extent, dimmed its limelight. Many researchers including Storen (2014), Degeorge & Fayolle (2011), Meek, Pachecho & York (2011) & Iakovleva, Kolvereid & Stephen (2011) have shifted their focus to the process of becoming an entrepreneur and the role of intention in the process as an alternative to understanding entrepreneurship. Degeorge & Fayolle (2011) iterated that starting a business requires planning thus the act must be deliberate instead of ‘automatic’ (based on personal traits that one possesses) as proposed by trait theorists. According to Soo & Wong (2004), the process of starting a new venture begins with intention. Entrepreneurial intention on the other hand have been shown to be dependent on social norm (Franco, Haase & Lautenschlager, 2010; Iakovleva, Kolvereid & Stephen, 2011), attitudes (Soomro & Shah, 2015) and motivation (Nabi & Linan, 2011) as well as perceived self-efficacy (Drnovsek, Wincent & Cardon, 2010).

1.2 EDUCATION AND ENTREPRENEURSHIP

The above mentioned promises of entrepreneurship have enticed many governments and learning institutions to offer entrepreneurship courses and programs (Lee & Wong, 2004) and they will probably continue to do so (Blenker et. al., 2014). In the European Union (EU), for instance, The European Commission has included entrepreneurship in their education systems since year 2007 through Lifelong Learning Programme to better prepare students to be a productive member of the society (Cotoi et.al., 2011). The programme covers students of all ages through its four sub-programs (Comenius for

schools, Erasmus for higher education, Leonardo da Vinci for vocational education and training and Grundtvig for adult education).

In the USA on the other hand, Pittaway & Edwards (2012) reported that there are over 2,200 entrepreneurship courses, 1,600 schools with entrepreneurship activities and 277 endowed positions for entrepreneurship. Although Pittaway & Edwards (2012) did not elaborate in detail on the coverage or delivery mode of the courses or the content of the entrepreneurship activities, their study added to the reports on interest shown in entrepreneurship education. Such interest by both the government and learning institutions is in line with Askun & Yildirim's (2011) suggestion that an adequate knowledge base must be available at a national level in order to fully reap the benefits of entrepreneurship. This is expected since educated entrepreneurs can easily identify opportunities available in the market and offer befitting offerings (Roinenen & Ylinenpaa, 2009).

Moreover, as Schwarz, Wdowiak, Almer-Jarz & Breiteneker (2009) explained, ventures started by educated entrepreneurs usually have higher success rate compared to those created by entrepreneurs who are less educated. This is perhaps attributed to education's role in reducing one's liability of being new in the market and in business itself and in equipping entrepreneurs with the required communication skill (Ulvenblad et. al., 2013). Furthermore, according to DeTienne & Chandler (2004), entrepreneurial education correlates with the number of innovative opportunities generated. In other words, entrepreneurs who are specifically educated to become entrepreneurs can create new opportunities instead of merely recognizing them and capitalizing on them accordingly. Entrepreneurship education has also been found to show positive correlation with intention to form a new business (Storen, 2014) as well as the actual

formation of new ventures (Rauch & Hulsink, 2015; Kolvereid & Moen, 1997). As such it came as no surprise that even when the question of whether entrepreneurship can be taught or is it a birth-right is still being debated (Lackeus & Middleton, 2015), evidences are accumulating in support of the positive impact of education in general and entrepreneurship education in particular on new business formation (Jorge-Moreno, Castillo & Triguero, 2012).

1.2.1 Entrepreneurship education in higher learning institutions

At the tertiary level, Gurol & Atsan (2006) and Matlay (2008) among others have documented the offering of entrepreneurship education in various parts of the world. The current fixation with entrepreneurship education particularly at the higher education level perhaps lies in what Matlay & Carey (2007) generalized as the belief that entrepreneurship education is the most effective method to pave graduates' way into self-employment as well as salaried work. The transition from being a student to an entrepreneur or salaried worker is probably eased by entrepreneurship education since such education can change students' value, norms and perceptions (Brancu, Munteanu, & Gligor, 2012).

According to Anderson (2011), universities have a critical role in educating entrepreneurs. The assertion was made as universities are the centre of higher knowledge (Samah & Omar, 2011). Such knowledge cannot be gained from daily routines. Furthermore, universities are ideal grounds for entrepreneurial training because their students are at the appropriate life stage for their personality traits and stimulus of entrepreneurial behaviour to integrate (Zainuddin, Abdul Rahim & Mohd Rejab, 2012). Therefore, university students can be rightfully moulded to become entrepreneurs while they are still studying or upon graduation.

The high regards for universities in educating entrepreneurs or potential entrepreneurs seem fitting since in its Latin origin universities signify the congregation of scholars (Samah & Omar, 2011). Anderson (2011) further asserted that although academicians cannot replicate experiences of entrepreneurs, they can theorize on the experiences and create new knowledge in the process. Universities can also teach students to be critical thinkers and make students successful innovators instead of mere creative builders (Anderson, 2011). Overall, it appears that entrepreneurship education ought to be placed high on the national and university level agenda if a country wants to advance its economic growth via entrepreneurship.

Based on past studies (for instance Rauch & Hulsink, 2015; Roinenen & Ylinenpaa, 2009; DeTienne & Chandler 2004; Kolvereid & Moen, 1997) it is expected that as more and more learning institutions particularly higher learning ones embark on entrepreneurship education, more entrepreneurs are produced. Unfortunately, as Matlay & Carey (2007) highlighted, the expectation is often left unmet. In the UK, they reported that only a meagre one percent of all university and college graduates become entrepreneurs. Mwasalwiba, Dahles & Wakkee (2012) documented a similar upsetting trend in Tanzania. They blamed the small number of graduates who found their own business to a number of factors including poor implementation of entrepreneurship-friendly policy at the grass-root level.

The small number of businesses formed by graduates was also evident in China where entrepreneurship education is not an alien practice. Zhao (2011) reported that the government of China emphasized on job creation through entrepreneurship after the country's 2008 economic crisis. The government published a guide book on job creation through entrepreneurship although the implementation was delegated to

individual departments supervising over 2000 provinces. Despite the government's various initiatives, only one percent of the overall Chinese graduates between 2007 and 2009 were involved in entrepreneurial activities and their success rates in Guangzhou and Zhejiang Provinces were merely one and four percent respectively as compared to 20 to 30 percent of graduate entrepreneurs in the developed countries and 20 percent success rate worldwide. The above statistics seem to trail Nabi & Linan's (2011) finding that graduates in the developing countries created a relatively small number of new ventures. Given Matlay & Carey's (2007) findings in the UK, it seems that certain developed countries too suffer from the same problem.

The disparity between entrepreneurship education and the number of graduate entrepreneurs is rather puzzling since university students have often been reported as having high intention to become entrepreneurs (Mohamad et. al., 2015; Nabi & Linan, (2011). The gap between education and the number of ventures started by graduates is also alarming especially when considering the rate of unemployment among graduates. It is perplexing that graduates who have received entrepreneurship education opt either for salaried job or unemployment instead of being graduate entrepreneurs. Anderson (2011) speculated that the complex nature of entrepreneurship makes it difficult for top-down governmental policies (including teaching entrepreneurship in universities) to truly work their magic. Each entrepreneur needs a different skill and knowledge and all of them may have different attitude as well. With this scenario, an investigation into the impact of entrepreneurship education on graduate entrepreneurship continues to be perpetually relevant.

1.3 ENTREPRENEURSHIP AND MALAYSIAN GOVERNMENT'S PLANS

Entrepreneurship has a deep root in Malaysia especially for the Chinese and the Indian Muslim communities (Ariff & Abubakar, 2003). Hamidon (2009) and Ariff & Abubakar (2003) traced the culture of entrepreneurship in Malaysia to the fifteenth century when Malacca was the region's trade center. Consequently it is not astounding that the Malaysian government has long recognized the role of entrepreneurship in the nation's development and concerted effort has been garnered in developing entrepreneurship in the country. According to Mohamed, Rezai, Shamsudin & Mahmud (2012) entrepreneurship has been embedded in Mathematics education at the primary school level and in integrated living skill subject at the lower secondary level since the early 1990s. At the tertiary level on the other hand, the Malaysian Ministry of Education had introduced the Malaysian Education Blueprint for Higher Education (MEBHE) in which holistic, entrepreneurial and balanced graduate is listed as a key outcome to be established between 2015 and 2025.

As a matter of fact, the government has consistently incorporated entrepreneurship in its major economic policies beginning with the New Economic Policy (NEP) in 1970 (Outline Perspective Plan II, n.d) until the New Economic Model (NEM) which was announced in 2010 (National Economic Advisory Council, 2010). The government's entrepreneurial stimulus comes in various forms including financial assistance, physical infrastructure, advisory services (Ariff & Abubakar, 2003) as well as education and training (Hamidon, 2013; Othman & Faridah, 2010; Cheng, Chan & Mahmood, 2009). Below are among the examples of Malaysian government's support for entrepreneurship: