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# ENTREPRENEURIAL INTENTION AMONG SCIENCE AND NON-SCIENCE STUDENTS AT UNIVERSITI MALAYSIA SABAH

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SEKOLAH PERNIAGAAN & EKONOMI UNIVERSITI MALAYSIA SABAH 2007



## **DECLARATION**

The materials in this dissertation are original except for the quotations, excerpts, summaries and references, which have been duly acknowledged.

ZANTI ROSMI BINTI ZAKARIA PS05-002(K)-028 13<sup>th</sup> of July 2007



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#### ABSTRACT

The purpose of this study is to analyze the entrepreneurial intention and the antecedents among science and non-science students at University Malaysia Sabah (UMS). This paper determines the effect of perceived desirability and feasibility to intention towards entrepreneurship. This study will also look into how demographic factors such as gender, ethnic and family background influence the relationship between perceived desirability and feasibility with entrepreneurial intention. The respondents were the final year undergraduate students for the year of 2006/2007. The results show that science students are more entrepreneurial compared to nonscience students. Attitude is the strongest factor that influences the intention to start a new business for both samples. Self-efficacy is found has significance effects on intention to new business creation but social norm does not has significant effect on intention for Science students. Meanwhile, among non science students, self-efficacy does not have significant effect on intention and social-norm has significant effect on intention to new business creation. This research may be beneficial to policy makers and students as they will know how and which one of the variables they need to change to increase the intention to start up the business.



#### ABSTRAK

# "NIAT KEUSAHAWANAN: PERBANDINGAN ANTARA PELAJAR SAINS DAN BUKAN SAINS DI UNIVERSITI MALAYSIA SABAH"

Tuiuan kaii selidik ini adalah untuk mengenalpasti niat untuk menjadi usahawan dan faktor-faktor yang menyumbangkannya terhadap pelajar sains dan bukan sains di Universiti Malaysia Sabah. Kajian ini mengkaji hubungan antara keinginan dan kebolehlaksanaan terhadap niat keusahawanan. Kajian ini juga akan melihat bagaimana faktor demograpik seperti jantina, bangsa dan latar belakang keluarga mempengaruhi hubungan antara keinginan dan kebolehlaksanaan kepada niat keusahawanan. Respondan yang dikaji ialah pelajar-pelajar tahun akhir untuk tahun 2006/2007. Sikap merupakan faktor yang terkuat mempengaruhi niat untuk menjalankan perniagaan kepada kedua-dua sampel. Kebolehlaksanaan juga menunjukkan hubungan yang signifikan dengan keusahawanan tetapi kepentingan sosial tidak mempunyai signifikan bagi pelajar Sains, Manakala, kepada pelajar bukan bidang sains, kebolehlaksanaan tidak mempunyai signifikan dan kepentingan sosial mempunyai signifikan terhadap niat untuk menjalankan perniagaan. Kajian ini mungkin mempunyai kebaikan kepada pembuat polisi dan pelajar-pelajar dimana mereka akan mengetahui bagaimana dan faktor yang mana yang patut mereka ubah untuk meningkatkan niat terhadap keusahawanan.



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#### CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

The development of entrepreneurship, as both concept and activity has been growing important in all of the countries including Malaysia. According to Histrich and Peter (2002); Kuratko and Hodgetts (2004) entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risks and receiving the resulting rewards of monetary and personal satisfaction and independence. Meanwhile, Scarborough and Zimmer (2003) proposed entrepreneur is one who creates a new business in the face of risk and uncertainty for the purpose of achieving profit and growth by identifying opportunities and assembling the necessary resources to capitalize on those opportunities. From the above definition, it can be said that entrepreneurship is defined as business start up or self-employment (Galloway, Brown, Anderson & Wilson, 2006; Gartner, 1985) and the entrepreneur is who creates a new business (Davidsson, 1995).

Presently, the development of entrepreneurship in Malaysia has been growing significantly. This is due to the importance of entrepreneurship in the creation and growth of new firms (Kirby, 2003). Based on the late companies (Registrar Of Companies, ROC, 2006) data, there are 717,953 legally registered companies in Malaysia in 2005 compared to year 2004 there are only 680,213 companies registered (Bank Negara, 2006). According to Companies Commission of Malaysia's (CCM) 2005 annual report, most of the new companies incorporated are involved in wholesale, retail, restaurants and hotels business, financial, insurance, property,



investment and business services. There are also increases in those relating to construction, community, social and personal services, communication, manufacturing and agriculture related businesses. Even though, there are numbers of new companies' start-up, it does not cope to the need of new employment by fresh graduates. The government which has seen this polemic encourages universities to introduce entrepreneurship program for undergraduates to involve and create it as one of their career option.

#### 1.2 Problem Statement

The structure of employment has changed due to government efforts to diversify the Malaysian economy. Unemployment in Malaysia was one of the consequence or outcome of structural changes. In Malaysia, we have seen the rapid in growth of new high schools, colleges, public and private universities for the past decade. These numbers of graduated students have walked out from their universities with the varieties of qualifications and seek the job to suit their professions. According to Suresh Ram (2007), currently almost 70% of public universities and institutions of higher learning graduates in the country are unemployed. On the other field which is economic sector, Malaysian economy has recovered itself from economic turmoil year 1997 in very slow phase. Only few sectors have shown good sign and afford to offer places for new graduate employees but most of them unable to do so due to economic constraints. As a result, a lot of graduate students become surplus in the market, unemployed and hunting their career with full of faith.

In accordance to that, our government has stepped up to minimize this problems by introducing few short and long term solutions; one of that is the creation of new ventures that may create employment opportunities. Various government departments have asked to give their support and a scheme is



introduced in market such as Entrepreneur Development Fund, Franchise Development Program, Bumiputera Entrepreneurship Project Fund and Credit Guaranteed Corporation Scheme as a medium of working capital for new entrepreneurs to initiate their business.

In the modern economy, universities have an important role throughout the developed world. Scientific and technological knowledge needs to be combined with other forms of expertise, such as knowledge of markets and customer needs to create innovative new products and services (Galloway et al., 2006). Previously, this skill only taught in business school but nowadays, it is seems essential to teach the entrepreneurship to students with different degree discipline to ensure the development of enterprising graduates who are fully equipped for the modern economy. Moreover, entrepreneurship itself is borderless to the new graduate students and applicable to all without graded them from their qualifications, such as art, science, engineering and agriculture.

The percentage of science and non-science students in University Malaysia Sabah is 60% and 40%. Due to this push factor, the research questions are, among science and non-science students, which group has a higher intention to be an entrepreneur? Why entrepreneurial intention might differ among them? How do psychological factors impact on student's intention to a new business creation? How to encourage them to be more entrepreneurial?

# 1.3 Objectives of Study

The objectives of this study are:

 To examine and compare the level of entrepreneurial intention among science and non-science students at UMS



- To investigate the effect of student's perception of desirability (attitude and social norms) and feasibility (self-efficacy) on starting their own business.
- To analyze the effect of the moderating variables (gender, ethnic, family background) to entrepreneurial intention.

## 1.4 Scope of Study

The scope of research is to compare the level of entrepreneurial intention and find reasons for different entrepreneurial intentions among students at UMS. The students are divided into two groups based on their subject studies background, science and non-science or arts. The science stream includes Science and Technology, Food Science and Nutrition, International Tropical Forestry, Engineering and Information Technology, Education and Social Development and Medicine. Meanwhile non-science/arts include Science and Technology, Psychology and Social Work, Business and Economics, Arts Studies and Education and Social Development. The research will be conducted among the final year of undergraduate students. The reasons why these samples are selected is because final year students are about to face their professional career choice so they will answer the questionnaire in better understanding of what they are going to be in the future.

# 1.5 Significance of Study

The significant of this study are as below:

- To help young future entrepreneurs to have better understanding of the reasons behind their own interest.
- To assist the university in obtaining better picture of applicability for them to develop an entrepreneurship subject in every course.



To help the government in understanding the reasons behind younger entrepreneurs that has interest in entrepreneurship and how to enhance the encouragement for them to pursue their interest.

## 1.6 Definition of Key Variables

The variables used in this research have very specific meanings. The definition of all these variables will be clearly outlined as follows:

## 1.6.1 Entrepreneurial Intentions

Entrepreneurial intention can be seen as an interest in creating a new business (Katz & Gatner, 1988) or a target behavior of starting a new business venture (Krueger, Reillly & Casrud, 2000).

#### 1.6.2 Attitude

According to Ivancevich, Konopaske and Matterson (2005), attitudes are determinants of behavior because they are linked with perception, personality, feelings and motivation. An attitude is a mental state of readiness learned and organized through experience, exerting a specific influence on a person's response to people, object and situations with which it is related. Each of us has an attitude on numerous topics, such as family, friends, religion, education, restaurants.

Attitude can also be defined as providing a state of 'readiness' or tendency to respond in a particular way. They are learned through life and are embodied within our socialization process (Mullins, 2004)



### 1.6.3 Social Norms

Social norms are assumed to be a function of beliefs that specific individuals approve or disapprove of performing the behavior. An individual will intend to perform a certain behavior when he/she perceives that important others think he/she should. Important others might be a person's spouse, friends, etc. (Levine and Pauls, 1997). Normally, people intend to perform that such behavior if he/she thinks that behavior is favorable to him/her and at the same time he/she believes the others think he/she should perform it.

# 1.6.4 Self-Efficacy

Self-efficacy is a key variable in determining if and how much effort the entrepreneur will extend on the venture and how long that effort will be sustained in terms of cognitive and behavioral persistence (Levander & Raccuia, 2001). Kirby (2003) has said perceived self efficacy refers to the strength of an individual's belief that he or she is capable of successfully performing the roles and tasks of the entrepreneur. The construct of self efficacy has been widely applied in psychology as an individual difference variable.

# 1.6.5 Demographic

Demographics are a shorthand term for 'population characteristics'.

Demographics include race, age, income, mobility, educational attainment,
home ownership, employment status, and even location. (Wikipedia).



# 1.7 Organization of Thesis

**Chapter 1** will give an overview of the research and its significance. This chapter also presents objective of the research and scope of the study. The definition of the key term is also outlined in this chapter. **Chapter 2** presents the past studies of the relationship between the dependent variable of entrepreneurial intention and the independent variables: attitude to the behavior; social norms; self-efficacy and demographic. **Chapter 3** is concerned with theoretical framework, research hypotheses, research design, and unit of analysis, sampling design, instruments design, data collection method and data analysis method. **Chapter 4** presents respondents profile and the research findings. **Chapter 5** presents discussion and implication of research, limitations of research and suggestion for future research.



## **CHAPTER 2**

#### LITERATURE REVIEW

### 2.1 Introduction

From the past research, there are many studies addressing the entrepreneurial intentions and the factors that determine it such as attitude towards self-employment, subjective norms and self-efficiency. This chapter will also give a better understanding on the moderating effects of demographic with entrepreneurial intentions.

# 2.2 Earlier Studies on Science and Non Science Studies Background

People with an academic education have traditionally not favored entrepreneurship as a career option (Paasio & Pukkinen, 2006). Among university graduates, there are differences between studies background of students in term of intention to start up a business.

A finding by Wilkinson (2005), in terms of subject studied, the majority of those who are keen to become self-employed are in the broad discipline areas of Business (46%), Humanities (18%) and Engineering (10%). The students with an engineering background are less likely to set up a firm compared to students with a background in management or natural science (Hytti, Paasio & Pukkinen (2005). Kolvereid and Moen (1997); Guerrero, Rialp and Urbano (2006) also found similar result, the graduate with an entrepreneurship are more likely to start new businesses and have stronger entrepreneurial intentions than other graduates. Galloway et al. (2006) also found that respondents who are studying for a degree in Science or



Engineering appear likely to expect to wait longer than those of Business & Management to realize a business start up.

However, in Franke and Lutje (2004) study of entrepreneurial intention of Business students, he found that entrepreneurial intention among Munich and Vienna students are lower than among Massachusetts Institute of Technology (MIT). The students from Munich and Vienna are economics and business administration and MIT is engineering students. T.Ramayah & Zainon Haron (2005) found respondents from science stream had significantly higher compared to Art stream and in Kristinsen & Nurul Indarti (2004) study, they found among Indonesian student, economics and business administration significantly lower than those non economic students. Meanwhile among Norwegian students, there was no significant difference of entrepreneurial intentions.

Even there are only few studies have been concentrated in subject studied background on entrepreneurial intention but there are still having a differences among them. The purpose of this study is to analyze the entrepreneurial intention among science and non-science student by using psychological theory.

# 2.3 Theoretical background

In the past, research on entrepreneurship focused on either personality features/traits or situational/ contextual (socio-economic) as the determinants of entrepreneurial activity. Boyd and Vozikis (1994) argue trait and situational theories to show none of these theories can adequately explain entrepreneurial activity. Entrepreneurship may be viewed as a process that occurs over time. Entrepreneurial intentions would be the first step in the evolving of venture creation (Lee and Wong, 2004). The entrepreneurial intentions models emphasize the convergence of attitudes and situational factors in the decision to start-up business (Kolvereid, 1996).



In between eighties and nineties, there are six main entrepreneurial intention models (Guerrero et al., 2006). There are:

- Entrepreneurial Event Model (Shapero, 1982) according to this study, the
  personal choice to start a new venture depends on the perception of the
  desirability, the propensity to act and the perception of feasibility.
- 2. The Theory of Planned Behavior (Ajzen, 1991) it explained that any behavior requires a certain amount of planning and it can be predicted by the intention to adopt that behavior. The antecedents to intention are the subject attitude towards the behavior, subjective norms and subject's perception of behavioral control.
- 3. Entrepreneurial Attitude Orientation (Robinson, Stimpson, Huefner, & Hunt, 1991) generated the Entrepreneurial attitude Orientation scale that explains the attitude prediction through four sub scales (achievement, self-esteem, personal control and innovation) and three types of reactions (affective, cognitive or conative).
- 4. Intentional basic Model (Krueger & Carsrud, 1993) examined the relationship between attitudes and entrepreneurial intention using a scale to permit greater flexibility in the analysis of exogenous influences, attitudes and intentions.
- 5. Entrepreneurial Potential Model Krueger & Brazael, 1994) defined the model based on the entrepreneurial event model and theory of planned behavior and supporting the evidence from the corporate venture and enterprise development perspectives.
- Davidson Model (Davidson, 1995) tested an economic-psychological pull of factors that influence individual's intention to go into business. The intention



#### References

- Ajzen, 1991, The Theory Of Planned Behavior. *Organizational Behavior and Human Decision Prosesses*, **50**: 179-211.
- Armitage, C.J. & Conner, M., 2001. Efficacy of the Theory of Planned Behavior: A Meta-Analytic Review. *Journal of Social Psychology*, **40** (4): 471–499.
- Auken, H. V., Stephens, P., Fry, F. L. & Silva, J., 2006, Role Model Influences On Entrepreneurial Intentions: A Comparison Between USA And Mexico. *The International Entrepreneurship And Management Journal*, **2**(3):325-336.
- Bank Negara Malaysia, 2006.
- Bird, B., 1988, Implementing Entrepreneurial Ideas: The Case For Intention. Academy Of Management Review, 13: 442-453.
- Brush et Al. 2003. Doctoral Education in the Field Of Entrepreneurship. *Journal of Management*, **29**(3):309-331.
- Chowdhury, Sanjib, Endres & Lee, M., 2005, Gender Difference and the Formation of Entrepreneurial Self-Efficacy. *Conference Papers*.
- Franke, N. & Luthje, C., 2004, Entrepreneurial Intentions Of Business Students: A Benchmarking Study. *International Journal of Innovation and Technology Management*, **1**(3): 269-288.
- Frazier, B.J. & Niehm, L.S. 2006, Predicting The Entrepreneurial Intentions Of Non-Business Majors: A Preliminary Investigation. *Joint Conference Proceedings*.
- Frederick J. Gravetter & Larry B. Wallnau, 2002, *Essentials of Statistics for the Behavioral Sciences*, (4<sup>th</sup> Edition), California: Wadsworth Pub Co.
- Galloway, L., Brown, W., Anderson, M. & Wilson, L., 2006, Investigating the Potential of Entrepreneurship Education. *International Journal of Management Education*, 57-65.
- Gatewood, E.J, Shaver, K.G. & Gartner, W. B., 1995, A Longitudinal Study of Cognitive Factors Influencing Start-Up Behaviors and Success in Venture Creation'. *Journal of Business Venturing*, **10**(5): 371-391.



- Ghazali, A., Ghosh, B.C. & Tay. R.ST (1995), The Determinants Of Self-Employment Choice Among University Graduates In Singapore". International Journal of Management, 12 (1): 26-35.
- Global Entrepreneurship Monitor (GEM), 2006.
- Henley, A., 2005, From Entrepreneurial Aspiration to Business Start-Up: Evidence from British Longitudinal Data, University of Wales Swansea.
- Henry Pribadi, 2005, Defining And Constructing The Teaching Model Of Entrepreneur Education Based On Entrepreneurial Intention Model. *Jurnal Teknik Industri*. **7**(1): 76 82.
- Histrich and Peters, 2002, Entrepreneurship, Bonston: McGraw-Hill.
- Hytti, Paasio & Pukkinen, 2005, Entrepreneurial Intentions of University Students And Graduates A Finnish Perpective. *Papers Presented At The ICSB World Conference, Washington DC, USA, June 15 18.*
- Ivancevich, Konopaske & Matterson . 2005. *Organization Behavior and Management*. (7<sup>th</sup> Edition), New York: McGraw-Hill.
- James D. Evans, 1996, Straightforward Statistics for the Behavioral Sciences, Brooks: Cole Pub.Co.
- James J. C., 2002, Estimating the Extent Entrepreneurial Intentions Become Reality, A Note.
- J. Audet, 2004, A Longitudinal Study Of The Entrepreneurial Intentions Of University Students. Paper presented at the Annual Meeting of the Babson Kaufmann Entrepreneurship Research Conference, Boulder, CO (June).
- Katz, J., & Gartner, W. B., 1988, Properties of Emerging Organizations. Academy Of Management Review. 13(3): 429-441.
- Kenneth N.Berk, 1994, Data Analysis with Student SYTAT. (DOS Edition), Cambridge:Course Technology.



- Kirby, D. A., 2003, The nature characteristic and Behavior of the entrepreneur. Entrepreneurship, Bonston: McGraw-Hill.
- Kolvereid, L., Isaksen, E., 2006, New Business Start-Up and Subsequent Entry into Self-Employment. *Journal of Business Venturing*, **21**: 866–885.
- Kolvereid, L., Tkachev & Alexei, 1999. Self Employment Intentions among Russian Students. *Entrepreneurship & Regional Development*, **11** (3): 260-280.
- Kolvereid, L. & Moen, O., 1997. Entrepreneurship Among Business Graduates: Does A Major In Entrepreneurship Make A Difference. *Journal of European Industrial Training*, 21(4): 154-160.
- Kristinsen, S. & Nurul Indarti, 2004. Entrepreneurial Intention among Indonesian and Norweigian Students. *Journal Of Enterprising Culture*, **12**(1):55-78.
- Krueger, Branback, Casrud, Elfving & Kickul, 2006, Why Replicate Entrepreneurial Intentionality Studies Prospects, Perils and Academy Reality. *Concept Papers*.
- Krueger, N., Reilly, M. & Carsud, A., 2000, Competing Models of Entrepreneurial Intentions. *Journal of Business Venturing*, **15**: 411-432.
- Krueger. N & Kickul, J., 2004, A Cognitive Processing Model Of Entrepreneurial Self-Efficacy And Intentions. Frontiers of Entrepreneurship Research.
- Kuratko, D.,F. & Hodgetts, R.,M.,2004, *Entrepreneurship, Theory, Process and Practice*. (6<sup>th</sup> edition), Ohio: Thomson, South-western.
- Lee, S. H. & Wong, P. K., 2004, An Exploratory Study Of Technopreneurial Intentions: A Career Anchor Perspective. *Journal of Business Venturing*. **19**: 7–28.
- Levander, A. & Raccuia, I., 2001, Entrepreneuriail Profiling Stimuli, reaction, Action.

  A Cognitive Approach to Entrepreneurship, Stockholm School of Entrepreneurship.
- Linan, F. & Chen, Y. W., 2006, Testing The Entrepreneurial Intention Model On A Two-Country Sample. *Working Paper*.



- Linan, F., Cohard, J. R. & Rueda, J. M., 2005, Factors Affecting Entrepreneurial Intention Levels. *Cantuche.* 45<sup>th</sup> Congress of the European Regional Science Association, Armsterdam.
- Lindsay & Noel J. 2005, "Toward A Cultural Model Of Indigenous Entrepreneurial Attitude." *Academy Of Marketing Science Review*.
- Lucas, W. & Cooper, S., 2005, Measuring Entrepreneurial Self-Efficacy. *Prepared For The EDGE Conference "Bridging The GAP: Entrepreneurship In Theory And Parctice" In Singapore.*
- Maina R. K., 2006, Stimulating Youth Entrepreneurship In Kenya. Concept Paper.
- Mazzarol, T., Volery, T., Doss, N. & i Thein, V., 1999, Factors Influencing Small Business Start-Ups. A Comparison with Previous Research. *International Journal Of Entrepreneurial Behaviour & Research*, **5**(2): 48-63.
- MIER, 2005, Towards a Vibrant Entrepreneurship Policy.
- Mohamed Ariff & Syarisa Yanti Abu Bakar, 2003, Strengthening Entrepreneurship in Malaysia.
- Mukhtar, S., M., Oakey, R. & Kippling, M., 1999, Utilization Of Science And Technology Graduates By The Small And Medium-Sized Enterprise Sector. *International Journal of Entrepreneurial Behavior & Research*, **5**(3): 126-143.
- Mullins, L. J., 2004, *Management and Organisational Behavior*. (7th edition), Harlow: Prentice Hall.
- Nabi G., Holden, R. & Walmsley, A., 2006, Graduate Career Making and Business Start-Up: A Literature Review. *Education + Training*, **48**(5):373-385.
- Navaratnam, R. V., 1997, *Managing the Malaysian Economy, Challenges & Prospects*, Petaling Jaya: Pelanduk Publications.
- Norhatta & Muhd Hussain, 2003, Knowledge, Skill and Attitude towards Business and Entrepreneurship among Students from Secondary School in the Klang Valley, Universiti Kebangsaan Malaysia.



- Paasio, K. & Pukkinen, T., 2006, Path Dependency in Becoming an Entrepreneur. International Council for Small Business ICSB 51<sup>st</sup> World Conference *Refereed Research Paper*.
- Davidsson Per, 1995. Determinants Of Entrepreneurial Intentions. Paper Prepared For the RENT IX Workshop, Piacenza, Italy, Nov. 23-24.
- Peterman, N., E. & Kennedy, J., 2003, Enterprise Education: Influencing Students' Perception Of Enterpreneurship. *Journal of Enterpreneurship Theory and Practice*, **28**(2): 129-144.
- Roslan & Ramlee, 2003, Entrepreneurship Tendencies among the Secondary Religious School Students in Perak, Universiti Kebangsaan Malaysia.
- Sandrine, E., 2003, The Contribution Of Role To The Theory Of Planned Behavior: An Exploration Of Acedemic Entrepreneurship. *Conference Paper*.
- Scarborough, N., M. & Zimmer, T., 2003, Effective Small Business Management, an entrepreneurial approach. (7<sup>th</sup> edition), Upper Saddle River: Prentice Hall.
- Scholten, V., Kemp, R. & Omta, O., 2004, Entrepreneurship For Life: The Entrepreneurial Intention Among Academics In The Life Sciences. *Paper Prepared For European Summer University*.
- Seet, P., S. & Seet, L., C., 2006, Changing Entrepreneurial And Developing Entrepreneurial Competencies Through Experimental Learning: Evidence from Entrepreneurship in Singapore's Tertiary Education Institutions. *Journal of Asia Entrepreneurship and Sustainability*. **11**(2).
- Vangelis Soultaris, et al, 2006, Do Entrepreneurship Programmes Raise Entrepreneurial Intention Of Science. *Journal of Business Venturing*.
- T. Ramayah & Zainon, 2005, Entrepreneurial Intention Among Universiti Sains Malaysia (USM) Students, Universiti Malaysia Sabah.
- The Sun, 2007, Graduates Unemployment.
- Uma Sekaran, 2003, Research Methods For Business: A Skill Building Approach, (4th Edition), New York: John Wiley & Sons, Inc.



Urbano, D., Guerrero, M. & Rialp, J., 2006, The Impact of Desirability and Feasibility on Entrepreneurial Intentions: A Structural Equation Model. *International Entrepreneurship and Management Journal*.

Wikipedia, the Free Encyclopedia.

Wilkinson, D., 2005, Entrepreneurial Intention Surveys 2004/2005 in University Leeds.

Wong, P., K.and Lee,L., 2005, Antecedents for Entrepreneurial Propensity in Singapore. NUS Entrepreneurship Centre, *Working Paper*.

