

# Impact of Psychological Traits, Entrepreneurial Education and Culture in Determining Entrepreneurial Intention among Pre-University Students in Malaysia

Vijeyan Samydevan<sup>\*</sup>, ShishiKumar Piaralal, Abd Kadir Othman, Zahir Osman

OUM Business School, Open University Malaysia

**Abstract** The purpose of this conceptual paper is to study the level of impact of psychological traits, education and culture on entrepreneurial intentions among Pre-University students in Malaysia. This paper proposes Risk Propensity, Entrepreneurial Self-Efficacy, Self-Confidence, Need for Achievement, Locus of Control, Tolerance of Ambiguity, Innovativeness and Entrepreneurship Education. Culture is considered as a moderating variable between entrepreneurial education and Entrepreneurial Intention. The researchers recommend a quantitative study among Pre University students from Form Six, Malaysian Matriculation and Chinese Independent Schools to see the impact of the determinants among different ethnic groups clearly.

**Keywords** Entrepreneurs, Entrepreneurial Intention, Entrepreneurial Education, Propensity to take Risk, Entrepreneurial self-efficacy, Locus of Control, Self-Confidence, Need for Achievement, Tolerance to Ambiguity, Innovativeness, Culture and Pre-University

## 1. Introduction

Malaysia, a fast developing country, has an ambition to be a high income developed nation by the year 2020 [1]. To attain this target several development policies were designed and implemented. Five year plans, The Industrial Master Plan and Outline Perspective Plan are among the few.

Entrepreneurship has been the driving force behind every nation's economic progress and development, ([2-4]). The interest towards entrepreneurship receiving increased attention and sustained interest would appear to be more than just a fad. Researcher [5] has commented, this interest accurately reflects an "emerging economic environment created by the confluence of changes in the corporate world, new technology and emerging world markets". As cited entrepreneurship can prove to be beneficial in the light of such changes [6]. Researcher [3] have extended the new growth theory [7] by assigning an explicit role for the Schumpeterian entrepreneur as the converter of knowledge into economic knowledge, and thus, as a significant contributor to economic growth [8]. The importance of entrepreneurship for economic development is being recognised by public policy makers and they support entrepreneurship education to promote entrepreneurial

activity [10].

As there is a strong correlation between entrepreneurship education and entrepreneurial intention and many countries have introduced entrepreneurship education to enhance entrepreneurial intention [11]. [12] suggested that entrepreneurship education can reduce unemployment among graduates however such education should start before students enrol in to universities. As there were no research had been done pertaining to entrepreneurial intentions for Pre- University students, this paper not only fills the gap it also employ moderator in this paper. This paper proposes 7 psychological variables as determinants of entrepreneurial intention and culture as a moderator between entrepreneurship education and entrepreneurial intentions for Pre-University students in Malaysia. However, due to the limitation of resources, Pre-University students here covers Pre-University (Form Six) in government schools, Malaysian Matriculation and Chinese Independent schools.

## 2. Literature Review

Theory of Planned Behaviour [13], Entrepreneurial Event Theory [14], Entrepreneur Potential Model [15], Davidsson Model [16] and Doughlas and Shepherd Model [17] are often related to entrepreneurial intentions. However, ([18-21] argued that ([13], [22] ) theory of planned behaviour (TPB) is the single most popular theory applied theoretical models and adopted widely for research projects approaching Entrepreneur intention and behaviour.

<sup>\*</sup> Corresponding author:

svijeyan@gmail.com (Vijeyan Samydevan)

Published online at <http://journal.sapub.org/economics>

Copyright © 2015 Scientific & Academic Publishing. All Rights Reserved

For the purpose of this study modified version of TPB employed by [23] been incorporated along with models employed by [24] and [25] could be used to determine the entrepreneurial intention.

### 3. Conceptual Framework Development

#### 3.1. Risk Propensity

The risk perspective of Entrepreneurial intentions refers to the extent to which individuals differ in their willingness to take on new unknown situations [26]. Several business behaviours have been associated with [27] who asserts that entrepreneurs are prudent managers of risk. [28] refers a person's risk-taking propensity in a uncertain circumstances. [27] refers to entrepreneurs as prudent managers of risk. Entrepreneurs often engage in risky behaviours and seem more willing to take risks [29].

Students' perception of risk is their ability to identify opportunities and turn them into business activity even under uncertain situations may aspire to become entrepreneurs.

#### 3.2. Entrepreneurial Self-Efficacy and Entrepreneurial Intentions

Self-efficacy is what an individual believes to accomplish using his/ her skills under certain situations [30]. [31] opined self-efficacy can be considered as a task-specific version of self-esteem and he further opined that entrepreneurial self-efficacy is a self-fulfilling prophecy. As per theory of Entrepreneurial Self-Efficacy Theory persons with high entrepreneurial self-efficacy more likely to engage with entrepreneurship [32]. Entrepreneurial self-efficacy has influence over people's learning ability, motivation and performance, as these people will often attempt to learn and perform tasks which they believe they will be successful [31].

#### 3.3. Self-confidence and Entrepreneurial Intentions

Entrepreneurs are those who prefer to do their own business in innovative way for which self-confidence is vital. Self-confidence is a necessary psychological characteristics [33]. Several Empirical studies had concluded that entrepreneurs have higher level of self-confidence compared to non-entrepreneurs [34]. Studies by ([35], [36]) show positive relationship between self-efficacy and entrepreneurial intentions.

#### 3.4. Need for Achievement (n-Ach) and Entrepreneurial Intentions

The need for achievement is based on expectations of doing something better or faster than others or better than the person's earlier accomplishments ([37], [38]). The N-ach concept as formulated by McClelland in the late 1950s and early 1960s argues that the specific behaviours and activities of individuals with a high N-ach as opposed

to a low N-ach differ in respect to nature, intensity and outcome. More specifically, [38] argued that individuals with a high N-ach have a preference for moderately challenging tasks requiring skill and effort, and providing clear feedback on performance; circumstances closely related to entrepreneurial activity.

#### 3.5. Locus of Control and Entrepreneurial Intentions

[39] posited an individual who belief an achievement depends on his own ability and action are known as internal locus of control, whereas if an individual believes achievement were result of luck or by efforts of others then it is known external locus of control. Individuals with more of an external control belief have the perception that the events in their life are typically controlled by luck, chance, fate or powerful others. As per [40], people who have internal locus of control have greater level of perceptual alertness and they are generally active seekers of information which is useful to them, to discover opportunities and be vigilant towards their environment to seek information pertaining entrepreneurship.

#### 3.6. Innovativeness and Entrepreneurial Intention

Schumpeter related innovation to entrepreneurship. Creativity and innovative ideas and are able to merge ideas with the resources available in order to generate additional value by way of commercialising ideas and resources. As [41] posited some people view an entrepreneur born with intuition, vigour, energy, persistence and self-esteem, while the classical school identifies entrepreneurship with innovation, creativity and discovery. A culture of innovation involves a society that creates incentives, monetary as well as social rewards that value creativity and diversity of ideas.

#### 3.7. Tolerance of Ambiguity and Entrepreneurial Intention

As per [41] when there is insufficient information to structure a situation, an ambiguous situation is said to exist. He said further that, tolerance of ambiguity is a manner in which a person perceives an ambiguous situation and with available information organizes themselves to approach the situation. Should an individual hold high ambiguity tolerance levels, he/she may be said to consider ambiguous situations challenging and strive in order to perform well in an unpredictable situations. A person who has a high tolerance of ambiguity is one who challenges ambiguous situations and strive to overcome unpredictable and unstable situations with the goal of performing well.

#### 3.8. Education and Entrepreneurial Intention

[18] succinctly mentioned that entrepreneurial education is a source of entrepreneurial attitude and implants among students the intentions to become future entrepreneur. [42] mentioned that education is among the fundamental factor contributes to students' attitudes toward entrepreneurship

and quality entrepreneurial education leads to higher level of students entrepreneurial intentions. Along with these [43] suggested that entrepreneurship courses gives confidence and courage to the course participants.

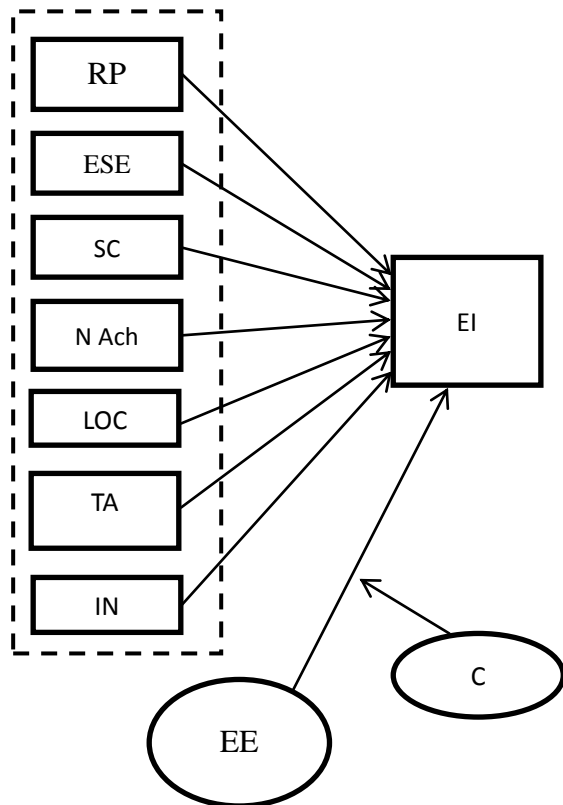
### 3.9. Moderator Role of Cultural Context and Entrepreneurial Intentions

Culture and good cultural values influence entrepreneur intentions. As per [44] found in House, Javidan, Hanges & Dorfman, (2002) the components of cultural dimensions are Uncertainty Avoidance, Power Distance, Collectivism, Gender Egalitarian and Assertiveness. Among these, supportive cultural dimensions would lead to higher entrepreneurial intentions.

From the above literature the following conceptual framework being drawn:

#### CONCEPTUAL FRAMEWORK

Psychological factors



Where:

- RP : Risk Propensity,
- ESE : Entrepreneurial Self-Efficacy
- SC : Self-Confidence
- N Ach : Need for Achievement
- LC : Locus of Control
- TA : Tolerance of Ambiguity
- IN : Innovativeness
- EE : Entrepreneurship Education
- C : Culture
- EI : Entrepreneurial Intention

The researchers had drawn the following propositions from

the conceptual framework developed.

- P1: Risk propensity is positively related to entrepreneurial intentions.
- P2: Entrepreneurial self-efficacy is positively related to entrepreneurial intentions.
- P3: Self-confidence positively influences entrepreneurial intentions
- P4: Need for Achievement is positively related to entrepreneurial intention.
- P5: Locus of Control is positively related to entrepreneurial intentions
- P6: Innovativeness positively influences entrepreneurial intentions
- P7: Tolerance of ambiguity positively influences the entrepreneurial intentions.
- P8: Entrepreneurial Education positively influences the Entrepreneurial Intentions.
- P9a: The positive relationship between entrepreneurial education and entrepreneurial intention is moderated by power distance.
- P9b: The positive relationship between entrepreneurial education and entrepreneurial intentions is moderated by in-group collectivism.
- P9c: The positive relationship between entrepreneurial education and entrepreneurial intentions is moderated by gender.
- P9d: The positive relationship between entrepreneurial education and entrepreneurial intentions is moderated by uncertainty avoidance

## 4. Conclusions and Recommendations

While most researchers were researching entrepreneurial intentions among undergrads this conceptual paper had outlined the variables determining the entrepreneurial intentions among Pre-University students. Creation of entrepreneurial intentions among students is partly enhancing human capital accumulation which has no beginning age.

In the dynamic world where the wave length of changes continuously getting shorter, the researchers insist that researches should be carried out periodically with the Pre-University students not only on the level of impact of variables changes with time but as the variables itself will be changing new variables need to be found and analyse the impact of new variabls. The researchers recommend a quantitative study regarding the impact of the variables on entrepreneurial intention to be carried out among the students of Form Six, Malaysian Matriculation and Chinese Independent school so as to clearly identify the impact clearly. Furthermore as earlier exposure to entrepreneurial intention would acculturate students with stronger entrepreneurial behaviour, further researches should also be carried out among upper and lower secondary school students with variables commensurate with the levels of education and with their age group.

## REFERENCES

- [1] PEMANDU. (2010). Government Transformation Programme, Prime Minister Department, Putra Jaya
- [2] Global Entrepreneurship Monitor (GEM). Global Entrepreneurship Monitor 2013 Executive Report. Downloaded from <http://www.gemconsortium.org> downloaded on 2 March. 2014.
- [3] Acs, Z.J., Arenius, P., Hay, M., & Minniti, M. (2004). Global Entrepreneurship Monitor: 2004 executive report. Wellesley, MA: Babson College.
- [4] Carree, M.A. (2002). Industrial restructuring and economic growth. *Small Business Economics*, 18, 243-255.
- [5] Venkatraman, N. (1996) Managing IT resources as a value center. IS Executive Seminar Series, Cranfield School of Management.
- [6] Gibb, A.A & Cotton, J. (1998). Entrepreneurship in school and College Education – creating the leading edge. Department of Industry and Trade Conference Centre.
- [7] Romer, P.M. (1990). Endogenous Technological Change, *Journal of Political Economy*, 98(5), pt. 2.
- [8] Carree, M.A & Thurik, A. R. (2002). The Impact of Entrepreneurship on Economic Growth. *International Handbook of Entrepreneurship Research*, Boston/Dordrecht: Kluwer Academic Publishers.
- [9] Fayolle, Gailly & Lassas, C. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European Industrial Training*, vol. 30 Iss: 9, pp.701 – 720.
- [10] Linan, F. (2010). *Intention-based models of entrepreneurship education*. Dept. of Applied Economics (Economía Aplicada I), University of Seville, Av. Ramón y Cajal, 1, E-41018 Seville (Spain).
- [11] Ahmad, S.Z. (2013). The need for inclusion of entrepreneur education in Malaysia lower and higher learning institutions. *Education and Training*, Vol 55 No.2, pp 191-203.
- [12] Ajzen, I. (1988). *Attitudes, personality and behaviour*. Milton Keynes, UK: Open University Press.
- [13] Shapero, A. & Sokol, L. (1982). *Social dimensions of entrepreneurship*. in Kent, C.A., Sexton, D.L. Vesper, K.H. (eds.): *Encyclopaedia of entrepreneurship*. Prentice Hall, Englewood Cliffs (NJ).
- [14] Krueger, N.F. & Brazeal, D. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18(3), 91-104.
- [15] Davidsson, P. (1995). Culture, Structure and Regional Levels of Entrepreneurship. *Entrepreneurship and Regional development*, 7, 41-62.
- [16] Douglas, E.J. & Shepherd, D.A. (2000). Entrepreneurship as a utility maximizing response. *Journal of Business Venturing*, Vol. 15 No.3, pp.231-51.
- [17] Summers, D.F. (2013). *Forming Entrepreneurial Intentions: An Empirical Investigation of Personal and Situational Factors*. Routledge study in Entrepreneurship.
- [18] Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566–591.
- [19] Liñán, F., & Chen, Y. W. (2009). Development and Cross-Cultural Application of A Specific Instrument To Measure Entrepreneurial Intentions. *Baylor University*.
- [20] Lin'án, F. (2008). Skill and value perceptions: how do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, 4(3), 257-72.
- [21] Ajzen, I. (1988). *Attitudes, personality and behaviour*. Milton Keynes, UK: Open University Press.
- [22] Dinis, A., Paço, A. D., Ferreira, J., Raposo, M. & Rodrigues, R. G. (2013). Psychological characteristics and entrepreneurial intentions among secondary students. *Education + Training*, Vol. 55 No. 8/9.
- [23] Dinis, A., Paço, A. D., Ferreira, J., Raposo, M. & Rodrigues, R. G. (2013). Psychological characteristics and entrepreneurial intentions among secondary students. *Education + Training*, Vol. 55 No. 8/9.
- [24] Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, Vol. 90 No. 6.
- [25] Bae, T. J., Qian, S., Mio, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship theory and practice*, *Baylor University*.
- [26] Morris, M. H. (1998). Entrepreneurial intensity: Sustainable advantages for individuals, organisations and societies. Westport, ct: Quorum.
- [27] Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11, 12-25.
- [28] Timmons, J.A. (1999). *New venture creation: Entrepreneurship for 21st century* (5th ed.). Homewood, Illinois: Irwin- McGraw-Hill.
- [29] Norton Jr., W.I., & Moore, W.T. (2002). Entrepreneurial risks: Have we been asking the wrong questions? *Small Business Economics*, 18(4),281-287.
- [30] Snyder, C.J. & Lopez, S, J. (2007). Positive psychology: The scientific and practical explorations of human strengths. London: Sage.
- [31] Lunenburg, F. C. (2011). Goal-Setting Theory of Motivation, *International Journal of Management, Business, and Administration*, Volume 15, Number 1.
- [32] Van der Bijl, J., & Shortridge-Bagget, L. (2002). The theory and measurement of self-efficacy construct. In E. Lenz, & L. Shortridge-Bagget (Eds.). *Self- efficacy in nursing: Research and measurement perspectives* (pp. 9-25). New York: Springer Publishing Company.

- [33] Ho, T.S. & Koh, H.C. (1992), "Differences in psychological characteristics between entrepreneurially inclined and non-entrepreneurially inclined accounting graduates in Singapore", *Entrepreneurship, Innovation and Change: An International Journal*, Vol. 1 No. 2, pp. 243-254.
- [34] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991). "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [35] Moreno, J. D. J., Castillo, L. L., & Masere, E. D. Z. (2007). Influence of entrepreneur type, region and sector effects on business self-confidence: Empirical evidence from Argentina Firms. *Entrepreneurship & Regional Development*, pp. 25-48.
- [36] Kumar, S., & Singh, Y. P. (2011). Analysis of the entrepreneurial behavior of dairy farmers – A case study from Bareilly district of up. *Indian J. Field Vet*, Vol. 6 No. 4.
- [37] McClelland, D. C. (1965). Need achievement and entrepreneurship, A longitudinal study. *Journal of Personality and Social Psychology*, 1, 389-392.
- [38] McClelland, D.C. (1961). *The Achieving Society*, Van Norstand, Princeton, NY.
- [39] Rotter, J.B. (1966). "Generalized expectancies for internal versus external locus of control of reinforcement", *Psychological Monographs: General and Applied*, Serial Number 609, Vol. 80, 1966, pp. 1-28.
- [40] Gilad, B. (1982). On encouraging entrepreneurship: An interdisciplinary approach. *Journal of Behavioral Economics*, 11, 132-163.
- [41] Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11, 12-25.
- [42] Christian Luthje, C. & Nikolaus Franke, N. (2003). The 'making' of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT, *R&D Management* 33, 2, Blackwell Publishing Ltd.
- [43] Dyer, G. (1994). Toward a theory of entrepreneurial careers. *Entrepreneurship Theory and Practice*, 19(2), 7-21.
- [44] Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. London: Sage.
- [45] House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the Globe: An introduction to project GLOBE. *Journal of World Business*, pp. 3-10.