



Psychological Traits as Key Factors in Determining an Entrepreneurial Intention among Students in Malaysia

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Abstract

This study examines key success factors in determining the entrepreneurial intention among students in Kota Kinabalu, Sabah. The key success factors for this study include locus of control, tolerance for ambiguity, need for achievement and innovativeness. The respondents for this study were students in higher learning institutions in Kota Kinabalu, Sabah Malaysia. The total number of questionnaires distributed was 400 and 336 questionnaires were usable. Based on the results and findings of this study, it was found that locus of control, need for achievement and innovativeness have contributed significantly towards entrepreneurial intention among students. While, tolerance for ambiguity was not among the predictors towards entrepreneurial intention in this study. This study through its research and findings has contributed significantly to both theoretical and practical implications. This study can help to provide the information related to entrepreneurial intention among students and can benefit the government in an effort to encourage more graduate students to get involved in entrepreneurial ventures.

Keywords: Entrepreneurial Intention; Locus of Control; Tolerance of Ambiguity; Need for Achievement; Innovativeness.

1. Introduction

Entrepreneurship has long been associated with its role in creating more new jobs in the market. Due to this fact, the government of Malaysia has encouraged more graduates to get involved in entrepreneurial activities particularly in reducing the unemployment rate among graduates (Izedonmi & Okafor, 2010). However, there is evidence showing that most graduates nowadays have lower entrepreneurial intention. For example, Brenner, Pringle & Greenhaus (1991) reported that only 5 percent out of 55 percent of respondents in the study conducted indicated the willingness to run their own businesses.

Accordingly, previous studies have tried to establish factors that determine entrepreneurial intention. Grundsten (2004) highlighted that entrepreneurial intention can be affected by environmental factors. Khan et al (2011), however, argued that entrepreneurial intention could also be influenced by psychological traits such as innovativeness, self-efficacy, and locus of control. Other factors such as cognitions, social conditions, and personality traits can also affect an individual's decision to venture into entrepreneurial activities (Carter, Gartner, Shaver, & Gatewood, 2003). Therefore, this paper seeks to investigate the effect of family background and psychological traits on entrepreneurial intention among students in Malaysia.

2. Literature Review

2.1 Entrepreneurship

Kuratko (2005) describes entrepreneurship as a dynamic process that involves vision, creation and change. Gartner (1990) highlighted eight themes used to define entrepreneurship. These include a description of an entrepreneur's

personal traits, value creation, innovativeness, organization creation, profit, owner-manager, growth, and uniqueness. Gartner (1990) added that it is the element of organization creation that distinguishes entrepreneurship from other business disciplines. This, thereof, defines entrepreneurship as the process of creating new organizations. Accordingly, the term 'entrepreneurship' in this paper refers to new venture creation or business venture.

2.2 Entrepreneurial Traits

Entrepreneur often refers to a combination of psychological traits, values, and attributes of a person motivated to start a business enterprise (Thomas & Mueller, 2000). Several studies were conducted to study differences in the personalities of entrepreneurs and non-entrepreneurs since psychological traits are deemed necessary for entrepreneurship to take place. Most previous research described psychological traits such as locus of control, innovativeness, self-confidence, tolerance for ambiguity, need for achievement, and tendency to take risk (Koh, 1996) with entrepreneurial intention. Chen & Lai (2010) also argues that entrepreneurs are individuals with high internal locus of control, high need for achievement, possess a tolerance of ambiguity and high degree of innovativeness. The role of personality is said to have a strong influence towards entrepreneurial intention and action to become an entrepreneur (Utsch & Rauch, 2000). Apart from that, Ertuna and Gurel (2008) argued that some individuals have a set of psychological traits that interact with background factors that directs them to venture into business activities.

Thus, the focus of this paper is to examine four psychological traits which include locus of control, need for achievement, tolerance for ambiguity, risk taking propensity and innovativeness in influencing entrepreneurial intention. According to Krueger & Carsrud (1993) individual's attitudes with regard to starting a new business form the individual's entrepreneurial intention. These attitudes depend on the individual's personality, their upbringing, beliefs, and values. It is important to note that the process of entrepreneurship (venture creation) begins with intentions before the act is performed.

2.3 Planned Behavior Theory

This paper describes the entrepreneurial intention from the perspective of Theory of Planned Behavior as proposed by Azjen (1991). According to Azjen (1991), an entrepreneurial behavior often originated from entrepreneurial intention. The theory of planned behavior describes that an individual's attitude with regard to becoming an entrepreneur, behavioral control, and subjective norms (other people's views) are the antecedents or precursors of intention. This implies that attitude, motivation, and subjective norms are the main determinants for entrepreneurial intention. It can be summarized that, the more positive the attitudes; the more subjective the norms; the greater the motivation; the stronger the individual's intention to execute the behavior (Grid & Bagraim, 2008).

2.3.1 Entrepreneurial Intention

According to Krueger (2007), entrepreneurial intention is the key determinant to new venture creation by individuals and is often moderated by exogenous variables such as family background, training, occupation, position in one's family, and education. Izedonm & Okafor (2010) defined intention as the cognitive state that comes just before executing a behavior. Therefore, an entrepreneurial intention in this paper refers to an individual's inclination to start an entrepreneurial activity sometime in the future.

2.3.2 Locus of Control

This refers to individual's perception with regard to reward and punishment in their life. According to Khan et al (2011), locus of control refers to the belief or notion that one can personally influence specific outcomes that are relevant to them. It can be described as the extent to which one is able to control what happens in their life (Khan et al., 2011). Individuals with internal locus of control often have certain belief that they control things that happen in their life. These individuals believe that results are the products of own will, abilities and efforts. Empirical studies have demonstrated that internal locus of control is a key trait of entrepreneurs, and as such is linked to the desire and intention to become an entrepreneur (Cromie, 2000). Those with external locus of control assume something that happened in their life is as a result of external factors such as chance, luck or fate. Those individuals believe that results are due to external factors that are beyond their control such as circumstances, fate, knowing the right people, chance, and fate among others.

2.3.3 Innovativeness

Innovativeness is the process that transforms an invention into a profitable product (Ahmed et al., 2010). Innovation is therefore more valuable as compared to the invention. Innovation is said to consist of idea commercialization, and execution of that idea. Innovation may also involve modification of existing products, services and systems to make them more marketable (Ahmed et al., 2010).

Various studies described innovativeness as one of the key traits of entrepreneurs. Early studies viewed an entrepreneur as a change agent and regarded them as a man of action or an idea man who is engaged in identifying

new business opportunities (Ahmed et al., 2010). Drucker (1985) described innovation as an entrepreneur's most basic role. He describes innovation as a tool and means for entrepreneurs to exploit change. According to Ahmed et al (2010), the role of entrepreneurs is to provide strategic competitiveness through an introduction of new products/service, exploration of new markets, innovative production techniques, supply sourcing, or reorganization of the entire industry. Innovativeness is often linked with the need for individuals to make profits and grow (Ahmed et al., 2010).

2.3.4 Need for Achievement

Need for achievement has often been associated with entrepreneurial intention. According to Pillis & Reardon (2007), high achievers tend to: set a moderate achievable goal, take premeditated risks, always take personal responsibility for their actions, and value feedback on performance. Ertuna and Gurel (2008) explained that such behaviors are strongly related to entrepreneurial success. McClelland (1965) argued that individuals with high achievement are often attracted to venture into business because of the existing situations such as risks, specific accomplishments, unambiguous feedback on performance in the form of profits, and personal achievement complement their achievement motivation. Pillis & Reardon (2007) reported that there is a significant relationship between need for achievement and entrepreneurial behavior. Ertuna and Gurel (2008) pointed that the need for achievement as one of the predictors of entrepreneurial intention.

2.3.5 Tolerance for Ambiguity

According to Cromie (2000), entrepreneurial actions are characterized by risks and uncertainties. In order to identify an opportunity and to invest in it, one must be ready to face risks. Ambiguity is when one has insufficient clues to form a situation while tolerance for ambiguity refers to the tendency to perceive situations that are ambiguous and not threatening (Ertuna and Gurel, 2008). Cromie (2000) explained that entrepreneurs deliberately seek out uncertainty to identify opportunities and make the most out of them. Cromie (2000) further added that entrepreneurial activities are generally associated with risk and uncertainty. Entrepreneurs, therefore, are often make decisions based on information that is not sufficient enough, creating ambiguity. Because of this, entrepreneurs must have high tolerance for ambiguity. According to Pillis & Reardon (2007), tolerance for ambiguity has been proven to be one of the key predictors of entrepreneurship than risk propensity. Pillis & Reardon (2007) found that entrepreneurs tend to have a higher degree of tolerance for ambiguity as compared to other managers. Cromie (2000) conceptualizes tolerance for ambiguity as an individual's inclination toward taking chances when making decisions.

3. Methodology

3.1 Research Design

Based on the nature of the study and the kind of data required to answer the research questions, a survey design was employed. A survey design was selected when collecting data from large samples. Muijs (2004) explained that survey strategy allows the researcher to examine multiple variables constituting the study phenomenon simultaneously. Thus, it is appropriate to be used in since this paper seeks to examine the effect of psychological traits (locus of control, innovativeness, need for achievement and tolerance of ambiguity) on entrepreneurial intention. The population of this study was public higher learning institutions in Kota Kinabalu, Sabah Malaysia. The respondents for this study were university students from private and public higher learning institutions. Simple random sampling was used in this study. A total of 400 self-administered questionnaires were distributed. Usable questionnaires were 336.

4. Results

4.1 Hypothesis Testing

Regression analysis was used to analyze the relationship between locus of control, innovativeness, tolerance of ambiguity and the need for achievement with entrepreneurial intention.

4.1.1 Locus of Control and Entrepreneurial Intention

The hypothesis (H1) examined whether locus of control is related to entrepreneurial Intention. As shown in Table 1, R^2 for the regression is 0.208 which shows that 20.8% of the variation in entrepreneurial Intention can be explained by locus of control. Locus of control is significantly correlated with entrepreneurial Intention as indicated by the value of $\beta = .456$ ($p < 0.000$). Therefore, H1 is supported.

Table 1: Regression Analysis of Locus of Control with Entrepreneurial Intention		
Dependent Variable	Independent Variables	Std. Coefficient Beta (β)
Entrepreneurial Intention		
	Locus Of Control	0.456
	R ²	.208
	Adjust R ²	.205
	Sig. F	87.590
	Sig	0.000

4.1.2 Tolerance for Ambiguity and Entrepreneurial Intention

The hypothesis (H2) examined whether tolerance of ambiguity is related to entrepreneurial Intention. As presented in Table 2, R² for the regression is 0.004 which shows that 0.4% of the variation in entrepreneurial Intention can be explained by tolerance of ambiguity. Tolerance of ambiguity is not significantly correlated with entrepreneurial Intention as indicated by the value of $\beta = 2.191$ ($p < 0.01$). Therefore, H2 is rejected.

Table 2: Regression Analysis of Tolerance of Ambiguity with Entrepreneurial Intention		
Dependent Variable	Independent Variables	Std. Coefficient Beta (β)
Entrepreneurial Intention		
	Tolerance Of Ambiguity	2.191
	R ²	0.004
	Adjust R ²	0.004
	Sig. F	2.191
	Sig	0.140

4.1.3 Need for Achievement and Entrepreneurial Intention

The hypothesis (H3) examined whether need for achievement is related to entrepreneurial Intention. As shown in Table 3, R² for the regression is 0.309 which shows that 30.9% of the variation in entrepreneurial Intention can be explained by need for achievement. Need for achievement is significantly correlated with entrepreneurial Intention as indicated by the value of $\beta = .556$ ($p < 0.01$). Therefore, H3 is supported.

Table 3: Regression Analysis of Need for Achievement with Entrepreneurial Intention		
Dependent Variable	Independent Variables	Std. Coefficient Beta (β)
Entrepreneurial Intention		
	Need For Achievement	.556
	R ²	.309
	Adjust R ²	.307
	Sig. F	149.400
	Sig	0.000

4.1.4 Innovativeness and Entrepreneurial Intention

The hypothesis (H4) examined whether innovativeness is related to entrepreneurial intention. As presented in Table 4, R² for the regression is 0.112 which shows that 11.2% of the variation in entrepreneurial Intention can be

explained by innovativeness. Innovativeness is significantly correlated with entrepreneurial Intention as indicated by the value of $\beta = .334$ ($p < 0.01$). Therefore, H4 is supported.

Table 4: Regression Analysis of Innovativeness with Entrepreneurial Intention		
Dependent Variable	Independent Variables	Std. Coefficient Beta (β)
Entrepreneurial Intention	Innovativeness	.334
	R ²	.112
	Adjust R ²	.109
	Sig. F	42.050
	Sig	0.000

5. Discussions and Conclusion

This paper examines the effect of psychological traits on entrepreneurial intention among students in higher learning institutions in Malaysia. This paper examines the effect of locus of control, tolerance for ambiguity, need for achievement and innovativeness on entrepreneurial intention.

Locus of control is often defined as the extent to which a person believe that he/she can control/impact the events in life (Carlson, N.R, 2007).It was found that locus of control have direct effect on entrepreneurial intention. Thus, shows that having greater internal locus of control, the greater chances that they will become an entrepreneur. Internal locus of control has a great connection with the concept of self-confidence, self-esteem and many other psychological variables. The second psychological factor in this paper was need for achievement. The finding of this study is in line with a study conducted by Pillis and Readon (2007). The finding shows there was a relationship between need for achievement and entrepreneurial intention. The third variable was tolerance for ambiguity and management of uncertainty. However, this study shows that tolerance of ambiguity has no direct relationship with entrepreneurial intention. The fourth predictor in this study was innovativeness. Brenner, Pringle and Greenhaus (1991) stated that less than 55 % of the people use their innovativeness and creativity while thinking about careers. However this study found that there is a relationship between innovativeness and entrepreneurial intention. Thus, has made innovativeness as one of the key factors in determining entrepreneurial intention.

In conclusion, this study found three psychological traits that were assumed to have an influence on the entrepreneurial intention. Those variables highlighted in this study locus of control, tolerance of ambiguity, need for achievement and innovativeness on entrepreneurial intention. However, tolerance for ambiguity seems has no influence towards entrepreneurial intention among students.

References

- [1] Ahmed, I., Nawaz, M. M., Ahmad, Z., Shaukat, Z. M., Usman, A., Rehman, W., & Ahmed, N. (2010). Determinants of Students' Entrepreneurial Career Intentions: Evidence from Business Graduates. *European Journal of Social Sciences*, 15 (2), 14-22.
- [2] Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- [3] Brenner, O.C., Pringle, C.D. & Greenhaus, J.H. (1991). Perceived fulfillment of organizational employment versus entrepreneurship: Work values and career intentions of business college graduate. *Journal of Small Business Management*, 29(3), 62-74.
- [4] Carlson, N. R. (2007) *Physiology of Behavior: ninth edition*. Pearson Education, Inc.: Boston
- [5] Carter, N. M., Gartner, W. B., Shaver K. G., & Gatewood E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13-39.
- [6] Cromie, S. (2000). Assessing Entrepreneurial Inclination: Some Approaches and Empirical Evidence. *European Journal of Work and Organizational Psychology*, 9(1), 7-30.

- [7] Ertuna, Z. I., &Gurel, E. (2008). Effects of Entrepreneurial Traits and Education on Entrepreneurial Intentions, pp. 1-10.
- [8] Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing*, 5:15-28.
- [9] Grid, A., &Bagrami, J. J. (2008).The theory of planned behaviour as predictor of entrepreneurial intent amongst final-year university students.*South African Journal of Psychology*, 38(4), 711-724.
- [10] Grundstén, H. (2004). Entrepreneurial Intentions and the Entrepreneurial Environment.A Study of Technology-Based New Venture Creation.Doctoral dissertation.Helsinki University of Technology, Finland.
- [11] Izedonmi, P. F., &Okafor, C. (2010).The Effect of Entrepreneurship Education on Students' Entrepreneurial Intentions.*Global Journal of Management and Business Research*, 6(1), 49-60.
- [12] Khan, M. M., Ahmed, I., Nawaz, M. M., &Ramzan, M. (2011).Impact of Personality Traits on Entrepreneurial Intentions of University Students.*Interdisciplinary Journal of Research in Business*, 1 (4), 51-57.
- [13] Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students.*Journal of Managerial Psychology*, 11(3), 12-25.
- [14] Krueger, N., &Carsrud, A. L. (1993). Entrepreneurial Intentions: Applying the theory of Planned Behaviour. *Entrepreneurship and Regional Development*, 5, 315-330.
- [15] Krueger, N. (2007). What Lies Beneath? The Experiential Essence of Entrepreneurial Thinking, *Entrepreneurship, Theory and Practice*, 1, 123-138.
- [16] Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship Theory and Practice*.September.
- [17] Muijs, D. (2004). *Doing quantitative research in education with SPSS*. Thousand Oaks, CA: Sage.
- [18] Pillis, E., & Reardon, K. K. (2007). The influence of personality traits and persuasive messages on entrepreneurial intention: A cross-cultural comparison. *Career Development International*, 12(4):382-396.
- [19] Thomas, A. S., & Mueller, S. L. (2000). A case for comparative entrepreneurship: assessing the relevance of culture. *Journal of International Business Studies*, 31(2), 287-301.
- [20] Utsch, A., & Rauch, A. (2000).Innovativeness and initiative as mediators between achievement orientation and venture performance.*European Journal of Work and Organizational Psychology*, 9(1), 45-62.