

The Stages Of Entrepreneurship Personality Criteria Among Malaysian High School Students

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ABSTRACT

The identification and development of entrepreneurial potential in an increasingly, organizationally dense society represents a challenge to continued social progress. This paper presents a survey to identify the levels of male and female students' entrepreneurial personality characteristics. A total of 90 students from two selected schools in Ipoh completed a questionnaire designed to test entrepreneurial personality characteristics that include need for achievement, need for affiliation, locus of control, risk-taking propensity and tolerance for ambiguity. The analysis indicated that there is no significant difference in the levels of entrepreneurial personality characteristics between male and female students. As for the five entrepreneurial personality characteristics, respondents placed the highest value on locus of control followed by the need for achievement.

INTRODUCTION

Entrepreneurship is increasingly becoming a very relevant instrument in promoting economic growth and development in various regional and national economies. Countries or territories with higher increases on entrepreneurial initiative indexes tend to explain a greater fall in unemployment levels. Therefore, a considerable agreement exists regarding the importance of promoting entrepreneurship to stimulate economic development and employment.

As entrepreneurs have the potential to contribute much to society, researchers have tried to analyze entrepreneurs' personalities, skills, and attitudes as well as the conditions that foster entrepreneurship. Entrepreneurs, like most people, are complex, and no one theory can explain all of their behaviors (Stoner and Freeman, 1992).

The Psychological Characteristics School of Entrepreneurship, which focuses on personality factors, believes that entrepreneurs have unique values and attitudes towards work and life. These, along with certain dominant needs propel the individual to behave in certain ways. Entrepreneurs can be differentiated from non-entrepreneurs by personality characteristics. People who possess the same characteristics as entrepreneurs have higher tendency (or potential) to perform entrepreneurial acts than do people who do not possess such characteristics. And characteristics which have received a great deal of attention include need for achievement, locus of control, risk-taking, tolerance of ambiguity, and type-A behavior.

More and more studies of various entrepreneurial characteristics have been conducted over the years and with greater frequency. This is not surprising and, in fact, should be expected given that an understanding of psychological characteristics that are unique to entrepreneurs is a logical first step in studying entrepreneurship. The main psychological characteristics associated with entrepreneurship in the literature such as need for achievement, need for affiliation, locus of control, risk-taking propensity and tolerance of ambiguity are discussed next.

Literature proposes that entrepreneurs are not the only persons who start businesses but also persons who possess certain characteristics or traits to varying degrees. Much of the research in entrepreneurship

has been founded upon the premise that entrepreneurs embody distinctive personality characteristics which can be identified and used to indicate a potential for entrepreneurship (Barcelona, 1994). Given the growing importance of entrepreneurship, there is practical value in being able to distinguish those who have distinctive entrepreneurial potential and those who do not. With knowledge of these factors (i.e. psychological characteristics) associated with entrepreneurial potential, programs can be initiated for instance by the government or private sector, to develop and enhance these factors in order to encourage entrepreneurship. Furthermore, institutions offering entrepreneurship programs can make better selection of entrants into their programs.

To foster entrepreneurship, specialized courses have become increasingly common in tertiary institutions and enterprise education has been promoted to encourage entrepreneurial behavior. In addition, entrepreneurship development in primary and secondary schools has received growing attention (because students have expressed a desire to participate in entrepreneurship education programs). It is believed that the ideal stage to acquire basic knowledge about entrepreneurship and to foster a positive attitude towards entrepreneurship is during childhood and adolescent years. It is recommended that entrepreneurial potential should be identified and evaluated at the secondary school level, during the developmental stage when the possibility of self-employment as a career option is still open.

Numerous studies have been conducted on isolating entrepreneurial characteristics using students as test sample. It is thus of importance and interest to entrepreneurial educators to establish the variations that exist in students with regards to possession of these entrepreneurial personality characteristics. Against this background, the primary aim of this research is to learn more about the entrepreneurial personality characteristics of secondary school students who are studying subjects like Economics, Commerce, and Accounting.

The objectives of this research are to study the level of male and female students' entrepreneurial personality characteristics; and to establish whether significant differences exist between gender with regards to the level of entrepreneurial characteristics of students.

Research Questions

This study addresses the following research questions:

1. What are the levels of personality characteristics of entrepreneurs reported by female students and male students?
2. Do significant differences exist between the levels of entrepreneurial personality characteristics of male and female students?

LITERATURE REVIEW

For many years, researchers have studied the characteristics associated with entrepreneurship in order to find out about the differences between entrepreneurs and non-entrepreneurs (Gartner, 1985). Many authors looked for the existence of certain personality features or traits that could be associated with the entrepreneurial activity (McClelland, 1961; 1985). Research has strongly supported psychological attributes, not perception and awareness, as the theoretical cornerstone for predicting adult entrepreneurial behavior and potential (Lumpkin, 2004).

A number of psychological attributes have been suggested as predictors of entrepreneurial behavior in the literature of entrepreneurs, with some degree of concurrence. Some of the earlier work conducted by McClelland (1961) looked at the needs of achievement, affiliation and power in entrepreneurs versus others. Gorman (1997) maintained that propensity towards entrepreneurship is associated with several personal

characteristics such as values and attitudes, personal goals, creativity, risk-taking propensity and locus of control. Of the personality traits, McClelland (1961, 1985) proposed achievement motivation, risk taking and locus of control as important characteristics. Among these characteristics, risk assessment and risk taking are considered the primary elements of entrepreneurship.

Researches suggested that entrepreneurs possess some key psychological attributes or characteristics, and that these in turn produce specific personality traits. Need for achievement, tolerance for ambiguity, risk taking and locus of control were analyzed with respect to entrepreneurial characteristics and were identified as correlates of being or desiring to be an entrepreneur (Olson, 2004)). Due to its definition and conceptual closeness to need for achievement, need for affiliation is also included in the analyses that follow.

Personality Characteristics of Entrepreneurs

Achievement Motivation

Achievement motivation can be defined as behavior towards competition with a standard for excellence (McClelland, 1961). People who have high levels of achievement motivation tend to set challenging goals, and try to achieve these goals. These people value feedback and use it to assess their accomplishments. They have a strong desire for self-efficacy and persist on a task only if they believe that they are likely to succeed. Achievement motivation is accepted as an important characteristic of the individual and influences work behaviors to a great extent. Achievement motivation also refers to desire to outperform other people. People with achievement motivation find satisfaction in comparing themselves to others and are motivated by this comparison.

Achievement motivation is a trait that is prevalent among entrepreneurs. It is believed that individuals with a high need for achievement have a strong desire to be successful and are consequently more likely to behave entrepreneurially. Certain characteristics of individuals with high need for achievement may lead to different levels of entrepreneurial styles. Furthermore, evidence indicating significant association between need for achievement and entrepreneurship has been widely documented in the literature. For example, Johnson (1986) reported that despite variability among studies regarding samples and the operationalization of need for achievement, a fairly consistent relationship between need for achievement and entrepreneurship can be found in 20 out of 23 major studies in the entrepreneurship literature.

In a student sample, achievement motivation was positively correlated with pro-activeness. Research also linked achievement motivation to creativity suggesting that in a highly intelligent group of children, achievement motivation explained high levels of variance in creativity (McClelland, 1967). In an entrepreneurial sample, achievement motivation was correlated with personal innovativeness (Burch, 1986). McMullan (2002) proposed that innovativeness and creativity are important variables. As suggested by Robinson (1991), innovativeness is the focal point of entrepreneurship and an essential entrepreneurial characteristic.

Need for Affiliation

The need for affiliation refers to a desire to be close to other people in order to feel reassured that the self is accepted (McClelland, 1961). People with high levels of need for affiliation tend to spend a significant amount of time socializing with other people. These people try to maintain harmonious relationships with others and may sometimes sacrifice work success to protect these relationships. People with high levels of need for affiliation have a strong desire to be liked by their coworkers and subordinates, and this may influence their performance in a negative manner.

Based on this definition, it is possible to draw links between entrepreneurial styles and need for affiliation. For example, we may expect a negative relationship between need for affiliation and proactiveness. Proactiveness requires a certain level of future orientation, whereas people with need for affiliation may be more concerned with protecting the status quo in order to protect their relationships with others. In addition, it may be possible to observe lower levels of competitive aggressiveness because people with high levels of need for affiliation want to be liked by people around them and they may avoid thinking in competitive terms. Being aggressive towards the competition may lead some people to have a negative attitude towards them and they may prefer to avoid these negative feelings.

Locus of Control

Locus of control theory has had a central position in personality research since the 1960s. Locus of control refers to the perceived control over the events in one's life (Rotter, 1954). People with internal locus of control believe that they are able to control what happens in their lives. On the other hand, people with external locus of control tend to believe that most of the events in their lives result from being lucky, being at the right time, and the behaviors of powerful individuals. People's beliefs in personal control over their lives influence their perception of important events, their attitude towards life, and their work behaviors. In a student sample, internal locus of control was associated with a desire to become an entrepreneur (Herron and Robinson, 1993).

Rotter (1954) hypothesized that those with an internal locus of control would more likely to strive for achievement compared to those with an external locus of control. Brockhaus (1982) found that entrepreneurs have greater internal locus of control than the general population; therefore entrepreneurs believe that the outcome of a business venture will be influenced by their own efforts. Brockhaus (1982) further suggested that locus of control could distinguish entrepreneurs who are successful from those who are unsuccessful. Generally, it is believed that entrepreneurs prefer to take and hold unmistakable command instead of leaving things to external factors. Analogous to locus of control, Robinson (1991) also found that internal personal control will lead to a positive entrepreneurial attitude.

Risk-Taking Propensity

As early as the 18th century, Richard Cantillon was calling the entrepreneurs risk-takers. Ever since, the idea of taking risks appears in many of the definitions describing entrepreneurs. Ronstadt (1985) defines entrepreneurship as the dynamic process of creating incremental wealth by individuals who assume the major risks in terms of equity, time, and career commitment. In other words, entrepreneurship requires a willingness to take calculated risks both personal and financial. Burch (1986) defines the entrepreneur as a person who organizes, operates and assumes the risk for a business venture.

Risk-taking propensity is defined as the perceived probability of receiving rewards associated with the success of a situation that is required by the individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequences than the proposed situation. A high propensity to take risks is also considered to be an important characteristic of entrepreneurs. More risk adverse individuals are expected to become workers, while the less risk adverse becomes entrepreneurs.

Risk taking is identified as a trait that distinguishes entrepreneurs from non-entrepreneurs and managers (Burch, 1986; Abraham, 1987; Wickham, 1998). The level of risk-taking propensity of the owners may lead to certain entrepreneurial orientations. It is believed that entrepreneurs prefer to take moderate risks in situations where they have some degree of control or skill in realizing a profit (Cunningham, 1991). They do not prefer situation which involved either extremes of risk or certainty

(McClelland, 1961). Risk-taking propensity may positively influence innovativeness, especially product innovativeness. Product innovativeness requires a certain degree of tolerance for taking risks because innovativeness benefits from a willingness to take risks and tolerate failures.

Tolerance for Ambiguity

When there is insufficient information to structure a situation, an ambiguous situation is said to exist. The manner, in which a person perceives an ambiguous situation and organizes the available information to approach it, reflects his or her tolerance of ambiguity. A person who has a high tolerance for ambiguity is one who finds ambiguous situation challenging and who strives to overcome unstable and unpredictable situations in order to perform well. Entrepreneurs do not only operate in an uncertain environment; according to Bowler (1995), entrepreneurs eagerly undertake the unknown and willingly seek out and manage uncertainty.

McClelland (1967) defines intolerance for ambiguity as a tendency to perceive ambiguous situations as source of threat. From this definition, we can infer that tolerance for ambiguity refers to the tendency to perceive ambiguous situations in a more neutral way. People who have low levels of tolerance for ambiguity tend to find unstructured and uncertain situations uncomfortable and want to avoid these situations. Tolerance for ambiguity is found to be related to personal creativity (Zimmerer, 1998) and the ability to produce more ideas during brainstorming. These findings suggest that creativity and innovativeness require a certain level of tolerance for ambiguity.

RESEARCH METHODS

Sample

The sample for this study consisted of 90 male and female Form 5 students, selected from two schools in Ipoh, Malaysia. In order to have a homogeneous sample of students, respondents who have similar knowledge background are selected. Students in the sample are currently pursuing subjects like Economics, Commerce and Accounting as elective subjects besides studying six other core subjects.

Research Instrument

The survey instrument used in the study is a self-administered, fixed-alternative questionnaire. Fixed-alternative questions are used to ensure a high response rate. Such a format also facilitates the coding and analysis of data. The questionnaire comprises two major sections. The first section measures professional attraction as well as parents' occupations and selected demographic variables.

The second section measures the five psychological characteristics, namely need for achievement (5 items), need for affiliation (5 items), locus of control (5 items), risk-taking propensity (5 items) and tolerance for ambiguity (5 items).

The need for achievement and affiliation were measured by the 10 items that were selected from the scale developed by The McGraw-Hill Companies (2005) to measure motivation in achievement, power and affiliation. Internal-external locus of control was measured using items from Rotter's locus of control scale (Rotter, 1954). The original scale consists of 29 pairs and has a force choice format. For this study, 5 items that seemed most suitable for a student sample were selected. Propensity for risk-taking was measured by using 5 items from the extraversion and introversion scale (Mayer, 1996). And tolerance for ambiguity was measured by using 5 items selected from the scale (16 items) of tolerance for ambiguity. Items that would be most relevant to student's life were selected.

Respondents were asked to indicate their degree of agreement with each statement on a five-point Likert scale, from strongly disagree to strongly agree. For each of the five psychological characteristics, a higher score indicates a greater need for achievement, need for affiliation, locus of control, risk-taking propensity and tolerance for ambiguity. Before administering the questionnaire, the questions were translated into the National Language to improve its readability for students.

Analysis

Descriptive statistics, for example frequency distributions and percentage were computed to develop a profile of those latent variables that were crucial for the study, i.e. students' professional attraction and parents' occupations. At the univariate level t-test of significant differences were performed to investigate if respondents, male and female students differ significantly on the five psychological characteristics, one at a time.

Results

The questionnaire was completed by 90 Form 5 students. The respondents included 40 male students and 50 female students. All of them are studying subjects like Economics, Commerce and Accounting. Descriptive statistics of variables such as parents' occupations and personal professional attraction are presented in Table 1 for the total sample, as well as in Table 2 for the male and female students

As reported in Table 1, 35.6% of the students' fathers were self-employed entrepreneurs, which is the second highest score as compared to the 48.9% of their fathers who were employees for the private sector. Most of their mothers were unemployed (62.2%). This might indicate that their mothers were playing the role of homemakers. Some of the students (8.9%) had chosen salaried work; whereas 44.4% and 46.7% of students respectively preferred to engage themselves in the liberal profession and self-employed entrepreneur fields. This implied that salaried work is their least preferred choice.

Table 1. Students' Profile (Total Sample)

Variables	Frequency (<i>f</i>)	Percentage (%)
Gender		
Males	40	44.4
Females	50	55.6
Fathers' Occupations		
Private sector employee	44	48.9
Public sector employee	4	4.4
Self-employed entrepreneur	32	35.6
Retired	6	6.7
Unemployed	4	4.4
Mothers' Occupations		
Private sector employee	14	15.6
Public sector employee	4	4.4
Self-employed entrepreneur	12	13.4
Retired	4	4.4
Unemployed	56	62.2
Students' Profession Attraction		
Salaried work	8	8.9
Liberal Profession	40	44.4
Self-employed entrepreneur	42	46.7

The analysis presented in Table 2 showed that 40% of male students' fathers were self-employed entrepreneurs. Whereas, 60% female students reported that their fathers were employees for the private sector. The male students also reported that 20% of their mothers were entrepreneurs. Majority of the male respondents (55%) were interested in entrepreneurial fields, but the girls (56%) were more attracted to liberal professions. The results suggested that successful self-employed parents were more likely to influence their children's perceptions on career choices.

Table 2. Students' Profile (Males and Females)

Variables	Males (n=20)		Females (n=30)	
	<i>f</i>	%	<i>f</i>	%
Fathers' Occupations				
Private sector employee	14	35	30	60
Public sector employee	4	10	-	-
Self-employed entrepreneur	16	40	16	32
Retired	4	10	2	1
Unemployed	2	5	2	1
Mothers' Occupations				
Private sector employee	2	5	12	24
Public sector employee	2	5	2	4
Self-employed entrepreneur	2	20	4	8
Retired	4	10	-	-
Unemployed	24	60	32	64
Students' Professional Attraction				
Salaried work	6	15	2	4
Liberal profession	12	30	28	56
Self-employed entrepreneur	22	55	20	40

The mean score for the five psychological characteristics ranges from 3.32 for risk-taking propensity to 4.03 for need for achievement. As the mid-point of each of the five scales is three on a five-point Likert scale, which ranges from one to five, we can say that all the psychological characteristics values are above the mid-point of three.

The results show that students generally possess higher locus of control (Mean: 4.03, SD=2.48) and need for achievement (Mean=3.91, SD=2.35). These two personality characteristics are very important to all individuals. While individuals with an internal locus of control believe that they are able to control life's events, individuals with a higher need for achievement have stronger desire to be successful. We can conclude that students generally have internal motivation to achieve success in their undertakings. In addition, this understanding of psychological characteristics that are unique to students is a logical first step in studying entrepreneurship.

The analysis by employing a two-tailed t-test, which is significant at the 95% confidence level, shows that there are no differences between the levels of entrepreneurial personality characteristics of male and female students. The results imply that both male and female students possess almost the same innate entrepreneurial psychological characteristics. Similarly, these findings should encourage institutions to be gender neutral in selecting students for entrepreneurial courses.

DISCUSSION

This paper reports the results of a study that inquires whether the levels of entrepreneurial personality characteristics between male and female students are different. The results show that there are no significant differences between the levels of entrepreneurial personality characteristics of male and female students. As for the five entrepreneurial personality characteristics, the mean scores are above the mid-point on a five-point Likert scale. Moreover, respondents placed the highest value on the scales of locus of control.

Future research should be designed to overcome some of the limitations of this study. First, the survey employs a self-report questionnaire. Thus, the possibility of response bias and non-response bias exists. Furthermore, the sample size is rather small to draw lasting conclusion. Future research with a larger sample of students from different regions of the country might provide stronger results.

Even with these limitations, however, this research has numerous potential implications. For example, the findings can be used as a career guidance tool for students or as a device for screening entrants into an entrepreneurship program. By knowing their entrepreneurial potential, students can make better and more informed career choices. In addition, the findings can serve as inputs into entrepreneurship education. The personality values can be used as a major key towards providing long-term educational policies to ensure that entrepreneurship becomes the hallmark of the Malaysian society.

Previous research has suggested that psychological characteristics can be learnt or changed (McClelland, 1985). In Kantor (1988), leading entrepreneurs and chief executive officers emphasized the importance of “teaching” psychological characteristics in entrepreneurship education to train successful entrepreneurs. Another potential implication is for organizations that are concerned with entrepreneurship pedagogy. Identifying levels of entrepreneurial personality characteristics could be used to develop pedagogical techniques and methods of instruction that are more aptly suited to different entrepreneurial inclination and dispositions.

CONCLUSION

The findings of this study definitely can serve as a guide in formulating education policies, outcome assessments and guidance counseling. Therefore, the on-going effort to learn if there is a consistent and meaningful link between personality characteristics and entrepreneurial activity may benefit institutions of learning especially those institutions which are involved directly in assisting the development of entrepreneurship.

REFERENCES

- Abraham, H. and Gurzynski, Z.S.A. (1987), "The entrepreneur as a non-factor", *South African Journal of Economics*, Vol. 55 No. 2. pp. 115-8.
- Barcelona, A. C., and Valida, A. C. (1994), Interrelationships Between Personal Variables and Entrepreneurial Potentials of Senior Students of Universiti Utara Malaysia, *Malaysian Management Review*, 29(4).
- Burch, J.G. (1986), *Entrepreneurship*, John Wiley & Sons, New York, NY.
- Brockhaus, R.H. (1982). The psychology of the entrepreneur. In C. Kent & D. Sexton & K. Vesper (Eds.), *The Encyclopaedia of Entrepreneurship* (pp. 39-56). Englewood Cliffs, NY: Prentice Hall.
- Bowler, A. (1995), *Entrepreneurship: An Introduction*, Nasou, Cape Town.
- Cunningham, J. B. and Lischeon, J. (1991), Defining Entrepreneurship, *Journal of Small Business Management, Academic Research Library*, pg 45.
- Gartner, W. (1985). A conceptual framework for describing the phenomenon of new venture creation, *Academy of Management Review*, Vol. 10, pp. 696-706.
- Gorman, G., Hanlon, D., & King, W. (1997). Some research perspective on entrepreneurial education, enterprise education and education for small business management: A ten year review. *International Small Business Journal*, 15(3), 56-57.
- Herron, L., & Robinson, R.B. (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, 8(3), 281-294.
- Mayer, F., and Sutton, K. (1996), *Personality: An Integrative Approach*. Prentice-Hall, Inc., New Jersey.
- McClelland, D. C. (1961). *The Achieving Society*, Princeton, NJ: Van Nostrand.
- McClelland, D. C. (1967). *The Achieving Society*, The free Press, New York, NY
- McClelland, D. C. (1985). *Human Motivation*, Glenview, IL: Scott, Foresman.
- McMullan, W.E., Chrisman, J.J. and Vesper, K.H. (2002). Lessons from successful innovations entrepreneurial support programming. *Innovation and Entrepreneurship in Western Canada: From Family Businesses to Multinational* ed by Chrisman, J.J., Holbrook, J.A.D. and Chua, J.H. University of Calgary Press, Calgary, Alberta.
- Johnson, S. M. (1986). Incentives for Teachers: What Motivates, What Matters. *Educational Administration Quarterly*, 22, 54-79.
- Kantor, J. (1988), Can Entrepreneurship: Be Taught? A Canadian Experiment, *Journal of Small Business and Entrepreneurship*, 4(4), 12-19
- Lumpkin G. T. and Erdogon, (2004). *If Not Entrepreneurship, Can Psychological Characteristics Predict Entrepreneurial Orientation? - A Pilot Study*, University of Illinois at Chicago of Business Administration, USA.
- Olson, D. E (2000). *The Role of Entrepreneurial Personality Characteristics on Entry Decisions in a Stimulated Market*, United States Association of Small Business and Entrepreneurship (USASBE).
- Robinson, P.B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to prediction of entrepreneurship. *Entrepreneurship: Theory and Practice* 15(4), 13-31.
- Ronstadt, R. (1985). "Training Potential Entrepreneurship", in *Entrepreneurship: What it is and How To Teach It*, ed. John. J. Kao and Howard S. Stevenson, Boston Mass: Harvard Business School.
- Rotter, J. B. (1954). *Social Learning and Clinical Psychology*, Prentice Hall, Englewood Cliffs, NJ.
- Stoner, J. A. F., and Freeman, R. E. (1992). *Management*, 5th Edition, Prentice Hall, Englewood Cliffs, New Jersey.
- Wickham, P.A. (1998), *Strategic Entrepreneurship: A Decision-making Approach to New Venture Creation and management*, Pitman, London.
- Zimmerer, T.W. and Scarborough, N.M. (1998), *Essentials of Entrepreneurship and Small Business Management*. 2nd ed., Prentice-Hall, Englewood Cliffs NJ.