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Psychological Traits and Business Performance of Entrepreneurs in Small Construction Industry in Malaysia

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Abstract: The research investigates the relationship between entrepreneur's psychological traits and their business performance among Class F entrepreneurs in civil construction industry in Malaysia. The result concluded that all three selected psychological traits are significant to the business performance of the class F entrepreneurs in Malaysia where the most successful class F entrepreneurs have the highest level of need for achievement, risk taking propensity and internal locus of control while the lower performers have lower scores in all three psychological traits. It is suggested that every class F contractors should possess confidence which able them to maintain their business performance. Due to the fact that psychological trait is vulnerable to several factors such as experience and knowledge, it is important to maintain the entrepreneur's level of motivation and self confidence at high level. The Government and other related agencies should play their roles to organize courses and trainings which will increase the level of motivation, self confidence and risk assessment knowledge of the class F contractors throughout Malaysia.

Key words: Psychological traits; Business performances; Class F entrepreneurs

BACKGROUND OF THE STUDY

Small and medium enterprises (SMEs) play an important role in Malaysian economic growth by contributing approximately 30 per cent of total employment in the country. Malaysian SMEs form an important role in the industrial network in Malaysia as suppliers of products and services to larger companies and also multinational corporations (Economic Review 2009). There are about 86.6% of the total SMEs involve in the service sector (SMIDEC, 2009) such as retail, accounting, restaurants, wholesale, transport and communication, construction and financial intermediaries.

Construction industry is one of the important service sectors in SME where Class F contractors plays important role in the Malaysian economy by providing their services in the civil works such as the construction of buildings, roads, drainages, fences and others as their main expertise. The registration of Class F contractors is managed by Malaysian Contractor's Service Center or in Malay language called as Pusat Khidmat Kontraktor (PKK), an agency under the Ministry of Entrepreneurship and Co-operative

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Development (MECD). Currently, MECD has been dissolved by the new Prime Minister, Dato Seri Najib Bin Tun Razak and PKK placed under the Ministry of Public Works (KKR).

Besides Class F, there are five more classes of civil contractors regulated by PKK which are Class A, Class B, Class C, Class D and Class E. One of the most important criteria for the companies intended to register with PKK is the paid-up capital of the company (Pusat Khidmat Contractor, 2009) such as in the table 1.0.

Approval of the civil contractors' registration will be mainly depending on PKK assessment results on the documentation of business or company registration or incorporation, technical competency of the company members, financial position, facilities and equipment owned by the company.

Table 1: Paid-up capital requirement for civil contractor registration under PKK

Class	Minimum paid-up capital
A	RM600,001.00
B	RM400,001.00
C	RM100,001.00
D	RM35,001.00
E	RM17,501.00
F	RM10,000.00

When registered, these contractors are qualified for government civil contracts according to their registered specializations. The specializations are categorized into seven different headings, which are Heading I (civil engineering works), Heading II (building works), heading III (mechanical, sanitary and water works), Heading IV (specialized civil engineering works), Heading V (Quarrying Metal and Earth Supply, Cartage and Transport), Heading VI (forest and land development) and lastly Heading VII (telecommunication works).

Each class of contractors is eligible for the government projects according to the cost of project range as exhibited in the table 1.2. Unfortunately, the registration of Class F entrepreneurs has been frozen since 8th April 2005. The decision was made by Cabinet Ministers Meeting on 30th March 1995 due to a report of a study by MECD which concluded four important findings as listed below:

too many Class F contractors compared to the number of projects offered by the government

limited chance for Class F contractors to secure government projects

poor quality of Class F entrepreneurs.

corruption and dishonesty by Class F contractors.

Table 2: Eligibility of project for each class of civil contractor

Class	Cost of project
A	More than RM10 million
B	RM 5,000,001.00 to RM10,000,000.00
C	RM 2,000,001.00 to RM5,000,000.00
D	RM 500,001.00 to RM2,000,000.00
E	RM 200,001.00 to RM500,000.00
F	Up to 200,000.00

Since January 2006, the government of Malaysia has reviewed the registration of Class F contractors and terminated inactive Class F contractors. As a result 3,399 Class F contractors had already terminated. The contractors are considered as active if they maintain an active bank account, participate in or secure any government jobs, attending courses organized by PKK or do not neglect their secured project (Entreprenet, 2009).

Realizing the problem faced by these contractors and entrepreneurs, the government of Malaysia had increased the number of projects offered to Class F contractors under the Ninth Malaysia Plan (2006 to 2010). Malaysiakini reported on 8th December 2006 that a decision was made by the government to allocate an additional RM600 million for Class F contractors. The projects will be distributed via 191 Umno

divisions nationwide within 2007. Each division will receive RM3 millions handled by the respective division heads with the help of the district office and Public Works Department (PWD). This solution was targeted to solve the problems related to the first and second reasons for freezing the registration of class F (Razif, 2006).

However, it was reported on 30th July 2007 by The Star newspaper that the Deputy Works Minister, Datuk Mohd Zin Mohamed mentioned that only 30% out of almost 40,000 Malaysian Bumiputra Class F contractors are still active and undertaking their jobs genuinely. He revealed that a study conducted by the Construction Industry Development Board (CIDB) in May 2007 reported that only 13,000 of the 40,000 contractors were actually participating in the industry. Others are only interested in becoming commission earners. Some of them are holding between five to ten Class F licenses in a single family (The Star Online, 2009).

Malaysiakini webpage on 7th December 2006 had identified three categories of Class F entrepreneurs. Firstly is the genuine Class F contractors who undertake the projects genuinely; secondly the part-time contractors who hold other full-time jobs while running the Class F businesses and lastly, contract brokers who are just sleeping partners dependant on the internal or external unregistered contractors as their partners to run their Class F business. These part-time contractors and brokers who get the projects sell them off to others and make a profit immediately. They are known as "Alibaba" or "Alisami" contractors and are usually the commission earners (Razif, 2006).

Alibaba is a terminology which has been widely used in Malaysia to refer to the Malay business people who have their name appeared in all official company documents but the business is actually operated by Chinese business people. Similarly, Alisami is a terminology used to refer to the Malay business people who have their name appeared in the official company documents but the business is actually run by Indian people. Both Alibaba and Alisami are lazy commission earners who earn their commission without putting any effort to accomplish their contract successfully. They manipulate their good relationship with the government officers who are in charge of government contracts to successfully win the contracts that they are interested in. Then they subcontract the works to Chinese genuine entrepreneurs for the case of Alibaba or subcontracted to Indian genuine entrepreneurs in the case of Alisami

PROBLEM STATEMENT

The abovementioned evidences have supported that the quality of Class F contractors and entrepreneurs is under question. There are still complaints related to the shortage of government projects offered even though the number of projects had been increased and distributed through proper channel. Consequently, a research which related to the personality of Class F entrepreneurs is needed in order to gain some insight on the issue of success and failure of the Class F entrepreneurs in Malaysian construction industry.

Psychological traits is chosen as a most important factor influencing the performance of the Class F entrepreneurs because the quality of entrepreneurs has been blamed by the Malaysian Ministry of Entrepreneurship and Co-operative Development (1995) as one of the factors contributing to the poor performance of Class F contractors in Malaysian small construction industry. This factor is the reflection of the quality of an entrepreneur, where the psychological traits are the reflection of the entrepreneur's cognitive base and values.

Studies in the field of personality based theory of entrepreneurship has gained insights on who entrepreneurs and what entrepreneurs do. Even though some prior studies had raised denial to the relationship between personality and business success (Gartner, 1985; Low and McMillan, 1988), recent studies have proven that both of these factors have significant effect on business and organizational performance of business (Higgs, 2006; Norburn and Briley, 1988). The major issue which needs to be answered is; Do Class F entrepreneur's psychological factors affect his or her business performance?

LITERATURE REVIEW

Personality is defined as the disposition to exhibit certain kind of response across various situations (Cervone, 2000) which is stable and enduring over time (Roccas, Sagiv, Schwartz and Knafo, 2002).

Entrepreneurs are endowed with certain traits or qualities that differentiate them from non-entrepreneurs (Garfield, 1986; Shane, 2000; Westhead and Wright, 1998).

Psychologists argue that there are specific distinct psychological characteristics which predisposed within the cognitive and values of entrepreneur (Amit et. al., 1993). They assume that fundamental attributes of people rather than other factors determine who becomes an entrepreneur (Shaver and Scott, 1991). The fundamental question of this line of thought remain as "what are the traits that is exclusive to entrepreneurs?".

The biographies of successful entrepreneurs such as Rockefeller, Trump and Enzo Ferrari may provide some evidences to encounter the abovementioned critics and simultaneously provide support to the research in the field of personality-based theory. It is frequently identified in the biographies that these entrepreneurs posses an "inborn intuitive ability" to recognize opportunities and make appropriate decision which do not exists in the non-entrepreneurs (Cunningham and Lischeron, 1991).

More evidences are found from the works of psychologist such as those developed by McClelland (1961) which focused on incentives and motives of individuals to conclude that successful entrepreneurs have a strong need for achievements (Hanserk, 2003; Horris, Miyasaki, Watters and Coombes, 2006; Lau and Busenitz, 2001; Olson and Currie, 1992; Rauch and Frese, 2007; Wu, Mattews and Dagher, 2007). Others have focused on the internal locus of control (Keh, Foo and Lim, 2002; Mueller and Thomas, 2000; Pitt and Kannemeyer, 2000), risk taking propensity (Acedo and Florin, 2007; Brockhaus, 1980; Barney, 2002; Busenitz and Barney, 1997; Busenitz, 1999), and tolerance for ambiguity (Cools and Broeck, 2007; Pitt and Kannemeyer, 2000; Schere, 1982). These psychological traits are identified as the most studied psychological traits conducted by various researchers in the personality base school of thought.

Further support are also found from the other stream of personality-base theory of entrepreneurship which is related to the observable characteristics of entrepreneurs such as their demographic background including age, tenure, financial position, education, socioeconomic roots, experience and others. These traits may somehow be changed over time through social and environmental factors (Acedo and Florin, 2007; Higgs, 2006; Hambrick and Mason, 1984; Kor, 2003; Norburn and Briley, 1988; Rauch and Frese, 2007).

However, controversies and critics have been raised regarding the issue as to whether entrepreneurs do indeed score higher on particular traits than non-entrepreneurs (Bridge, O'Neill and Cromie, 2003). Amit et. al. (1993) asserted that entrepreneurs' traits do not distinguish entrepreneurs from managers to deny the personality-base stream of thought. Several empirical evidences have also shown that the traits associated with the entrepreneurs are common to other groups of people (Cromie, 2000; Shaver and Scott, 1991; Vecchio, 2003).

Therefore, Low and MacMillan (1988) argued that the personality-based descriptive studies do not contribute to the development of entrepreneurship theory while some scholars suggested discontinuing the search for personality traits in entrepreneurship research (Aldrich, 1999; Gartner, 1988; Vesper, 1988). These inconsistencies are mainly due to several reasons including a large number of traits are linked to entrepreneurship, the difference in the ways each similar trait are operationalized and the static nature of entrepreneurial traits in most of the studies (Delmar, 2000).

As Rumelt (1987) suggested that one of the foundations of a good working theory of entrepreneurship is that it should be able to develop connections between the observable and predictable phenomena. Therefore, an association between the personality base theories to the business performance needs to be demonstrated. Based on this gap of research, this study examines the association between psychological characteristics of entrepreneurs with their business performance.

THEORETICAL FRAMEWORK, RESEARCH QUESTION AND HYPOTHESIS

Theoretical Framework

The independent variable of this study is psychological traits while the business performance is the dependent variable.

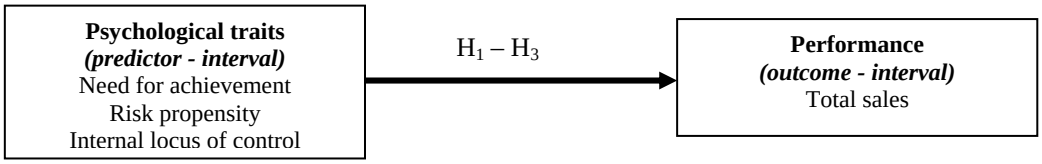

Figure 1: Theoretical Framework

Research Question

Research question is constructed in order to meet the objectives of the research:

"Does an entrepreneur's psychological traits influence business performance?"

Hypothesis

In order to answer the abovementioned research question, this study posits the hypothesis to be:

H1: Need for achievement positively influences the business performance of Class F entrepreneurs in Malaysia
H2: Risk-taking propensity positively influences the business performance of Class F entrepreneurs in Malaysia
H3: Internal locus of control positively influences the business performance of Class F entrepreneurs in Malaysia

RESEARCH DESIGN AND METHODOLOGY

The Population and Sample

The population of this study consists of all registered Class F contractors throughout Malaysia. In order to provide a pool of potential respondents, a list of registered business owners of all registered Class F contractors could be obtained from Malaysian Contractor's Service Center (PKK) official homepage (http://www.pkk.kkr.gov.my). Based on the database retrieved from the website, there are 31,844 numbers of active Class F contractors throughout Malaysia. Most of them are located in Selangor (15%) followed by Johor (10%). The detail of the number and percentage of contractors in each state of Malaysia is exhibited in the table 3.1 below:

Table 3 : Number and percentage of Class F contractors in each state

No	State	Number of registered Class F	%
1	Johor	3,223	10%
2	Kedah	2,460	8%
3	Kelantan	2,499	8%
4	Melaka	1,198	4%
5	Negeri Sembilan	2,372	7%
6	Pahang	2,228	7%
7	Pulau Pinang	1,394	4%
8	Perak	2,821	9%
9	Perlis	1,090	3%
10	Selangor	4,785	15%
11	Terengganu	2,416	8%
12	W.Persekutuan	1,685	5%
13	Sabah	2,665	8%
14	Sarawak	1,008	3%
		31,844	**100%**

Source : http://smpkk.kkr.gov.my/subpkk/msDir/user/index2.php

Stratified proportionate random sampling technique was used to get the amount of samples in this study. Sekaran (2005) postulated that this technique is under probability sampling whereby population is first divided into meaningful segments, thereafter subject are drawn in proportion to their original numbers in the population. The advantages of using this technique are most efficient among all probability designs and all groups are adequately sampled and comparisons among groups are possible.

Data Collection

Mail questionnaires are advantageous when the information are needed from the sample which is widely dispersed with reasonable cost but low response rate are usually obtained with bias because the respondents may be different from those who did respond (Cavana et. al., 2001). The mail questionnaire method is viewed as the best method of data collection for this particular study. This is primarily due to the fact that the sample is distributed all over the states in Malaysia including Sabah and Sarawak. The research requires a high cost and such a long journey to reach them if face-to-face interviews or observational study are to be employed.

After in-depth review and consideration of all available methods of data collection, 500 potential respondents have been contacted simultaneously via mail which contains participant information letter and survey form. In order to avoid bias and fulfill the need of representing the population of class F entrepreneurs throughout Malaysia, stratified random sampling were used where sample of entrepreneurs were drawn from every state in Malaysia. In addition, they need to fulfill the criteria set by the questionnaire such as already been in the business for more than 2 years. Terminated contractors within less than a year are also qualified to participate in this study.

RESULTS

Descriptive Analysis

Out of 500 invited Class F entrepreneurs, only 114 (23%) of them had answered the questionnaires completely and returned them using the enveloped provided. The state of Selangor (14.9%) contribute the highest number of respondents followed by Johor (10.5%) , Perak (8.8%) and Sabah (8.8%). The distribution of the respondents is proportionate to the total number of registerd contractors in the particular state.

Out of these 114 respondents, 15 (13.2%) of them are female while the others are male. This fact suggests that the small construction industry is dominated by male contractors. Based on the descriptive statistics, the respondents have been registered as Class F contractors for between 1 to 29 years with the average of 8.9 years. When they grouped into 3 major groups, it was found that, most of the Class F contractors participated in this study have been registered as Class F contractors for less than 10 years (74.56%), followed by between 10.1 to 20 years (21%) and lastly between 20.1 to 30 years. None of the respondents have been registered as Class F contractors for more than 30 years.

The descriptive statistics of number of full time workers employed by Class F contractors as also explained that the Class F contractors of the sample employed between 0 to 24 numbers of full time workers with an average of 4 full time workers. Based on the number of full time workers, most of the contractors are trying to maintain the minimum number of workers for their business which is between 0 to 6 full time workers in order to maintain low cost of overhead.

In term of age, they are between 21 to 73 years old with the average age of 41.85 years of age. the skewness and kurtosis readings are close to 0 which implied that the age of respondents are normally distributed.

In term of formal education, 64% of them, which is more than half, have not entered higher learning institution. The highest educational level of the contractors is only degree level while none of them had obtained Master or PhD qualification.

Their total sale ranges between RM40,000.00 to RM5 millions. In average, they gained a total sale of RM700,000.00 within those 2 years (standard deviation of RM800,000.00). From these revenue, they

managed to gain total profit that ranges between RM8,500.00 to RM1.33 millions with the average of RM560,000.00 (standard deviation of RM181,000). The total numbers of projects undertaken within 2007 to 2008 are between 2 to 76. In average, the respondents had secured almost 16 numbers of projects within 2007 to 2008. In term of profitability per project, each project had contributed a profit of at least RM1062.50 up to the maximum of RM66,500.00 per project.

Factor Analysis

Factor analysis is important to evaluate the validity of the instrument used for this study. Only confirmatory factor analysis is used instead of exploratory factor analysis because the questionnaire was adapted from reliable sources and verification was done by several experts.

The confirmatory factor analysis was done by assessing the internal reliability of all three examples of psychological factors (need for achievement, risk taking propensity and internal locus of control) through SPSS software analysis and the reading of cronbach alpha was then evaluated. Any items of the questionnaire with cronbach alpha less than 0.6 need to be deleted. The result of the reliability (confirmatory factor analysis) is presented as follows:

(1) Need for Achievement

The result of internal reliability factor analysis for each item in the need for achievement construct is shown in table 4. The cronbach's alpha is 0.6 which is considered good internally reliability (Berthoud, 2000). Table 5 showed that none of the items in need for achievement questions could increase the cronbach's alpha value if the item is deleted.

(2) Risk Taking Propensity

The result of internal reliability factor analysis for each item in the risk taking propensity construct is shown in table 4. The cronbach's alpha is 0.7 (satisfactory level) which is considered satisfactory level of internally reliability (Westergaard et. al., 1989). Table 5 showed that none of the items in risk taking propensity questions could increase the cronbach's alpha value if the item is deleted.

(3) Internal Locus of Control

The result of internal reliability factor analysis for each item in the internal locus of control construct is shown in table 4. The cronbach's alpha is 0.7 (satisfactory level) which is considered satisfactory level of internally reliability (Westergaard et. al., 1989).

Table 5 showed that item C37 of the internal locus of control questions could increase the cronbach's alpha value if the item is deleted. Anyway, the item is not deleted because the existing cronbach's alpha value could satisfy the internal reliability.

Table 4: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Need for achievement		
0.613	0.635	10
Risk taking propensity		
0.796	0.794	6
Internal locus of control		
0.713	0.712	11

Table 5: Item Statistics (Need for Achievement)

Statement	Mean	Std. Deviation	Cronbach's Alpha if Item Deleted
Need for Achievement			
(C19) I do my best work when my job assignments are fairly difficult.	4.07	0.455	0.584
(C20) I try very hard to improve on my past performance at work	4.18	0.541	0.557
(C21)I take moderate risks and stick my neck out to get ahead at work	4.00	0.421	0.585
(C22) I try to avoid any added responsibilities on my job	4.04	0.487	0.585
(C23) At work, I set high standards for myself and others	4.08	0.718	0.600
(C24) I demand quality at work	4.19	0.808	0.589
(C25) I am highly motivated to succeed	4.10	0.704	0.588
(C26) I put much time and effort into my work	4.04	0.657	0.535
(C27) I turn plans into action at work	3.96	0.703	0.629
(C28) I try to perform better than others	4.31	0.626	0.616
Risk taking propensity			
C30. With respect to my company, I believe that higher financial risks are worth taking for higher rewards.	3.51	0.744	0.779
C31. I accept occasional new product failures as being normal	3.59	0.774	0.759
C32. In term of my business, I like to take big financial risks	3.49	0.833	0.735
C33. I encourage the development of innovative marketing strategies, knowing well that some will fail.	3.56	0.704	0.791
C34. With respect to my business, I do not like to "play it safe"	3.54	0.755	0.763
C35. I like to implement plans even though it is no evidence that it will work	3.58	0.763	0.755
Internal locus of control			
C36. There are a lot of things I can do to change the practice of the construction industry.	4.30	0.594	0.694
C37. Many of the problems experience in my business can be avoided through careful planning and analysis.	4.37	0.584	0.680
C38. To a great extent, the environment in which my business operates is shaped by forces within its control.	4.10	0.665	0.718
C39. Becoming successful in my business is a matter of creating opportunities; luck has little or nothing to do with it.	4.51	0.568	0.694
C40. My business have real influence in the concern of the small construction industry	4.19	0.636	0.701
C41. It is always wise to make strategic plans because bad or good fortune does not matter.	4.18	0.694	0.684
C42. My business can pretty much accomplish whatever it sets out to achieve.	4.16	0.632	0.695
C43. My business can have an influence in developing the market.	4.10	0.691	0.689
C44. My business has the resources to control the competitors' forces in small construction industry.	4.10	0.764	0.666
C45. Engaging in detailed strategic analysis worth because all events are under control.	4.18	0.599	0.698
C46. Failure of business is usually due to failure to take advantage of the opportunities.	4.42	0.578	0.694

Simple Linear Regression (SLR) Analysis

The results are presented for three selected psychological factors namely need for achievement, risk taking propensity and internal locus of control.

Table 6: Coefficients of regression model (Need for achievement)

		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	-7.925×10^6	703,857.52		-11.25	.000
	Need for achievement	2.105×10^6	171,307.34	.76	12.29	.000

a. Dependent Variable: (Total Sale)
b. Adjusted R square = 0.57

The results of the Simple Linear Regression indicate a positive and significant relationship between need for achievement and total sale ($b_1 = 2.10^5 \times 10^6$, $t = 12.29$, $p<0.05$). Need for achievement seems to influence total sale positively. Thus, an increase in need for achievement will also result in an increase in total sale. Therefore, H_1 is supported with the regression model as below:

(Total sale) = (-7.92×10^6) + [$(2.10^5 \times 10^6)$* (need for achievement)]

The strength of the relationship between the two variables is 0.57 as measured by Adjusted R Square in table 6 indicating that need for achievement exerts a strong influence on total sale.

Table 7: Coefficientsa of the regression model (Risk taking propensity)

		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.70×10^6	401,774.90		-6.72	.000
	Risk taking propensity	9.60×10^5	112,100.07	0.62	8.56	.000

a. Dependent Variable: Total Sale
b. Adjusted R square = 0.39

The results of the Simple Linear Regression indicate a positive and significant relationship between risk taking propensity and total sale ($b_1 = 9.60 \times 10^5$, $t=8.57$, $p<0.05$). Therefore, H_2 is supported with the regression model as below:

(Total sale) = (-2.7×10^6) + [$(9.60 \times 10^5$)* (risk taking propensity)]

Risk taking propensity seems to influence total sale positively. Thus, an increase in risk taking propensity will also result in an increase in total sale. The strength of the relationship between the two variables is 0.39 as measured by Adjusted R Squared in the table 4.7 indicates that risk taking propensity exerts a strong influence on total sale.

Table 8: Coefficients[a] of the regression model (Internal locus of control)

		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	-5.05×10^6	851,782.98		-5.93	.000
	Internal locus of control	1.36×10^6	200,533.49	0.54	6.78	.000

a. Dependent Variable: (Total sale)
b. Adjusted R square = 0.29

The results of the Simple Linear Regression indicate a positive and significant relationship between internal locus of control and total sale ($b1 = 1.36 \times 10^6$, $t=6.78$, $p<0.05$). Internal locus of control seems to influence total sale positively. Thus, an increase in internal locus of control will also result in an increase in total sale. Therefore, H_2 is supported with the regression model as below:

(Total sale) = (-5.06×10^6) + [(1.36×10^6)* (internal locus of control)]

The strength of the relationship between the two variables is 0.29 as measured by Adjusted R Squared indicating that internal locus of control exerts a strong influence on total sale.

DISCUSSION

Result from hypotheses 1 to 3 tests have answered the questions related to the relationship between psychological traits and performance of business of Class F entrepreneurs in Malaysia. All three hypotheses are generally supported. The results revealed that generally, entrepreneurs with high psychological trait perform higher than entrepreneurs who possess lower psychological traits for all three studied characteristics (need for achievement, risk-taking propensity and internal locus of control).

The results of Simple Linear Regression ran for hypothesis 1 indicated a significant positive relationship between need for achievement and business performance. Thus, an increase in need for achievement will produce an increase in business performance of the Class F entrepreneurs.

The result implied that successful entrepreneurs posses higher need for achievement compared to the average and low achievers. As expected earlier, based on the previous study such as Rauch and Frese (2007), this empirical study also found that need for achievement is a valid predictor of the business start-up and success. They justified that need for achievement is classified as one of the personality traits that matched the task of entrepreneurs. Entrepreneurs need to be interested in their tasks to perform well in their business. They choose tasks of moderate difficulty, able to accept responsibility for results and seek feedback on outcomes.

This study has therefore validates the personality based theory of entrepreneurship provides a strong support that successful Class F entrepreneurs have a stronger need for achievements than the low performers entrepreneurs, similar to the previous studies (Hanserk, 2003; Horris et. al., 2006; Lau and Busenitz, 2001; Olson and Currie, 2007; Rauch and Frese, 2007; Wu et. al., 2007).

For hypothesis 2, the results indicated a significant positive relationship between risk taking propensity and business performance. Thus, an increase in risk taking propensity will produce an increase in business performance of the Class F entrepreneurs. Therefore, this study had supported the view that successful and high performance entrepreneurs possess higher risk taking propensity than the low performers.

The abovementioned support is an extension of the view that this characteristic is exclusive to entrepreneurs (Zhao et. al., 2005) where entrepreneurs are more overconfident than managers (Barney, 1995; Busenitz, 1999; Busenitz and Barney, 1997) and are able to make quick decisions (Barney, 1995) based on their past experience and tolerance for ambiguity (Acedo and Florin, 2007).

However, the results have also shown that the mean of every items in the risk taking propensity (table 4) are around moderate level (3.5 to 3.6). This denotes that entrepreneurs are not gamblers who take risk on a wild chance but they are working with moderate or calculated risks as contended by Frederick et. al. (2006). Besides avoiding unnecessary risks, they added that successful entrepreneurs will do everything possible to get the odd in their favor.

Lastly, results for hypothesis 3 indicated a significant positive relationship between internal locus of control and business performance. Thus, an increase in internal locus of control will produce an increase in business performance of the Class F entrepreneurs.

This association has confirmed the validity of internal locus of control as a predictor to the performance of business (Boone et. al., 1996) even though some studies has provide denials to the exclusiveness of internal locus of control to entrepreneurs (Hull, et. al.,1980; Chen et. al., 1998; Cromie, 2000). Boone et. al. (1996) contended that internal locus of control helps entrepreneurs to overcome setbacks and disappointments and eventually lead to higher performance.

This finding also provides extension of validation to the previous studies that internal locus of control can predict business start-up (Cools and Broeck, 2007) and influences job performance (Judge and Bono, 2001; Judge et. al., 1998; Spector, 1988) by suggesting that internal locus of control also has influence on entrepreneurs' business performance.

CONCLUSION

It shows that the three selected psychological traits (need for achievement, risk taking propensity and internal locus of control) are important to the success and failure of the class F entrepreneurs in Malaysia. The most successful class F entrepreneurs possess the highest level of need for achievement, risk taking propensity and internal locus of control as indicated in this study.

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