

ENTREPRENEUR PSYCHOLOGICAL TRAITS AND PERFORMANCE: IMPLICATIONS FOR NIGERIAN NON-OIL SMES EXPORTING COMPANIES

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Abstract: *The purpose of this paper is to investigate the impact of psychological traits on performance of small and medium sized (SMEs) exporting firms in a developing country. The study made of survey method to reach one hundred and twenty three firms. Descriptive and inference statistics were used to test the hypotheses. The results showed that the psychological traits tested (need achievement, locus of control and self-efficacy) are related among themselves and positively related to performance of the studied firms. Subjective measures were used to test performance. The findings are in line with some other studies using similar variables. The major contribution of this paper is it's the relationship between entrepreneurial psychological traits and performance in a developing African country like Nigeria.*

Keywords: *Psychological traits; need achievement; locus of control; self-efficacy; performance*

JEL Codes: L25, L26

INTRODUCTION

The growth of most economies depends essentially on the vibrancy of the entrepreneurship. Entrepreneurship has been found to create employment, offering unlimited opportunities to the people, development of pool of skill and semi-skilled workers and helping them to generate income. According to Chen, Tzeng, Ou and Change (2007) most industrial nations were built by entrepreneurial individuals. A number of these entrepreneurial individuals started their business ventures through sole proprietorship or small and medium-sized enterprises (SMEs). SMEs are seen as the

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engine of growth of any economy. They play a vital role in the global economy (Kropp, Lindsay and Shoham, 2006). However, the perception of African entrepreneurship among scholars and researchers on SMEs differ considerably. This is because of seemingly lack of technical entrepreneurial talent in the establishment and management of manufacturing industries (Adegbite, Ilori, Irefin, Aberejo and Aderemi, 2007). The lack of technical entrepreneurship has been proven in African continent because of glaringly lack of meaningful development and economic advancement in sub-Sahara Africa (Okpara and Kinmbiadis, 2008). The promotion of SMEs according to Kazeem and van der Heijden (2006) is one of the best strategies to achieve national development and high level of competition.

The development of SMEs is significant in developing countries like Nigeria that suffers from high level of unemployment, lack of investment, balance of payment deficit, high level of poverty etc. This is because the growth of SMEs provides solutions to some of the complex economic and developmental problems of these countries (Beugelsdijk, 2007). The development of SMEs is a function of depth and availability of entrepreneurs. Entrepreneurship is a decisive factor for a country to attain a reasonable level of competitiveness. SMEs are the driving force for the achievement of economic development and creation of jobs and contributing to personal development of both employees and the owners. Moreover, SMEs are used as vehicles of establishing business enterprises in developing countries like Nigeria.

Entrepreneurship is multidimensional process that requires further research studies. This is because existing literature is filled with inconsistent definition of entrepreneur and the relevance of personality traits on the success of the entrepreneur (Beugelsdijk, 2007; Jaafar and Abdsul-Aziz, 2005). More importantly, most of the researches in this area were conducted in developed countries particularly USA and European Countries (Adegbite, et. Al 2007). There are a number of studies in literature that had suggested a relationship between personal attributes of an entrepreneur and the success of the firm (Adegbite, et al., 2007). These attributes are described with different adjectives and synonyms. Kasheed (2002) identified need for achievement, creativity and initiative, risk taking and objective setting, self confidence, internal locus of control, energy, commitment and persistency as salient features of successful entrepreneurs. From the above discussion, this study attempts to bridge the research gap of inadequate study on the effect of entrepreneurs' psychological traits on firm outcome in a developing country like Nigeria. The objectives of this study therefore, include determining the extent of influence of the entrepreneurs' psychological traits on firm performance in Nigerian non-oil SMEs exporting sector.

In Nigeria, SMEs account for about 80% of the industrial sector, in terms of number of employees and enterprises. SMEs also account for 10% of manufacturing

output and meager 1% of gross domestic product (GDP) (Adegbite, et. al, 2007; Nigeria Investment Promotion Commission, 2003). Parts of the challenges faced by SMEs despite its contributions include inadequate technical entrepreneurial talent, persistent low level of technology, shortage and inadequate entrepreneurial skill of operators and absence of an effective management technique (Adegbite, et. al 2007; UNIDO, 1994). This makes it difficult for SMEs to compete effectively in technologically driven, knowledge based and export oriented global market. The present study attempts to assess the relationship between technical entrepreneurial characteristics and firm level behaviour and performance of SMEs in Nigeria.

LITERATURE REVIEW

The entrepreneur is the individual that identifies opportunities, gather necessary resources, creates and is ultimately responsible for the performance of the firm (Adegbite, et al. 2007). The above definition did not account for the entrepreneur characteristics as well as the effect of social, cultural, psychological, political and economic contextual factors. The model for the influence of characteristics of the enterprise, comprise of thoughts, ideas or dreams of the individuals, particularly of the founding individual (Tonge, 2001). Other important characteristics factors for the success of the entrepreneur include the need of achievement (McClelland, et al. 1989); risk taking propensity (Brockhaus, 1980); locus of control (Markman and Baron, 2003) and desire for personal control of business (Sexton and Bowman, 1983). More importantly, other background factors have been identified to be related to characteristics of entrepreneur. These background factors include previous employment, family background, age and gender, education and religion (Storey, 1982; Adegbite, et al. 2007).

The concept of entrepreneur in literature has no acceptable definition. Rasheed (2002) suggested certain basic attributes of an entrepreneur, these attributes include need for achievement, creativity, initiative, risk taking, self confidence, internal locus of control, need for independence and autonomy, commitment and persistency. However it is important to note that some authors had argued against the use of disposition attributes of the entrepreneur as a useful predictor of organizational success (Visser, Corning and de Smit, 2005). While on the other hand some researchers are in favour of the use of dispositional attributes as useful tools in theories of behavior in organization (Visser, Corning and de Smit, 2005)). It is worthy of note that failure of previous research to identify acceptable set of characteristics for profiling an entrepreneur has led some scholars to shift attention to entrepreneurial behavior (Poon and Aiunddin, 2006). Therefore, a number of studies have used an individual level of analysis; recent research however has focused on the firm level of behavior to explain entrepreneurial performance.

In the opposite direction other stream of researches, however, contend that without the entrepreneur there is no entrepreneurship and it is important to study entrepreneurship at the individual level using trait based approach (Johnson, 1990). However, the use of only dispositional characteristics may not be enough to explain firm-level outcome and for complete understanding of the entrepreneurship process. Few studies have examined how personality traits and firm-level behavior are related particularly in Nigerian business environment.

The need for achievement trait has been linked empirically to entrepreneur activity which is defined as the tendency to choose and persist in activities that hold a moderate chance of success without undue risk of failure (McClelland, Koestner, and Weinberger, 1989). It has been established in literature that people with a strong motive for achievement have a strong desire to be successful, accept responsibility, seek objective performance feedback, set achievable goals and are willing to take calculated risks (Poon and Aiunddin, 2006). Therefore individuals with strong desire to succeed are likely to exploit entrepreneurial opportunities and perform better than those with a weak desire to succeed (Share and Venkataraman, 2000). This model has been more pronounced in entrepreneurs than non-entrepreneurs (Ahmed 1985). Achievement motive has been shown to predict entrepreneurial performance and success in both western (Miner, Smith, and Bracker, 1994) and non-western countries. Thus we propose:

H₁: Achievement motive will be positively related to firm performance

Locus of control refers to people believing that the success they achieve in life is determined by their own traits or behavior (internal locus of control) or that their success is determined by external factors such as fate (external locus of control). As obtained in literature people with high locus of control exert more effort and persist towards achieving valued outcomes (Poon and Aiunddin, 2006). Empirically it has been proven in literature that greater efforts and perseverance generally lead to higher performance (Markman and Baron, 2003). For example, locus of control has been found to be associated with academia performance, organizational change and career success (Judge and Boro, 2001). On the basis of this, we propose:

H₂: Internal locus of control will be positively related to firm performance

One other dispositional trait that is belief to affect entrepreneur success is self-efficacy traits. Self-efficacy concept is defined by Wood and Bandura (1989) to refer to 'beliefs in ones' capabilities to mobilize the motivation, cognitive resources and courses of action needed to meet given situational demands'. General self-efficacy expectations refer to people with varied and numerous experiences of success in a variety of situations. Generalized self-efficacy is described by Judge and Boro (2001) as the 'fundamental ability to cope, perform and be successful'. Previous studies had established a link

between self-efficacy and entrepreneurial intentions and actions. On the basis of this we propose:

H₃: Generalized self-efficacy will be positively related to firm performance

Method

This study made use of survey questionnaire to gather data. The study was carried out in Lagos, South West Nigeria. The working universe for this study is a compile list of registered non-oil exporters by Nigerian Export Promotion Council (NEPC). The compilation has the names of registered performing exporting firms, their locations (addresses), exported products, postal and email addresses. There are three hundred and eleven one (311) registered non-oil exporters as at December, 2009. Two hundred and twenty-one (221) of these registered companies are located in Lagos and its environs. The study made use of all registered non-oil exporters in Lagos. This is partly for convenience and partly because of the relative small size of the registered companies in Lagos. According to Asika (1991) the best sample size is a complete census of the population. As such all the elements of the population are expected to be registered non-oil exporters in Lagos. One other justification for limiting the study to Lagos is that over 70% of the total registered non-oil exporting companies are located in Lagos. Lagos is Nigeria's former Federal Capital City and it is the country main manufacturing and commercial centre.

Most of the registered non-oil exporting companies are small scale business. Small scale businesses are defined by Central Bank of Nigeria (2001) and Bankers Committee as those businesses with capital outlay of between N1 million and N50 million, excluding the cost of land and employing between 10 to 50 full-time workers. Structured questionnaire was used to gather data for this study. The respondents were entrepreneurs of registered SMEs involved in non-oil exporting sector. To ensure good response rate and to overcome the challenge of delayed postal services common in Nigeria, a drop-off and pick-up method was used. One main advantage of this method is that it ensures reliable distribution and collection procedures which are systematic and controlled by the researcher. A total of 123 usable out of 221 copies of questionnaire distributed were retrieved which provide a response rate of 56%.

Measures

A number of the items in the questionnaires were adopted from previous studies. For example, achievement motive was measured using a three item, 7-point Likert type scale that was originally developed by Edward (1959) to measure achievement motivation. Question items for need for achievement include: I will accept responsibility for my own performance, I want to know how well am doing. The reliability scale of the items is 0.75. Rotter (1966) original 4-item measures were used to measure internal locus

of control. The items were originally developed to measure generalized expectations. They have tested to have high reliability and validity in a number of studies (Boon and Debrabander, 1993; Boon, Debrabander, and van Vittelooostuijn, A.. 1991). The four items adopted for this study are; (a) many unhappy things in peoples' lives are partly due to bad luck; (b) peoples' misfortune result from the mistake they make; (c) most employees do not realize the extent to which their actions are influenced by accidental happenings; (d) becoming a success is matter of hard work, luck has little or nothing to do with it. The reliability of the scale is 0.79. Generalized self-efficacy was measured using 5- item taken from Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, and Rogers, (1982). The question items used in this study include failure makes me try harder; I feel insecure about my ability to do things. The reliability of the scale is 0.81.

Within the Nigeria business environment, owners are usually reluctant to reveal business financial records and request on this may elicit low or no response. As such subjective measures of performance are used. The use of subjective, self-reporting measures of performance is consistent with past research (Smart and Conant, 1994; Poon and Aiunddin, 2006). More importantly, empirical evidence has shown that there is a high level of correlation between subjective views of managers' perception of their firms' performance and the actual performance as indicated by objective measures (Wall, Michie, Patterson, Wood, Sheehan, Clegg, and West, 2004). The respondents were asked to assess both growth and functional performance of their firms. Eight-item performance scale ranging from very poor (1) to very good (5) was used. The Cronbach alpha of this scale is 0.83

Results

Principal component factor analysis was calculated for the question items. Factor extraction resulted in single factor loading in each of the four scales ranging from 0.75 to 0.83. The component factor analysis and Varimax rotation produced Eigenvalue greater than 1.0 and factor loading greater than 5.0. The four variables used to measure psychological traits are highly loaded.

Table 47 *Principal Component Factor*

Variables	Items	Factor Loading
Need Achievement	4	0.75
Internal Locus of Control	4	0.79
Generalized Self-Efficacy	5	0.81
Performance	7	0.83
Eigenvalue = 2.43		
Variance explained = 61.3%		

Mean scores psychological traits and performance is indicated in Table 48. In all the variables tested, the mean scores range from minimum of 3.78 (internal locus of

control) to 4.53 (generalized self-efficacy), while need achievement and performance have 3.81 and 4.51 respectively. Analysis of Table 48 shows the relationship between psychological traits (need achievement, internal locus of control, generalized self-efficacy and performance). The table indicates that the three psychological traits tested have positive relationships among themselves and performance some at 0.05 while others are at 0.01. For example, need achievement is positively related to the other two psychological traits test: internal locus of control ($r=0.61$, $p<0.05$) and generalized self efficacy ($r=0.68$, $p< 0.05$). The three psychological traits are also positively related to performance: need achievement ($r=0.66$, $p< 0.01$); internal locus of control ($r= 0.58$, $p<0.05$) and generalized self-efficacy ($r=0.64$, $p<0.05$). This result supports our hypotheses and it is consistent with earlier studies (Mostafa, Wheeler, and Jones, 2006).

Table 48 *Descriptive Statistics and Correlation Analysis for the Study*

	Mean	SD	1	2	3	4
Need Achievement	3.81	0.68	1			
Internal locus of Control	3.78	0.72	0.61*	1		
Generalized self-efficacy	4.53	0.80	0.68*	0.52*	1	
Performance	4.51	0.73	0.66**	0.58*	0.64*	1

* $p<0.05$; ** $p<0.01$

The regression results in Table 49 show the impact of need achievement on performance. The impact of need achievement obtained is $R= 0.285$ (28.5). This shows a strong relationship between need achievement and performance. The explanatory power of the relationship is $R^2= 0.250$ (25%). The implication of this is that 25% of the performance of the studied organization can be traced to need achievement. The other percentage 75% is explained by other factors aside from need achievement. The F-ratio is 0.000 which is statistically significant, while the t-ratio indicates the significance of need achievement to performance.

Table 49 *Regression Analysis of Need Achievement and Performance*

R	0.285
R2	0.250
Std error	0.576
Dw	1.353
F	13.394
Sig. F	0.000
Beta coefficient	0.344
t-cal	0.317
Sig t	0.00

The result of the analysis of inverse relationship between internal locus of control and performance is shown in Table 50. The result showed similar trend with the earlier

analysis. The R value is 0.275 (27.50%) and its explanatory power R^2 is 0.253 (25.3%). This can be interpreted to mean that 25.3% of performance is due to internal locus of control. F-ratio is statistically significant at .000 and the t-ratio showed that internal locus of control of the studied firms has significant impact on its performance. Therefore, from the above it can be interpreted that there is strong relationship between psychological traits and performance. The performance of the studied firms is also strongly influenced by the level of psychological traits of the owners.

Table 50 Regression Analysis of Internal Locus of Control and Performance

R	0.275
R2	0.253
Std error	0.506
Dw	1.870
F	19.022
Sig. F	0.000
Beta coefficient	0.492
t-cal	10.981
Sig t	0.002

DISCUSSION

The purpose of this study is to investigate the relationships between entrepreneur psychological traits and the level of performance of SMEs in Nigerian non-oil export sector. The variables used for entrepreneur psychological traits are need achievement, internal locus of control and generalized self-efficacy. Performance was measured with subjective variables as it may be difficult to obtain objective measurements. In this analysis of the relationship, it was discovered that psychological traits have positive relationships among themselves. Need achievement have strong positive relationship with both internal locus of control and generalized self-efficacy. Internal locus of control also has positive relationship with need achievement and generalized self-efficacy. Similarly is the relationship between generalized self-efficacy and need achievement and internal locus of control. This result is at variance with the findings of Poon and Aiunddin (2006).

Internal locus of control is significantly related to firm performance. This indicates that the higher an entrepreneur was on internal locus of control, the better is the performance of the firm. The relationships among the psychological traits of entrepreneur may be interpreted to be both additive and interactive. However, the effects of specific self-efficacy on performance need to be explored. This is because the relationship between self-efficacy and firm performance is more complex than a simple generalized relationship. The need to identify characteristics that predispose an entrepreneur to succeed is of great importance in a developing economy like Nigeria.

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