The Effect of Entrepreneurial Characteristics on the Profitability of Micro, Small and Medium Scale Enterprises in Kaduna State

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Abstract

The growth and development of micro, small and medium enterprises (MSMEs) has been a focus for policy makers and researchers in the developed and developing countries. Review of extant literature revealed that the ability of the MSMEs to achieve higher profitability has been inhibited by lack of relevant characteristics on the part of the entrepreneurs. This study therefore investigates the effect of self-efficacy, risk taking and locus of control on the profitability of micro, small and medium scale businesses in Kaduna state. Survey research design was employed in the study which is cross sectional in nature. Primary data was collected through questionnaire administration. The data was collected from a sample of 174 drawn from a population of 201 MSMEs. The study employed stratified and simple random sampling technique in selecting the samples and the unit of analysis was the ownermanagers representing each MSME. Inferential statistics was used to analyze the data collected from the field with the aid of Statistical Package for Social Sciences (SPSS) version 20. Multiple regression analysis was used to test the hypotheses formulated for the study. The findings revealed that self-efficacy, risk taking and locus of control all have significant positive effect on the profitability of MSMEs in Kaduna State. The study concluded that entrepreneurial characteristics lead to higher profitability of MSMEs in Kaduna state. The study recommended that a combined effort by governments at all levels and Non-Governmental Organizations (NGOs) are required towards capacity building for the entrepreneurs to enhance and appreciate their inborn personalities and traits for higher profitability.

Keywords: Entrepreneurship, Entrepreneurial characteristics, Profitability

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Background to the Study

The contributions of Micro, Small and Medium Enterprises (SMEs) to economic growth and development of nations have been widely acknowledged and well documented by researchers and policy makers globally Kalpande, Gupta & Dandekar, 2010; (Shastri, Tripathi, & Ali, 2011; Martey 2013). Countries all over the world constituting the developed and developing ones have moved away from the former approach to economic growth and development which focuses on Large Scale Enterprises (LSEs) to MSMEs which are considered as contributing higher to their economic wellbeing. According to the National Enterprise Development Programme (NEDEP) Release 1.0 in 2011, MSMEs contribute 40-55% of the world's Gross Domestic Product (GDP) and 50-80% of the world's employment.

Cognisance of the enormous roles MSMEs play in the economy, successive governments have adopted different mechanisms aimed at entrenching the sector into the main stream of the Nigerian Economy. The government had accorded and gave priority to them through the introduction of different policies, incentives, subsidies, programs and agencies aimed at providing a favourable environment for businesses to flourish. Some of these establishments include: National Economic Reconstruction Fund (NERFUND) in 1990, National Poverty Eradication Programme (NAPEP) in 1996, Small and Medium Enterprise Development Agency of Nigeria (SMEDAN) in 2003, Micro Finance Institutions (MFI) in 2005 and Small and Medium Industries Equity Investment Scheme (SMIEIS) in 2006. Other recent ones include Youth Enterprise with Innovation in Nigeria (YOU WIN), Train to Work (TRATOW) initiative and so forth. The cardinal points of all these development initiatives were to accelerate the pace of industrialization, complement LSEs and promote entrepreneurship among the populace.

Despite all government interventions and supportive mechanisms, MSMEs fail to grow from micro to small and small to medium and eventually large enterprise as it will be expected. A 182 page Nigerian Bureau of Statistics/Small and Medium Enterprise Development Agency of Nigeria (NBS/SMEDAN) 2012 National MSMEs collaborative study revealed that there are 17, 284,671 MSMEs in Nigeria. The breakdown shows that micro businesses constitute about 17,261,753 or 99.87%, the small enterprises accounted for about 21,264 or 0.12% while the medium scale enterprises is about 1,654 or 0.01%. NEDEP also revealed that Micro enterprises contribute 60-75% of the Nigerian employment, small enterprises contribute 20% and Medium enterprises contribute 5-10%. Given the fact that micro enterprises constitute 99.87% of the total SMEs operating in the country; this explains that MSMEs in Nigeria are characterized by low performance and therefore are unable to grow from one scale of business to another (SMEDAN, 2012). Also, in an international conference on SMEs, Oyelaran (2010) posited that SMEs contribute approximately 1% of the country's GDP compared to 40% in Asia and 50% in the USA. This implies that there are some forces behind their low profitability in Nigeria.

Given the fact that MSMEs constitute majority of businesses operating in the country, their low performance call for this research to be undertaken. Previous studies on issues, challenges and prospects of MSMEs such as Charles and Babatunde (2012) and Agwu, (2014) identified incompetence's and lack of entrepreneurial characteristics among entrepreneurs as the major cause of low profitability of MSMEs. Given the myriad of challenges faced by MSMEs, the benefits of having a competent entrepreneur cannot be overemphasized. In line with this problem, the following research hypotheses have been formulated for the purpose of validation during the course of this study;

- H0₁: Self Efficacy has no significant effect on the profitability of MSMEs in Kaduna State.
 H0₂: Risk Taking has no significant effect on the profitability of MSMEs in Kaduna State.
- **H0**₃: Locus of Control has no significant effect on the profitability of MSMEs in Kaduna State.

Literature Review and Theoretical Framework Entrepreneurial Characteristics

Entrepreneurial characteristics of the owner-manager popularly known as an entrepreneur play a very important role in ensuring the success of the business (Rajah & Takan, 2005). Islam, Khan, Obaidullah and Alam (2011) added that it makes them different from ordinary people. Many different types of people are drawn to entrepreneurship and a wide variety of talents, aptitudes, and personal traits help contribute to an entrepreneurial spirit, personality, and vision (eOkafor, Fagbemi, & Hassan, 2010). The attitude, mindset, passion and character that define the successful entrepreneur are sometimes hard to pinpoint, specify or sum up in a profile. But Luisa (2006) contend that it is always easy to recognize in an individual or spot in action within the business arena. Thus, Thandeka (2008) established that the closer the match between the individuals' personal characteristics and the required characteristics of being an entrepreneur, the more successful the individual will be.

However, after examining the personality of the entrepreneur, Dingee, Haslett and Smollen (1970) suggested traits like: drive and energy level; ability to work for long hours. Self-confidence; implies a belief in yourself and your ability to achieve set goals. Setting challenging but realistic goals, long term involvement: imply having a high sense of commitment and dedication. Risk taking; taking calculated and moderate risk. Persistent problem solving: having an intense and determined desire to solve problems towards the completion of tasks, and learning from failure; understanding your role in a failure and preventing future occurrence. Joseph, (2010) identified; need achievement; the tendency to choose and persist in an activity, locus of control; success or failure results from people's behaviour and self-efficacy; ability to cope, perform and be successful. Driessen and Zwart (2000) looked at social orientation; good at developing and maintaining contacts. Self-efficacy; implies accepting responsibility for success or failure. Endurance; refers to perseverance in good and bad times. Creativity; refers to the ability to recognize opportunities and flexibility; ability to adapt to changing circumstances as the most important characteristics that define a successful entrepreneur.

From the preceding review, we can deduce three traits that have frequently appeared in the literature include; self-efficacy, risk taking and locus of control.

SMEs Profitability

One of the most difficult attributes of a firm to conceptualize and measure is profitability (Ross, Westerfield and Jaffe, 1999). In a general sense, accounting profits are the difference between revenues and costs. However, the problem with accounting-based measures of profitability is that they ignore risk. In the economic sense, a firm is profitable only if its profitability is greater than investors can achieve independently in the capital market. In their text, Ross, Westerfield and Jaffe (1999) suggest some methods to measure profitability including profit margin or return on sales, return on assets, and return on equity. Given the fact that the availability of financial data on these profitability indicators in small business settings is limited, relying on the financial measure can be misleading despite its objectivity. Therefore,

a financial measure was used in this study based on the manager's perception of growth in profit.

Entrepreneurial Characteristics and MSMEs Performance

Woldie, Leighton and Adesua (2008) in an analysis of the influence of five owner/managers characteristics and four firm characteristics on the growth of SMEs found that, SMEs growth is largely influenced by firm characteristics including age, sector, legal status and number of employees. Owner/ managers characteristics including age, education and prior experience were also found to influence growth of SMEs.In South Africa, Machirori and Fatoki (2013) investigated the impact of entrepreneurial characteristics on networking of SMEs. Gender, age and educational level were used as measures of entrepreneurial characteristics. Using a selfadministered questionnaire to collect primary data, descriptive and regression analysis were employed to analyse such data. They found that some entrepreneurial characteristics impact positively on networking of SMEs. Islam, Khan, Obaidullahi and Alam (2011) also examined the effect of entrepreneurial characteristics and firm characteristics on business success of SMEs in Bangladesh. Age, gender and educational qualifications were used as measures of entrepreneurial characteristics. Data was collected using a self-administered questionnaire on the owners and employees of SMEs and the SPSS output revealed that only gender has significant effect on business success of SMEs. Different indices were used to measure success. However, the study failed to explicitly state the parameters for the measurement of success. Muzenda (2014) also investigated the effect of entrepreneurial attributes, firm characteristics and external factors on the performance of SMEs. The data was collected using structured questionnaire and analysed using regression. The findings revealed that entrepreneurial attributes, firm characteristics and external factors demonstrated significant association with SMEs performance. What is common among the studies above is that they all used background characteristics such as age, gender, education among others while other psychological characteristics like passion and risk taking were not considered.

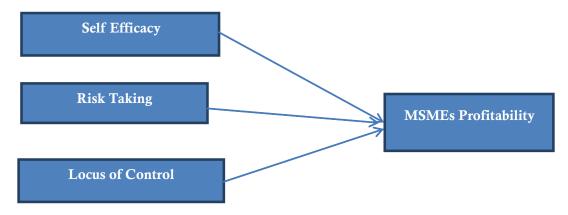
Other studies that focused on the psychological characteristics of the entrepreneur though concentrates on the internationalization of SMEs include; Ogunleye (2012) who investigated the impact of psychological traits including self-efficacy, need for achievement and internal locus of control on performance of SMEs exporting firms in Nigeria. Data was collected from 123 firms and hypothesis was tested using descriptive statistics. The finding reveals a significant relationship between entrepreneurial psychological traits and performance of SMEs in Nigeria. Similarly, Adegbite (2006) studied the impact of entrepreneurial characteristics on the performance of manufacturing SMEs in Nigeria using data collected through questionnaire from 100 SMEs and analyzed using descriptive statistics and inferential statistics, the result showed that 7 out of the 10 entrepreneurial characteristics of the respondents made negative impact on financial performance. Luisa (2006) analyse the role of managerial characteristics on choice and internationalization of SMEs. Manager's experience, level of education, language skills, risk taking and aggressiveness were used as indices for managerial characteristics. The result revealed that some personality traits of the manager affect the firm export intensity growth. The study focus on the food industry neglecting other vibrant sectors that are equally important to the economy.

What is common among the researches above is that most of them used demographic features to measure entrepreneurial characteristics and says little about other psychological characteristics. Therefore, the focus of this study is on psychological attributes of an entrepreneur, self-efficacy, risk taking and Locus of control.

Human Capital Theory

Human capital theory was originally developed by Becker in 1964 to estimate employees' income distribution from their investments in human capital. Becker defines human capital as skills and knowledge that individuals acquire through investments in schooling, on-the-job training, and other types of experiences. It comprises the stock of knowledge and skills that reside within individuals. Specifically, it includes the unique insights, skills, cognitive characteristics and aptitudes of entrepreneurs. It also includes achieved attributes, accumulated work and habits that may have a positive or negative effect on productivity. It represents a resource that is heterogeneously distributed across individuals and is thus, central to understanding differences in opportunity identification and exploitation. Researchers have employed a large spectrum of variables signifying human capital such as formal education, training, employment experience, start-up experience, owner experience, parent's background, skills, knowledge among others.

The Human Capital theory is adopted for the study because the study is aimed at determining the effect of self-efficacy, risk taking and Locus of Control on MSMEs profitability. Thus, from the theory viewpoint, individuals with more or higher human capital achieve higher profitability when executing tasks.



Conceptual Framework of the Study

Methodology

The study adopts a survey research design which is cross-sectional in nature, primary data was collected from the population of the study using self-administered questionnaire. This type of research design is adopted because the information about the independent variable and dependent variables represents what is going on at only one point in time. The study adapted Ogunleye (2012) questionnaire and responses were taken on five point likert scale ranging from strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1).

The population of the study consist of 201 MSMEs owners-managers operating their businesses within Kaduna state as at 2016 and are registered with SMEDAN. The list is obtained from the Kaduna state Smedan office. The choice of this group of MSMEs is necessitated by the fact they are well organized with registered offices and are having full time employees. The sample size of the study is 134 determined using Yamane formula.

However, 30% of the minimum sample was added as suggested by Israel (2013) in order to take care of non-responses and incorrect filling or failure of some respondents to fill or return the questionnaire. Thus, 40 respondents were added to the computed sample size of 134 which gives the total of 174. Stratified and simple random sampling technique was adopted to select businesses from the 3 senatorial zones of the state namely; South, Central and North. The questionnaire was distributed based on proportionate sampling procedure to arrive at a sample size for each senatorial zone.

Primary data was employed for the study in order to guide the researcher in making meaningful findings and conclusions. The study obtained the data through administering of questionnaire to registered owner-managers operating MSMEs in the state.

The table below shows how the questionnaires were proportionally distributed to the 3 senatorial zones. This is obtained by taking the numbers of registered MSMEs in each zone multiply by the sample size of the study and divide by the total registered MSMEs of the state.

Table 3.1 Distribution of Questionnaires according to Senatorial Zones

Senatorial Zones Number of Registered MSME		Apportioned Questionnaires		
NORTH	22	19		
CENTRAL	164	142		
SOUTH	15	13		
TOTAL	201	174		

Source: Researcher's computation

Validity and Reliability of Instruments

A pilot study was conducted in order to test for the validity and reliability of the instrument. The validity of the instrument was obtained by a panel of two experts. Each scale item was rated in terms of the relevance of its constructs. The items were rated on 4-point ordinal scale: not relevant, somewhat relevant, quite relevant and highly relevant. Content Validity Index (CVI) for each scale was computed to ascertain whether the domain of the concept is made clear and the items fully measure the domain. CVI of 0.923 was recorded for self-efficacy as 3 out of 7 items were rated quite relevant and highly relevant, a CVI of 1.00 was recorded on risk taking and a CVI of 1.00 was recorded on Locus of Control. A CVI of 1.00 were recorded on profitability of MSMEs as all the 11 items were rated quite relevant and highly relevant. Therefore, all the scales met the minimum validity of 0.80 (Polit & Beck, 2006).

In an attempt to determine the accuracy of the measurement, the test for reliability was conducted. A total of 20 questionnaires were administered to a segment of the population. The result revealed that self-efficacy (SE) has a reliability scale of 0.984 while risk taking(RT) has a score of 0.840 and locus of control(LC) has a scale of 0.821 and MSMEs profitability has a reliability scale of 0.899. Alpha reliabilities for all the scales were above 0.80, therefore meeting acceptance standards for research (Drost, 2004).

Technique of Data Analysis and Justifications

Multiple regression analysis was used to test the hypotheses about the effect SE, RT and LC on the profitability of MSMEs with Statistical Package for Social Science (SPSS) version 20. The decision to use regression analysis was informed by the fact that the researcher's objective is to establish the extent of effect the independent variables have on the dependent variable.

Factor Analysis

Principal Component Analysis (PCA) was employed with varimax rotation method to analyze the underlying structure of the inter-relationships among the items into a set of common dimensions.

The dependent variable was measured by 11 items at inception. The factor loading of the items ranged from 0.688 to 0.901 with 3 item being removed for various reasons such as having low commonalities value, loading less than 0.50 and cross-loading. The independent variables were measured by 14 items in three dimensions. The factor loading of the items ranged from 0.611 to 0.876 with 2 items being removed for various reasons such as having low commonalities value, loading less than 0.50 and cross-loading.

Test of Hypotheses

Model Summary

Model	R	R Square	Adjusted R	Std. Error of
			Square	the Estimate
1	.538	.289	.274	.39301

a. Predictors: (Constant), LC, RT, SE

The model summary table above indicates that SE, RT and LC account for 28.9% (r^2 = 0.289) change in the profitability of MSMEs operating in Kaduna state. It also indicates strong relationship between the variables @=0.538).

ANOVA^a

Mode	1	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	8.794	3	2.931	18.979	.000 ^b
1	Residual	21.624	140	.154		
	Total	30.418	143			

a. Dependent Variable: SPR

b. Predictors: (Constant), LC, RT, SE

In the Anova table, the F-statistics tests the fitness of the model of multiple regressions specified for this study, where MSMEs profitability was expressed as the function of SE, RT and LC. The F statistics is significant at 5% (F= 18.979, P<0.05) indicating the fitness of the model.

Coefficients^a

Continue						
Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.333	.397		3.355	.001
	SE	.484	.208	.259	2.613	.011
	RT	.357	.112	.302	3.181	.002
	LC	.445	.200	.246	2.228	.027

a. Dependent Variable: SPR

Table coefficient table shows that SE can positively and significantly predicts profitability of MSMEs (Beta = 0.259, P=0.011). It is on this basis that we reject hypothesis one (H_{01}) which stated that SE have no significant effect on the profitability of MSMEs in Kaduna state.

It also shows a Beta value of 0.357 and a p-value of 0.002 again less than 5% level of significance against RT, therefore, we also reject hypothesis two (H_{02}) which stated that RT has no significant effect on the profitability of MSMEs in Kaduna state.

Conclusion and Recommendation

In line with the findings of the study, it is concluded that in order to achieve business profitability, entrepreneurs need to possess the characteristics of self-efficacy, risk taking and Locus of control.

The study recommended that a combined effort by governments at all levels and Non-Governmental Organizations (NGOs) are required towards capacity building for the entrepreneurs to enhance and appreciate their inborn personalities and traits for higher profitability. The government and non-governmental supports be channeled towards competent entrepreneurs who possess the characteristics. This will enable the effective and efficient utilization of the funds given to them.

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