

THE IMPACT OF UNIVERSITY ENTREPRENEURSHIP EDUCATION ON FINANCIAL PERFORMANCE OF GRADUATE ENTREPRENEURS

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ABSTRACT

This paper investigates the relationship between university entrepreneurship education and financial performance of graduate entrepreneurs. Guided by the theory of planned behaviour, data were collected via a five point Likert questionnaire and analysed using a linear regression model. The findings of the study indicate that university entrepreneurship education has significant positive relationship with financial performance of graduate entrepreneurs. On the basis of this finding, the study concludes, among others, that university entrepreneurship education is beyond teaching business, instead it inculcates entrepreneurship spirit that impact on the performance of graduate entrepreneurs. While these findings has met the objectives of the study, further research is recommended on the relationship between entrepreneurship education and financial performance of graduate entrepreneurs according to discipline such as accounting graduate entrepreneurs.

Keywords: University, Graduate, Entrepreneurship, Financial, Performance.

INTRODUCTION

The financial crisis of the last decade couple with governments policies towards entrepreneurship have led to increasing demand for future entrepreneurs. As a result, institutions of learning, particularly universities across the world, place greater importance on entrepreneurship education which, according to Iazzolino et al. (2019), could be seen as possible form of economic revival. Entrepreneurship education, according to Gundry et al. (2014), is about promoting innovative skills that can be applied in practice. It may change the behaviours of students towards entrepreneurship and provide them with knowledge and resources needed for establishing robust environment with little uncertainty for innovation and growth (Wei et al (2019). Entrepreneurship education, Wei et al. (2019) further noted, provides the students a wide-ranging learning management that helps them to establish the right values and intellectual capacity that shape their innovative perceptions.

Through structured programmes, universities across the globe provide entrepreneurship education (Gamede & Uleanya, 2019). These programmes come in the form of curriculum Sheta (2012), extra-curriculum (Fayolle et al., 2006), and social education programmes (Denny et al., 2011). Entrepreneurship programmes taught in university are designed to prepare the student either to learn to understand entrepreneurship or become entrepreneurial or become an entrepreneur (Hytti, 2004) or any combination of the three. Thus, Gibb (2006) posits that entrepreneurship education is about learning for entrepreneurship, about entrepreneurship and through entrepreneurship.

Despite the growing number of universities offering entrepreneurship education across the globe, many researchers (Decramer et al., 2012; Smith et al., 2006) have questioned the effectiveness of university initiatives in producing good entrepreneurs. Some researchers (Kirby, 2005; Laukkanen, 2000) have even concluded that universities nowadays merely teach entrepreneurship and business instead of inculcating entrepreneurship spirit on the students. While these arguments have been countered by many studies (Noel, 2002; Souitaris et al., 2007; Kolvereid & Åmo, 2007), the debate still continues. It is against this background that this study is undertaken to investigate whether university entrepreneurship education has impact on financial performance of graduate entrepreneurs. The rest of the study is divided into five sections. The section that follows presents the theory that guides the study. This is followed by a review of literature and hypothesis development in section three. Section four discusses the study's research method. Discussion of findings is presented in section five while section six concludes the study.

THEORETICAL FRAMEWORK

There are quite a number of theories that explain the relationship between entrepreneurship education and entrepreneur's performance. However, this study is guided by Ajzen's (1991) theory of planned behaviour (TPB). The TPB theory mainly emphasis on individual's intention to perform a given behaviour. The theory assumes that entrepreneurial intention is explained by three motivational backgrounds, namely: personal attitude toward behaviour, perceived social norms and perceived behavioural control. Each of these three backgrounds has exerting reciprocal effects on the others.

The personal attitude relates to a person's appraisal of specific behaviour as either positive or negative. When new problem arises, people tend to reflect in the beliefs they have in their minds and automatically attitude is formed. Attitude, according to Keurger et al (2000) is like or dislike of certain action out of beliefs and behaviours. Thus, a person's attitude towards entrepreneurship is a measure of his perceived likelihood of running his own business as well as motivation to pick entrepreneurship as career. This entrepreneurial attitude is influence by a number of factors which include personal wealth and independence, respect for running one's business, and social benefits, among others (Nishimura & Tristán, 2011).

Social norms, on the other hand, refers to apparent social pressure from family members, friends and other persons that influence one's behaviour (Ajzen, 1991). People around a person influence his decisions. For example, the choice of a person's career can be influence by his parents, friends and others around him. These normative beliefs are measured by the motivations hold by friends and family members to influence the behaviour of a person with their ideas and suggestions. Thus, in relation to entrepreneurship, normative beliefs are measured through the evaluation of the likely backing or motivation an individual receives from the people around him. Perceived behavioural control relate to self-assessment of an individual's control over the behaviour he performs. Aside from indirectly influencing the behaviour of a person through intention, it also directly influences behaviour if the person's views reflect the actual control he has over his behaviour. This behavioural control is described by Fretschner (2014) as an act of individual mindfulness to control a given situation.

Generally, within the context of entrepreneurship, the higher the score of any of the three backgrounds, the higher the intention to perform the behaviour. Depending on the behaviour, it is likely to have different possibilities if only one or two backgrounds have significant explanatory

power (Ajzen, 2005). Thus, if all the three motivational antecedents were measured with the same level of reliability, any lack of predictive power would suggest that the relevant antecedent does not characterise any significance in the formation of intention for the particular behaviour. Therefore, an effective educational idea is likely to change one or more of the antecedents of intention by influencing beliefs upon which they are rooted, which in turn influence entrepreneurial intention and by extension entrepreneurial behaviour.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature on the relationship between entrepreneurship education and graduate entrepreneurs is enormous (Kolvereid & Moen, 1997; Noel, 2002; Souitaris et al., 2007; Kolvereid & Åmo, 2007). For example, Kolvereid & Moen (1997) conducted a comparative study on graduates that majored in entrepreneurship and graduates that majored in other business courses. Their findings suggest that choosing entrepreneurship as a majors result in both higher entrepreneurship intention and actual business creation. Similarly, in his work on the effect of entrepreneurial education on the intent to open a business, Noel (2002) found that graduates with entrepreneurship major have higher intention, relative to graduates with other business or non-business majors, to set up a business with two to five years of graduation.

Similarly, Kolvereid & Åmo (2007), in their study on entrepreneurship among graduates from business school, found that graduates who are entrepreneurship majors remain twice more likely as graduates with other majors to start a business and become a business owner. In the same vein, Souitaris et al. (2007), studied the effect of entrepreneurship programmes on the entrepreneurial attitudes and intentions of science and engineering students. They found that positive relationship between entrepreneurship programmes and entrepreneurial intention with inspiration being the most influential benefit. Furthermore, Ibrahim et al. (2017) investigated the attitude of graduates towards entrepreneurship. They found positive attitude of graduate toward entrepreneurship but the choice of starting a business after graduation is low.

In spite of the enormous studies on the relationship between entrepreneurship education and graduate entrepreneurs as evidenced above, there is no single study that investigates the impact of university entrepreneurship education programmes on financial performance of graduate entrepreneurs. It is this gap that this study aims to fill.

Hypothesis Development

As discussed earlier, university entrepreneurship education programmes come in three forms, viz; curricular (Sheta, 2012), extra-curricular (Fayolle et al., 2006), and social education activities (Denny et al., 2011). The following paragraphs discuss the impact of each of the three educational activities on graduate entrepreneurs' financial performance.

Curricular Activities

The impact of university entrepreneurship curriculum on the attitude and capacity of graduate to become successful entrepreneurs is well researched. A number of researchers, including Souitaris et al. (2007) and Dohse & Walter (2010), have argued that entrepreneurship education encourages entrepreneurial attitude by impacting on students' personality attributes such as independence and self-realisation. Thus, the curricular should be tailored towards developing competencies so as to create entrepreneurial attitudes. In this regards, Souitaris et al. (2007) suggested that curriculum that focused on skills development has the potentials of

developing the student's ability to solve complex problems and make informed decisions. Similarly, on their part, Boissin et al. (2009) posited that curriculum focused on business creation supports the development of capabilities such as development of business plan which, in turn, leads to the formation of own business. All of these studies are suggesting that university entrepreneurship curriculum impacts on entrepreneurs' success. On the basis of this discussion, the following hypothesis is formulated for this study.

H1: There is a positive relationship between university entrepreneurship curricular activities and financial performance of graduate entrepreneurs.

Extracurricular Activities

These are institutional supports designed to create awareness, provide information and enterprise competencies as well as resources and physical supports for the actualisation of entrepreneurship intention. Studies on the impact of extracurricular activities on entrepreneurship intention and venture creation revealed mix result. For example, Fayolle et al. (2006) and Souitaris et al. (2007) found that extracurricular activities such as information centres, financial supports, and business incubators are motivations for entrepreneurship intention and business creation. This finding is supported by Rasmussen & Sørheim (2006) who suggested that the existence of extracurricular encourages entrepreneurial culture amongst university students to create their own businesses. However, other scholars found that extracurricular activities alone do not guarantee entrepreneurship (Coduras et al., 2008; Nabi et al., 2006). On the contrary, they found that extracurricular activities have neutral effect on students' entrepreneurship adventure. On the basis of these contradictory findings, this study hypothesis as follows.

H2: There is a positive relationship between university entrepreneurship extracurricular activities and financial performance of graduate entrepreneurs.

Social Education Activities

This refers to the ability of a person to learn from the experience of others around him. Social education activities offered in universities are based on the concept of Social theory. The theory assumes that individual's social and mental faculties are fundamental to his understanding of passion, motivation and human actions within the environment he leaves. The fundamental constructs of the social theory are twofold, namely; social learning and self-efficacy. Social learning relates to a person's ability to learn from others experiences aside his own experience. On the other hand, self-efficacy relates to a person's perception of his ability to be successful entrepreneur. Social learning, according to Boyd & Vozikis (1994), can be observational (i.e. learning through observation) or enactive (i.e. learning through action). As a result of increase in demand, many universities are now offering social education programmes. Empirically, it was found that after participation in a social education programme, participants experienced higher level of self-efficacy, improved positivity towards entrepreneurship and desire in forming a business (Denny et al., 2011). On the basis of this discussion, this study assumes that social entrepreneurship programmes impact on the performance of entrepreneurs and hypothesis as follows.

H3: There is a positive relationship between university social entrepreneurship programmes and financial performance of graduate entrepreneurs.

RESEARCH METHOD

Sample and Data Collection

The population of this study comprises of all the graduate entrepreneurs in North Eastern Nigeria. Having considered the motivation of the study and the time and resources available (Patton, 2002) a sample of 150 graduate entrepreneurs was purposely selected from the population. Consistent with Sandelowski (1995), the choice of purposive sampling seems appropriate because it allows for the determination of proper sample size with high degree of accuracy (Thietart, 2001).

Data was collected through a five point Likert based questionnaire. In line with Blaxter et al. (2010), the questionnaire was constructed and pilot tested across some of the graduate entrepreneurs. Similarly, in order to minimise the possible threats to the credibility of the results of the study, the questionnaire was subjected to reliability and validity tests (Golafshani, 2003). The questionnaires were administered personally to the entrepreneur. Out of 150 questionnaires administered, 113 questionnaires were returned and were all completed correctly. This represents 75% of the entire questionnaires administered suggesting that the questionnaire was soundly constructed (Walonick, 2004).

Definition of Variables

This study employs two sets of variables—dependant and independent variables. The dependant variable is the financial performance of entrepreneurs and the independent variables are entrepreneurship education and individual entrepreneur specific attributes. The variables and their description are presented in Table 1.

Type	Name	Proxy	Description
Dependent	Financial Performance	FP	Financial Performance defined as profitability average annual profit of the entrepreneur
	Curricular activities	EC	Number of entrepreneurship courses offered
TM		Teaching methodology employed in entrepreneurship courses	
TS		Teaching strategies such as lecture, case studies group etc.	
Independent (entrepreneurship education)	Extracurricular activities	CS	Entrepreneurship conferences and seminars offered
		VB	Visitation to entrepreneurs businesses
		IF	Infrastructural facilities to support the creation of entrepreneurship
	Social education activities	UE	This refers to the physical environment of the universities
		UC	Stands for university community comprising of people with different backgrounds
		UI	This refers to the speed to which the university environment allows information spread
Independent (individual specific attributes)	Age	AG	The age of the sampled entrepreneurs defined in ranges
	Sex	SX	Male or female graduate entrepreneur
	Family business	FB	Graduate entrepreneurs whose parents owned a business

Table 1 presents the description of dependent and independent variables used in the study

Model Development

Consistent with Iazzolino et al. (2019), this study used multiple regression analysis to measure the impact of university entrepreneurship education on the financial performance of graduate entrepreneurs. Thus, the following regression model is developed.

$$FP_{it} = \beta_0 + \beta_1 EC_{it} + \beta_2 TM_{it} + \beta_3 TS_{it} + \beta_4 CS_{it} + \beta_5 VB_{it} + \beta_6 IF_{it} + \beta_7 UE_{it} + \beta_8 UC_{it} + \beta_9 UI_{it} + \beta_{10} AG_{it} + \beta_{11} SX_{it} + \beta_{12} FB_{it}$$

Note: All variables are described in Table 1

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 2 presents the descriptive statistics of the study. From the Table, the graduate entrepreneurs surveyed are mainly males with parents being business owners and making an average profit of between N200000 to N500000 annually. The Table also reveals that the entrepreneurs strongly believe that all the entrepreneurship activities impact positively in their financial performance except for teaching strategies, conferences and seminars, infrastructural facilities, and university physical environment in which they are mainly neutral. While it is possible to draw any conclusion from this statistics, it is apparent that the graduate entrepreneurs have not shown any disagreement to the impact the entrepreneurs education they received on their financial performance.

Variables	Observations	Mean	Median	Std. Deviation
FP	113	3.4071	4.00	1.31365
EC	113	3.6903	4.00	1.01840
TM	113	3.7345	4.00	0.84534
TS	113	2.7876	3.00	1.46660
CS	113	2.7699	3.00	1.31617
VB	113	3.3628	4.00	1.08613
IF	113	2.6903	3.00	1.45823
UE	113	2.7611	3.00	1.49567
UC	113	3.5664	4.00	1.05962
UI	113	3.3805	4.00	1.34509
AG	113	2.6460	2.00	1.39463
SX	113	0.6018	1.00	0.49171
FB	113	0.6903	1.00	0.46444

Table 2 reports the descriptive statistics used. All variables are described in Table 1

Correlation Coefficient

Table 3 presents correlation coefficient of the variables employed. The results indicate that entrepreneurs' financial performance has significant positive relationship with all the entrepreneurship activities. Similarly, all the entrepreneurship activities have significant positive relationship with each other.

Table 3
PEARSON CORRELATION COEFFICIENT

Variables	FP	EC	TM	TS	CS	VB	IF	UE	UC	UI	AG	SX	FB
FP	1												
EC	0.916**	1											
	0.000												
TM	0.854**	0.879**	1										
	0.000	0.000											
TS	0.926**	0.870**	0.790**	1									
	0.000	0.000	0.000										
CS	0.933**	0.866**	0.803**	0.960**	1								
	0.000	0.000	0.000	0.000									
VB	0.922**	0.894**	0.894**	0.929**	0.933**	1							
	0.000	0.000	0.000	0.000	0.000								
IF	0.924**	0.849**	0.766**	0.979**	0.949**	0.917**	1						
	0.000	0.000	0.000	0.000	0.000	0.000							
UE	0.913**	0.842**	0.747**	0.954**	0.942**	0.922**	0.969**	1					
	0.000	0.000	0.000	0.000	0.000	0.000	0.000						
UC	0.936**	0.950**	0.837**	0.871**	0.850**	0.875**	0.877**	0.864**	1				
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
UI	0.902**	0.889**	0.891**	0.883**	0.902**	0.919**	0.853**	0.853**	0.856**	1			
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
AG	0.913**	0.840**	0.768**	0.923**	0.884**	0.846**	0.920**	0.875**	0.880**	0.844**	1		
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
SX	-	-	-	-	-	-	-	-	-	-	-	1	
	0.797**	0.694**	0.557**	0.849**	0.833**	0.697**	0.871**	0.810**	0.763**	0.646**	0.871**		
FB	-	-	-	-	-	-	-	-	-	-	-	0.823**	1
	0.757**	0.677**	0.530**	0.766**	0.702**	0.625**	0.776**	0.699**	0.729**	0.596**	0.874**	0.000	

Table 3 reports the Pearson correlations coefficient for all the variables used. All variables are described in Table 1.

**correlation is significant at the 0.01 (1%) level, *correlation is significant at the 0.05 (5%) level.

Table 4 presents a summary of the regression results. The model summary indicates that all the independent variables taken together accounts for 97.7% of the variations in financial performance, out of which university entrepreneurship education accounts for 94.9%. The model is statistically significant with 0.000.

On individual basis, the regression results indicate a number of positive and negative relationships. First, the results revealed a negative relationship between the entrepreneurs' financial performance and two of the curricular activities, namely: entrepreneurship courses and teaching strategies. While these associations negate the expectations of the study, it might not be unconnected to some of the assertions that universities merely teach entrepreneurship and

business instead of inculcating entrepreneurship spirit on the students (Kirby, 2005; Laukkanen, 2000).

Similarly, the results indicate that two of the extra-curricular activities, viz: visitation to businesses and university infrastructure, were negatively related to the financial performance of the entrepreneurs. These findings, though negate the study's expectations, have captured the true state of the Nigerian universities, particularly as it relates to infrastructure. There is serious shortage of infrastructure in Nigerian universities and this is one of the reasons which, according to Ebehikhalu & Dawam (2014), that hinders Nigerian universities to be innovative. Visitation to businesses is part of extra-curricular activities in many universities. However, one reason for the negative relationship might be lack of enough visits and possibly visits to larger companies that are not core entrepreneurs. Similarly, the findings support the idea that extracurricular activities alone do not guarantee entrepreneurship (Coduras et al., 2008; Nabi et al., 2006) but rather have neutral effect on students' entrepreneurship adventure.

Meanwhile, all other activities have positive relationship with the financial performance of the entrepreneurs. This has confirmed Kolvereid & Moen (1997) findings that choosing entrepreneurship as a major result in both higher entrepreneurship intention and actual business creation. Similarly, the findings concur with Noel (2002) that graduates with entrepreneurship major have higher intention, relative to graduates with other business or non-business majors, to set up a business with two to five years of graduation.

In relation to social education programmes, all the three programmes studies have shown positive relationship, with university community having significant positive relationship. This result has confirmed Denny et al. (2011) findings that participation in social education programmes makes a participant to acquire higher level of self-efficacy, improved positivity towards entrepreneurship and desire in forming a business. The finding is arguably one of the basis for universities prioritising social education programmes in their entrepreneurship education programmes.

Finally, it is clear from the findings that not all the personal attributes are positively related to financial performance. At least family business ownership is negatively related to the graduate entrepreneurs' financial success. While there are evidences showing that students whose parents owned business demonstrate greater liking for entrepreneurial career (Scott & Twomey, 1998; De Wit, & Van Winden, 1989) by observing and interacting with their parents (Eesley & Wang, 2017), this study has found that this is not always the case, particularly with respect to graduate entrepreneurs, suggesting that personal attributes are necessary but not sufficient requirement for entrepreneur's success.

Variable	Expectation	Beta (β)	Significance
EC	+	-0.132	0.154
TM	+	0.142	0.038
TS	+	-0.089	0.517
CS	+	0.460	0.000
VB	+	-0.009	0.934
IF	+	-0.080	0.606
UE	+	0.141	0.190
UC	+	0.461	0.000
UI	+	0.047	0.569
AG		0.027	0.788
SX		0.071	0.345
FB		-0.156	0.007
Summary: $R^2=0.977$, Adjusted $R^2=0.949$, $F=175.918$, $Sig=0.000$			
Table 4 presents the regression results of all the variable used in the study. The expected results of the study are indicated in the Table. All variables are described in Table 1.			

CONCLUSION

This study investigated the relationship between the financial performance of graduate entrepreneurs and the university entrepreneurship education they received. Specifically, three different aspects of university entrepreneurship education of curricular activities, extra-curricular activities and social education programmes were studied for their impact on the financial performance of graduate entrepreneurs. Despite some of the activities under the curricular and extra-curricular activities were negatively related to entrepreneurs' financial performance, the test results indicated that entrepreneurship education explained 94.9% of the variation in financial performance. This study is unique in the sense that it goes beyond the usual research of determining intention and business formation to business performance.

The analyses and discussion of the findings above have led to the emergence of several conclusions in this study. First, this study concludes that university entrepreneurship education is vital for successful entrepreneurship. Sequel to the graduates' personal abilities and efforts, the university entrepreneurship education they received has led to the development of entrepreneurship competencies in them that resulted in them forming their own businesses and achieving financial success as this study revealed.

Second, it is also the conclusion of this study that the information the graduates received and the resources they were exposed to during their university education had enabled them in utilizing their personal ability to form and become successful in their entrepreneurial endeavors, which has clearly distinguished them from other entrepreneurs.

Third, this study also concludes that individual's personal attributes are necessary but not sufficient requirement for becoming a successful entrepreneur. Personal attributes such as family business, as indicated by this study, might not be a requirement for success.

Finally, it is also the conclusion of this study that university entrepreneurship education goes beyond teaching business as some scholars argued. Its inculcate the entrepreneurship spirit on the students.

In spite of this novel contributions and conclusions above, further study is recommended to be conducted on graduate entrepreneurs according to discipline such as accounting graduate entrepreneurs. Similarly, further research is recommended on the impact of university entrepreneurship education on the financial reporting quality of graduate entrepreneurs.

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