

**IMPACT OF ENTREPRENEURIAL EDUCATION ON ENTREPRENEURIAL
INNOVATION AMONG STUDENTS OF OSUN STATE POLYTECHNIC,
IRE, OSUN STATE**

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Abstract

The objective of this study is to examine the impact of entrepreneurship education on entrepreneurial innovation among students of Osun State Polytechnic, Ire in Osun State, Nigeria. The survey research design was adopted for this study. Both primary and secondary sources of data were used. A stratified random sampling procedure was used to select a sample of three hundred and fifty (350) respondents. Data collected were analyzed using Simple Regression Analysis. The result of the Simple Regression Analysis revealed that F-value is statistically significant at 1 percent. The estimated coefficient of multiple determination (R^2) value of 0.745 indicated that 74.5% of variance in entrepreneurial innovation can be explained by entrepreneurship education. This shows that entrepreneurship education is an important factor which positively and significantly influence entrepreneurial innovation. The study concluded that entrepreneurship education improves the students' entrepreneurial innovativeness, competencies and desirability to start a new or expanding the existing business after graduation. Based on this, the study recommended that there is need to encourage students to embrace entrepreneurship education or training and the evolvement of national culture of entrepreneurship education which would re-orientate students to make them innovative, creative and inventive thereby changing their mindsets from job-seeking mentality to entrepreneurial innovativeness.

Keywords: Entrepreneurship, entrepreneurship education, entrepreneurial innovation

1.0 Introduction

Entrepreneurship is a mentality which refers to the inspiration and capacity of an individual to determine an opportunity within an organization and going for the opportunity so as to create and achieve economic success. Entrepreneurship is related to people, their inclinations and activities for establishing, attainment or running an enterprise or participating in strategic decision mechanisms of a company. The benefits which accrue to entrepreneurs from innovations enables them to compete, change and create new market which are heterogeneous group from all social segment. Entrepreneurial behavior and creativity entails features which includes risks and independence (CEC, 2003).

The attitude of graduate towards being employed in institutions and organizations has led to the failure of graduates in contributing to the economic development of the nation which was what informed the introduction of entrepreneurship education in schools. The introduction of Entrepreneurship education in schools shows its importance to economic empowerment and

business innovation. Entrepreneurship education has become necessary due to the continual churning out of graduates who are hardly self-reliant but solely dependent on white collar jobs (Ediagbonya, 2013). Entrepreneurial education plays a vital role in the development of the economy socially and politically. This will be possible when a lot of entrepreneurs who could establish, manage and innovate business on their own which will help in reducing poverty in Nigeria.

Entrepreneurship qualities possessed by people depends on the entrepreneurship education which is followed up with support services for successful running of business (Idada & Alimi, 2014). Entrepreneurship education seeks to provide student (especially those in tertiary schools) with the knowledge, skills, attitude and motivation to set up ideas and business innovation which will lead to employment (Ekankumo & Kemebaradikumo, 2011). Entrepreneurship education builds the spirit of being entrepreneurs in the minds of the students. Thus, it has a way of discouraging laziness and idleness among our teeming population. Most people that are idle today or probably lazy are those that seem to know little or nothing about entrepreneurship because that is what it takes to develop business plans, start and innovate businesses ideas. Innovating business ideas is when a new activity is added to an existing product or process.

Presence of successful entrepreneurs and the increase of the number of entrepreneurs in a society is dependent on the potential entrepreneurs receiving entrepreneurship education and having a desire for entrepreneurship. Thus, it is necessary to steer students with entrepreneurial intentions towards entrepreneurship. And for this purpose, it is necessary to make research on the impact of entrepreneurship education on entrepreneurial intentions of potential entrepreneurs.

2.0 Literature Review

The Cocept of Entrepreneurship

Aina and Salako (2008) describe entrepreneurship as the willingness and ability of an individual to seek out investment opportunities and take advantages of scarce resources to exploit the opportunities profitably. It is seen as the process of creating something new with value by devoting the necessary time and efforts. In the view of Nwachukwu (2007), entrepreneurship is the ability to set up a business-enterprise as different from being employed. It involves the acquisition of skills, ideas and managerial abilities necessary for self-reliance. Entrepreneurship in any country is important for reducing unemployment and with the zeal of entrepreneurs, very valuable jobs will be created, not just for entrepreneurs only but also for others in the society (George & Archibong, 2010).

Entrepreneurship Education

Ogundele, Akingbade and Akinlabi (2012) describe entrepreneurship education as a purposeful intervention by an educator in the life of the learner to impact entrepreneurial creativity and skills to enable the learner survive in the world of business while Alberti, Sciascia and Poli (2004) view entrepreneurship education as the structured formal conveyance of entrepreneurship competencies which also means the concepts, creativity, skills and mental awareness used by individuals during the process of starting and managing their growth oriented ventures. Literature review in entrepreneurship education shows that there are two schools of thought regarding the

conceptual framework for teaching entrepreneurship. The first one is the “new venture creation” and the second is known as “innovation” (Saks & Gannglion, 2002). Entrepreneurship education tries to develop in the participants the creativity to perform entrepreneurial behaviours, knowledge and desirability of the entrepreneurial activities (Linan, 2004).

Entrepreneurship education is any pedagogical programme or process of education for entrepreneurial creativity and skills which involves developing certain personal qualities. It is therefore, not exclusively focused on the immediate creation of new business only (Fayolle, Gailly, & Lassas-Clerc, 2006). Linan (2004) finds that there are four different kinds of entrepreneurship education programmes. According to the researcher, the first, “Entrepreneurial Awareness Education” aims to increase knowledge about entrepreneurship and to influence attitudes that may impact creativity. The second category is described as “Education for start-up”. These programmes are geared toward people who generally already have an entrepreneurial creativity and need to solve practical questions about becoming self-employed. The third category, “Education for Entrepreneurial Dynamism” focuses on people who are already entrepreneurs and want to promote creative behaviours after the start-up phase. The last category, “Continuing Education for Entrepreneurs” describes life-long learning programmes and focuses on experienced entrepreneurs.

Furthermore, entrepreneurial education as observed by Lo (2011) seeks to increase entrepreneurial knowledge, skills, capacity, intentions, creativity and attitudes of students that are in tandem with the current requirements of the economy. Mwangi (2011) opined that the most significant objective of entrepreneurship education is to deliberately assist graduates, practicing and potential entrepreneurs to be creative in setting up and operating their own entrepreneurial ventures instead of seeking paid employment from someone else. Entrepreneurship education delivers specialized knowledge to students that inculcate the traits of risk-taking, creativity, innovation and managerial skills for the purpose of creating new goods or services to new and existing users in the societies (Minniti & Levesque, 2008).

Entrepreneurial Innovation

Innovation as observed by Okpara (2007) is the process of bringing the best ideas into reality which triggers a creative idea and generates a series of innovative events. The author sees innovation as the creation of new value or a process that transforms new ideas into new value, turning an idea into value. Therefore, you cannot innovate without creativity while the former is the process that combines ideas and knowledge into new value.

In most instances, creativity was confused with innovation, whereas there is a clear distinction between the two concepts. Researchers have argued that the association between creativity and innovation is contingent and multi-faceted in nature (Sarooghi, Libaers & Burkemper, 2013). Whereas creativity involves the generation of novel and useful ideas, innovation, on the other hand, causes the implementation of these ideas to produce novel products and processes (Amabile, 1996; Shelley, 2004). Hence, creativity enables individuals to produce ideas that are new and important, innovation is the practice where creative ideas are converted to produce significant accomplishments or results (Matthews, 2007). Entrepreneurs implement creative ideas to introduce innovative products or services, or to deliver products or services in a new, more efficient, and hence in an innovative way.

Innovation in New Product Development could include upgrading an existing product or developing a totally new concept to create an original and innovative product (Burger-Helmchen, 2009; Larsen & Lewis, 2007). This is also true for services and processes, thus innovation is recognized in the literature as ranging from the incremental to the radical. There is broad agreement that innovation should be present in all aspects of an organization and that it should be a mindset or a way of life (Abraham & Knight, 2001; Kuczmariski, 1996). Innovation should permeate through the various elements of the organization's business model in order to make it harder to be copied by competitors (Loewe & Dominiquini, 2006). Therefore, innovation is not only measured by the new products or services offered by an enterprise but also by new and more efficient ways of developing, producing or delivering products or services.

2.1 Theoretical Framework

The Schumpeter Effect

According to the Schumpeterian approach, entrepreneurship denotes the capability for carrying out innovations by means of leadership. It constitutes the decisive internal source of capitalist development. The entrepreneurial function may be executed by diverse agents, whose capabilities are embedded in a variety of institutional forms. Schumpeter (1934) views entrepreneurship education as responsible for innovation, that is, it acts as a drive for creating new ideas, innovations, improved techniques, new technologies and new products. An empirical justification for this theory has been provided by Audretsch and Fritsch (1994) which revealed that unemployment is negatively related to new-firm start-ups, that is, as new businesses are established, the level of employability in the society is stimulated and unemployment reduces sustainably in the economy. The implication of the above theory is that when people are provided qualitative entrepreneurship education with hands-on training, they tend to establish their own business later on.

This is a theory that also provides logical explanation that entrepreneurship education and unemployment are negatively or inversely related, that is, increase in entrepreneurship activities in the economy douses and sustainably reduces unemployment situation (i.e. facilitating employability). The process of entrepreneurship leading to gainful employment is termed "Schumpeter effect" (Audretsch & Thurik, 2002).

Schumpeter sees entrepreneurship education as a distinct and separate function of the firm and identified five ways of revolutionising the pattern.

- i. The development of a new product i.e., a product never introduced before, or the substantial improvement of quality of an existing product.
- ii. The discovery of a new production method. The term discovery does not necessarily mean scientific discovery but the genuine application of an existing method to an industry.
- iii. The discovery and exploitation of a new market. The term discovery does not necessarily apply to a new geographical market or an unknown market, but rather a market that an industry has not explored before.

- iv. The discovery and exploitation of a new source of supply of raw materials. The term "discovery" does not necessarily apply to a new geographical resource market or an unknown resource, but rather a resource that was never used in a certain industry.
- v. The discovery/development and implementation of a new way of organisation.

2.2 Empirical Review

Paco and Raposo (2011) investigated the relationship between education and entrepreneurial activity. The result shows that there exist a significant relationship between entrepreneurial education, new venture formation, and subsequent entrepreneurial performance.

Sofoluwe, Shokunbi, Raimi, and Ajewole (2013) investigates the prospect of repositioning entrepreneurship education as a strategy for boosting human capital development and employability in Nigeria. The paper adopts a quantitative research method, specifically the use of a survey method for eliciting responses from a cross-section of academic staff and students from Yaba College of Technology, Lagos. A modest sample size of 150 respondents was drawn from the target population using a convenience sampling technique. The key findings indicate that entrepreneurship education is a leeway to job creation and innovation, youth empowerment, peaceful society and economic development.

Mahendra, Djatmika and Hermawan (2017) investigates the effect of entrepreneurship education on entrepreneurial intention among college students enrolling in the Department of Management, Faculty of Economics, State University of Malang. The research employed descriptive correlational design, and a number of 230 students are taken proportionate randomly as sample from 540 students enrolled in three study programs. Research finding revealed that entrepreneurial intention, innovation and attitude is indirectly affected by entrepreneurship education.

3.0 Methodology

The research design adopted for this study is the survey design. This research design uses a research instrument for gathering information and generating data. The design focused on the collection and data analysis from the study population which enabled the researcher to look into the relationship between the identified variables. This method also gave the respondents the chance to express their opinions on the variables under investigation (Essien, 2014; Gado, 2015; Kanu, 2015; Omenka, 2013).

The population of the study was made up of 3,970 final year students of Osun State Polytechnic, Ire who took the entrepreneurship course. According to Krejcie and Morgan, (1970) as documented by Kpolovie (2011), a population of 3,970 requires a minimum sample size of 350. Thereafter, a stratified random sampling technique was used to select three hundred and fifty (350) respondents which cuts across all faculties offering the course.

The formula for determining the sample size is as follows

$$s = X^2NP(1 - P) + d^2(N - 1) + X^2P(1 - P)$$

Where s = required sample size

X^2 = the tabluue of chi square for 1 degree of freedom at the desired confidence level (3.841)

N = population size

P = population proportion

d = the degree of accuracy expressed as a proportion (0.5).

The structured questionnaire was measured and the responses were rated on the Likert-scale format with answers ranging from 1-5 (1= strongly disagree to 5= strongly agree) with each variable having 5 questions. The Cronbach's alpha coefficient has been variously described as the most acceptable test of the reliability of inter-item uniformity (Sekaran & Bougie, 2010). The study reported Cronbach reliability alpha of entrepreneurship education (.78), and entrepreneurial innovation (.71) Simple regression analysis was used to analyze the influence of independent variable (entrepreneurship education) on dependent variable (entrepreneurial innovation) with the aid of Statistical Package for Social Sciences (SPSS) version 21.

Model Specification

Mathematically, the model is specified as follows;

Model: $EI = \beta_0 + \beta_1 X_1 + \mu$

Where;

EI= Entrepreneurial Innovation,

X₁ = Entrepreneurship Education,

β_0 = Intercept,

β_1 = Regression Coefficient,

μ = Stochastic error term.

4.0 Data Discussion and Findings

This segment of the study focused on the analysis of data collected, presentation of results and discussion of findings. The data collected from primary source through questionnaire administered are hereby presented. The data collected were mainly on issues relating to the effect of entrepreneurship education on entrepreneurial innovation among polytechnic students in Osun State, Nigeria.

Table 1: Simple Regression Analysis Showing the Influence of Entrepreneurship Education on Entrepreneurial Innovation

Variable	Co-efficient	Standard Error	T-value	Sig
Constant	27.306	1.902	14.353	.000
Entrepreneurial education	1.310***	.096	13.580	.000
F-value	84.404			
R ²	0.745			

Source: Field Survey, 2019

***** Statistical Significant at 1% level**

From the above table, the result of simple regression analysis model showed the relationship between entrepreneurship education and entrepreneurial innovation. The F – value provides an overall test of significance of the whole function of the regression line. This test shows that F – ratio is statistically significant at 1 percent level of significance. The estimated coefficient of multiple determination (R^2) value of 0.745 indicated that 74.5% of variance in entrepreneurial innovation can be explained by entrepreneurship education. The regression analysis also shows that entrepreneurial education significantly and positively impact educational innovations among the polytechnic students at 1% level of significance. This implies that entrepreneurship education has a decisive influence on students' entrepreneurial innovation. This indicates that the higher the level of entrepreneurship education received by the polytechnic students, the better their innovativeness to set up business venture after graduation. This result conforms to the studies carried out by Paco and Raposo (2011) and Umar and Norashidah (2017) who revealed through the findings of their studies that students who participated in entrepreneurship education have shown more and stronger innovativeness towards starting their own small businesses because entrepreneurship education develops a vision in students to start their own small businesses with innovation, creativity and managerial competencies.

5.0 Conclusion and Recommendations

The main objective of this study was to examine the effect of entrepreneurship education on entrepreneurial innovation among students of Osun State Polytechnic, Ire in Osun State, Nigeria. A structured questionnaire-based study was carried out among 350 students from the faculties in Osun State Polytechnic, Ire. The study concludes that entrepreneurship education has a positive and significant effect on entrepreneurial innovation among the students.

Therefore, the study recommends that there is need to encourage students to embrace entrepreneurship education or training in order for them to become innovative, self-reliant and wealth creators. The government should also evolve a national culture of entrepreneurship education to be integrated into all academic courses of study in tertiary institutions which would re-orientate students to make them innovative, creative and inventive, thereby changing their mindsets from job-seeking mentality to entrepreneurial innovation.

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