
Entrepreneurial Barriers and Intentions Among Final Year Undergraduate Students of Industrial and Technology Education in Niger and Kaduna States, Nigeria

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ABSTRACT

The study identified entrepreneurial barriers and intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. Two research questions were raised to guide the study and two null hypotheses were formulated and tested at .5 level of significant. The research design used was descriptive survey. The population of the study consisted of 348 final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. The instruments for data collection were Entrepreneurial Barrier Inventory and Entrepreneurial Intention Scale. The internal consistency of the instruments was found to be .88 and .91 respectively using Cronbach Alpha statistics. The study employed the use of mean to answer the research questions and z-test to test the hypotheses. Findings revealed among others that; insufficient capital, difficulty in obtaining bank finance lack of: assets for collateral, business skills, information about how to start a business and business experience were entrepreneurial barriers among final year undergraduate students of industrial and technology education. It was therefore recommended that, institutions where industrial and technology education is taught should have an integrated mechanism in offering training to final year students in overcoming entrepreneurial barriers.

Key words: Entrepreneurship Education, Entrepreneurial Barriers and Entrepreneurial Intentions

INTRODUCTION

Entrepreneurship education can be seen as the type of education that seek to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. According to Adeola and Bolarinwa (2010), entrepreneurship education is the assemblage of formalized teaching that enlightens, trains and educate anyone

interested in business creation or small business development. Uzo-Okonkwo (2013) perceives entrepreneurship education as the process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge and skills to act on them. According to Ademiluyi (2007); Nabi and Holdeni (2008) the aim of entrepreneurship education is to serve as a primary source of economic growth that

creates business opportunities and reduces unemployment. Nevertheless, promoting entrepreneurship education addresses some socio-psychological problems that arise from unemployment among university graduates and also offers better prospects for students such as undergraduate students of industrial and technology education.

Industrial and technology education students are individual undergoing course of study in the following technology education options: Automobile, Building, Electrical/Electronics, Metalwork and Woodwork. According to Maigida *et al.* (2013), industrial and technology education students are individuals train to be high-level manpower of international standards in Technology Education to serve the educational and industrial needs of the nation through teaching and research. Despite the technical training enjoyed by the graduates of industrial and technology education, Salami (2011) revealed high rate of unemployment among industrial and technology education graduates. Maigida (2012) attributed the high unemployment rate among industrial and technology education students to entrepreneurial barriers.

Entrepreneurial barriers are that which prevents entrepreneurial activities from occurring or makes it more difficult to start. According Zhuplev and Shtykhno (2009), entrepreneurial barriers is defined as circumstances or obstacles that keeps intending entrepreneurs from practicing entrepreneurship. Robertson, Collins, Medeira, and Slater (2013) revealed that, university students in developing countries such as Nigeria are faced with several entrepreneurial barriers which include insufficient capital to start a business and difficulty in obtaining bank finance, Olufunso

(2010); Samuel *et al.* (2013); Ali *et al.* (2010), further revealed lack of assets for collateral, lack of business skills (financial, marketing), are considered the most challenging barriers to entrepreneurship. Entrepreneurial barriers are capable of diminishing the entrepreneurial capabilities of industrial and technology education students despite positive entrepreneurial intentions.

Entrepreneurial intention is the intention to start a new business. Thompson (2009) defined entrepreneurial intention as a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future. According to Chu *et al.* (2007); Pittaway and Cope (2007), entrepreneurial intention includes: choosing a career as an entrepreneur, preferring to be an entrepreneur rather than to be an employee in a company or an organization. Krueger *et al.* (2000) disclosed that, preparing to do anything to be an entrepreneur, thinking seriously to start my own business after completing my study are positive entrepreneurial intention. Nevertheless, Shane (2014) revealed that, universities have been regarded as a source of technological development that is useful to entrepreneurial activity but high number of university graduates remain unemployed due to low or no entrepreneurial intentions. Hence, there is need to identify the entrepreneurial barriers and intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.

Statement of the Problem

Entrepreneurship education is aimed at producing graduate with the ability to recognize commercial opportunities and the

insight, self-esteem, knowledge and skills to act on them. Despite the importance of entrepreneurship education in creating business opportunities and reducing unemployment, Ademiluyi (2007); Nabi and Holdeni (2008) revealed that, university graduates in developing countries such as Nigeria constitute high number of the unemployed populace. Maigida *et al.* (2013) also revealed that, despite the skill-oriented nature of industrial and technology education, its graduates go about looking for employment after school even after they have gone through a course in entrepreneurship. Thompson (2009); Robertson *et al.* (2013) further disclosed that, the growing numbers of unemployed youth especially among graduates of industrial and technology education graduates indicate the inability of entrepreneurship education in minimizing the unemployment problem. This shortcoming could be attributed to entrepreneurial barriers and lack of entrepreneurial intentions among graduates. Hence, this study seeks to identify the entrepreneurial barriers and intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.

Purpose of the study

The purpose of the study was to identify the entrepreneurial barriers and intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. Specifically, the study seeks to identify:

1. Entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

2. Entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

Research Questions

The following research questions were formulated to guide the study:

1. What are the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria?
2. What are the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria?

Hypotheses

The following null hypotheses were formulated and tested at .5 level of significant

HO₁: There is no significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

HO₂: There is no significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

METHODOLOGY

The research design used for this study was the descriptive survey research

design. Fox & Bayat (2007) defined descriptive survey research design as design aimed at casting light on current issues or problem through a process of data collection. The study was carried out in Niger and Kaduna States, Nigeria. The population of the study consisted of 348 final year undergraduate students of industrial and technology education, 120 from Federal University of Technology, Minna, Niger State and 228 from Kaduna Polytechnic, Kaduna States, Nigeria. No sampling technique was adopted for the selection of respondents due to manageable population size. The instruments for data collection were modified versions of Entrepreneurial Barrier Inventory by Samuel *et al.* (2013) and Entrepreneurial Intention Scale by Thompson (2009). Both instruments

were designed on five points rating scale of Very Strongly Agree (VSA), Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD) with numerical values of 5, 4, 3, 2, and 1, respectively were used to collect data for the study. Cronbach Alpha statistics was used to determine the internal consistency of the instruments and found to be .88 and .91 respectively. The study employed the use of mean to answer the research questions and z-test to test the hypotheses.

RESULTS

Research Question 1

What are the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria?

Table 1: Mean of respondents on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

		N ₁ =120, N ₂ =228			
S/N	Entrepreneurial Barriers	1	2	A	Remarks
1	Lack of savings	3.45	3.50	3.48	Agreed
2	Difficulty in obtaining bank finance	3.33	3.42	3.38	Agreed
3	Lack of assets for collateral	3.56	3.48	3.51	Strongly Agreed
4	Lack of business skills (financial, marketing)	3.37	3.30	3.32	Agreed
5	Lack of information about how to start a business	3.44	3.42	3.43	Agreed
6	Lack of business experience	3.33	3.21	3.25	Agreed
7	Lack of information about any government agency that can assist in funding a business	3.36	3.40	3.39	Agreed
8	High cost of business registration	3.23	3.30	3.28	Agreed
9	Fear of starting business due to risk involve	3.31	3.41	3.38	Agreed
10	Future uncertainty	3.25	3.31	3.29	Agreed
11	Fear of business failure	3.60	3.70	3.66	Strongly Agreed
12	Weak economic environment	3.48	3.60	3.56	Strongly Agreed
13	Lack of support from family or friend	3.44	3.50	3.48	Agreed

S/N	Entrepreneurial Barriers	₁	₂	A	Remarks
14	Difficulty in convincing others that it is a good idea to carry on	3.48	3.38	3.41	Agreed
15	No one to turn to for help	3.56	3.55	3.55	Strongly Agreed
16	Difficult to find right partners	3.52	3.47	3.49	Strongly Agreed
17	Insufficient capital to start a business	3.45	3.40	3.42	Agreed
18	Governmental laws and regulations	3.45	3.57	3.53	Strongly Agreed
19	Negative attitudes towards risk	3.66	3.67	3.67	Strongly Agreed
Total		3.52	3.44	3.46	Agreed

N_1 = Numbers of students in Niger State, N_2 = Numbers of students in Kaduna State, \bar{x}_1 = Mean of students in Niger State, \bar{x}_2 = Mean of students in Kaduna State, \bar{x}_t = Average mean of students in Niger and Kaduna State.

Table 1 revealed that all the 19 items had average mean value above 2.50. This indicate that final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria agreed that the 19 items were entrepreneurial barriers.

Research Question 2

What are the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria?

Table 2: Mean of respondents on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

$N_1=120, N_2=228$					
S/N	Entrepreneurial Intentions	₁	₂	A	Remarks
20	I will choose a career as an entrepreneur	3.48	3.33	3.38	Agreed
21	I prefer to be an entrepreneur rather than to be an employee in a company or an organization	3.45	3.39	3.41	Agreed
22	I would rather find or form a company than to be a manager of an existing one	3.41	3.47	3.45	Agreed
23	I want the freedom to express myself in my own business	3.22	3.47	3.38	Agreed
24	I would rather be my own boss than have a secure job	3.49	3.48	3.40	Agreed
25	I delight the challenge of creating a new business	3.60	3.44	3.50	Strongly Agreed
26	The idea of one day starting your own business is appealing	3.50	3.48	3.49	Strongly Agreed

S/N	Entrepreneurial Intentions	1	2	A	Remarks
27	I am determined to have my own business in the future	3.38	3.56	3.50	Strongly Agreed
28	My professional goal is to become an entrepreneur	3.55	3.52	3.53	Strongly Agreed
29	I am prepared to do anything to be an entrepreneur	3.47	3.45	3.46	Agreed
30	I'll put every effort to start and run my own business	3.40	3.45	3.43	Agreed
31	I have thought seriously to start my own business after completing my study	3.57	3.66	3.63	Strongly Agreed
32	I have a strong intention to start a business someday	3.67	3.62	3.64	Strongly Agreed
33	I'm determined to create a firm in the future	3.74	3.83	3.80	Strongly Agreed
Total		3.60	3.50	3.75	Strongly Agreed

Table 2 revealed that all the 14 items had average mean value above 2.50. This indicate final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria agreed that the 14 items were entrepreneurial intentions.

Hypothesis One

HO₁: There is no significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

Table 3: z-test analysis of significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

Respondents	N	\bar{x}	SD	Df	z-value	p-value	Remark
Students in Niger State	120	3.52	0.51	346	0.094	0.926	Not Significant
Students in Kaduna State	228	3.44	0.56				

Table 3 revealed that the p-value > 0.5, which implies that there is no significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. Hence, hypothesis one was retained

Hypothesis Two

HO₂: There is no significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

Table 4: z-test analysis of significant difference between the mean responses of students in Niger and Kaduna States on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria

Respondents	N	\bar{X}	SD	df	z-value	p-value	Remark
Students in Niger State	120	3.60	0.65	346	0.078	0.815	Not Significant
Students in Kaduna State	228	3.50	0.72				

Table 4 revealed that the p-value > 0.5 , which implies that there no significant difference between the mean responses of students in Niger and Kaduna on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. Hence, hypothesis two was retained.

FINDINGS

1. Insufficient capital, difficulty in obtaining bank finance, high cost of business registration, fear of starting business, future uncertainty, fear of business failure, weak economic environment, difficulty in convincing others, no one to turn to for help, difficult to find right partners, lack of: assets for collateral, business skills, information about how to start a business, business experience, information about any government agency, support from family or friend were entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.
2. Choosing a career as an entrepreneur, preferring to be an entrepreneur, founding or form a company than to be a manager of an existing one, wanting the freedom to express myself in my own business, being my

own boss, delighting the challenge of creating a new business, appealing with the idea of starting own business, determining to have my own business in the future, having goal to become an entrepreneur, preparing to do anything to be an entrepreneur, putting every effort to start and run my own business, thinking seriously to start my own business after completing my study, having a strong intention to start a business someday, determining to create a firm in the future were entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.

3. There was no significant difference between the mean responses of students in Niger and Kaduna on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.
4. There was no significant difference between the mean responses of students in Niger and Kaduna on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.

DISCUSSION OF FINDINGS

Findings on entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria revealed insufficient capital, difficulty in obtaining bank finance, high cost of business registration, fear of starting business, future uncertainty, fear of business failure, weak economic environment, difficulty in convincing others, no one to turn to for help, difficult to find right partners, lack of: assets for collateral, lack of business skills, information about how to start a business, business experience, information about any government agency, support from family or friend were entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. This finding concord with the findings of Akpomi (2008) who revealed no take-off funds/sponsorship, and the poor attitude of Nigerians towards purchasing made-in Nigeria goods as entrepreneurial barriers. The finding also supports the finding of Ali, Topping and Tariq (2010) who revealed lack of knowledge in business management or entrepreneurship, lack of opportunity in the market place, and absence of family members in self-employments as entrepreneurial barriers.

Furthermore, the z-test analysis for the test of significant difference between the mean responses of students in Niger and Kaduna on the entrepreneurial barriers among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria revealed no statistical difference. This finding is in agreement with the finding of Benzing, Chu and Callanan (2005) that revealed no statistical difference between the

mean responses of entrepreneurs on the regional comparison of the motivation and problems of Vietnamese entrepreneurs.

Findings on entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria revealed choosing a career as an entrepreneur, preferring to be an entrepreneur, founding or form a company than to be a manager of an existing one, wanting the freedom to express myself in my own business, being my own boss, delighting the challenge of creating a new business, appealing with the idea of starting own business, determining to have my own business in the future, having goal to become an entrepreneur, preparing to do anything to be an entrepreneur, putting every effort to start and run my own business, thinking seriously to start my own business after completing my study, having a strong intention to start a business someday, determining to create a firm in the future were entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria. This finding is in disagreement with the findings of Olufunso (2010) who found very weak or no entrepreneurial intention among final year students in South African. The finding also opposes the findings of Casson (2013).

Furthermore, the z-test analysis for the test of significant difference between the mean responses of students in Niger and Kaduna on the entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria revealed no statistical difference. This finding is in agreement with the finding of Szirmai, Naude

and Goedhuys (2011) that revealed no statistical difference between the responses of entrepreneurs on entrepreneurial innovation and economic development.

CONCLUSION

Based on the findings of the study, it is concluded that insufficient capital, difficulty in obtaining bank finance, high cost of business registration, fear of starting business, future uncertainty, fear of business failure, weak economic environment, difficulty in convincing others, no one to turn to for help, difficult to find right partners and governmental laws and regulations, lack of assets for collateral, lack of business skills, lack of information about how to start a business, lack of business experience, lack of information about any government agency that can assist in funding a business, lack of support from family or friend were entrepreneurial barriers and also, there is entrepreneurial intentions among final year undergraduate students of industrial and technology education in Niger and Kaduna States, Nigeria.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made.

1. Institutions where industrial and technology education is taught should have an integrated mechanism in offering training to final year students in overcoming entrepreneurial barriers.
2. Students of industrial and technology education should make effort in realizing their entrepreneurial intentions by engaging in entrepreneurial activities despite the presence of entrepreneurial barriers.

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