Personal Entrepreneurial Competencies among Technology Education Students for Self-employment at the University of Ilorin, Kwara State

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Abstract

The study investigated personal entrepreneurial competencies (PEC) possessed by Technology Education Students for self-employment in establishing Small and Medium Scale enterprises (SMEs). Two research questions and 2 hypotheses were developed for this study. A survey research design was used for the study. The population comprised of 234 students of University of Ilorin, Ilorin, Kwara State. The subjects responded to a 28-item questionnaire. The questionnaire was validated by 3 experts in entrepreneurship education from University of Ilorin, Kwara State. The reliability of the instrument was found to be 0.68 using Cronbach Alpha formula. Mean and Standard Deviation were used to answer and analyse the research questions, while the hypotheses were tested using t-test statistics at 0.05 level of significant. The study revealed that entrepreneurial competencies such as opportunity sensing, persistence, commitment to contract, and risk-taking among others are PEC possessed by technology education students in Kwaraa State. The findings also showed that PEC such as opportunity sensing, persistence, commitment to contract, risk-taking, information seeking and Self-Confidence, appraise the performance of the enterprise among others are being utilized by the students. The study further revealed that there was no significant difference the mean response of male and female Students on the PEC Possessed by Technology Education Students for establishing an enterprise. It was recommended among others that all the competencies discovered but not possessed by students in this study should be packaged and included in curriculum of Technology Education programme. Teachers should assist students to identify their PEC for establishing an SMEs.

Keywords: Entrepreneurial Competencies, Technology Education, Self-Employment, Small and Medium Enterprises, Opportunity Identification, Risk-Taking, Persistence

Introduction

The role of entrepreneurship in the development of an economy involves more than just increasing per capital output income other than initiating and constituting change in the structure of business and society. The study of entrepreneurship has relevance today, not only because it

helps entrepreneurs better fulfill their personal needs but because of the economic contribution of the new ventures. The development and identification of entrepreneurial talent among students is important to sustaining a competitive advantage in Nigeria economy that is catalyzed by innovation. The role of quality entrepreneurship education and training in identifying and nurturing this entrepreneurial potential among students is becoming apparent to policy makers, and educators. The study of entrepreneurship and the education of potential entrepreneurs are essential parts of any attempt to strengthen the link between increasing national income and creating new jobs and between innovation and market place. (Hassan, 2024).

The word "entrepreneurship" became the business buzzword of the 1980s equivalent to "professionalism", the managerial buzzword of the 1970s. Entrepreneurship quality on the parts of individual drives and aspiration to be entrepreneurs was later expanded to the idea of "intrapreneurship" or entrepreneurship concept borrowed by big corporation. Whilst the wealth, freedom and independence are the motives for individuals to be entrepreneurs, large corporations become "entrepreneurial" to gain competitive advantages over their successful competitors who may be smaller but are more innovative and adaptive to changes. Sharma (2021) defined entrepreneurship as the relentless pursuit of opportunity without regards to the resources currently controlled. Anybody that possesses adequate skills and competencies in the management of business venture or enterprise can become an entrepreneur. Entrepreneurs are also defined as "innovative, action-oriented people who, by devoting time and effort, create something different with value added".

They risk their time, money, comfort and status in anticipation of bigger rewards of monetary, personal and social. Competence is the combination of knowledge, skills and attitudes that can be developed through training and which are adequate for accomplishing some specific tasks. Ofoha (2013) described competency as ability to do something well, measured against a standard especially ability acquired through experience or training. Ikpesu *et al* (2021) viewed competencies as essential knowledge and skills obtainable in a profession and those which the professionals in the field must possessed and be able to demonstrate at optimal level of acquisition and functioning. A student possesses some competence as long as the knowledge, skills and attitudes that constitute the competence which are part of him and enable him to perform effectively within certain work practices as entrepreneur.

Competencies of entrepreneurs, if identified at an earlier stage of the educational process, may contribute to the advancement of possible venues for the development or enhancement of the entrepreneurial inclinations. This study and nurturing on entrepreneurial competencies of students, in all academic disciplines will contribute to a substantial proposition for directions of entrepreneurship in the academe. As an offshoot of this study, facts on entrepreneurship may cultivate the demand for applied concepts of the course.

When a person set-up a business of his own where he can apply the knowledge and skills and competencies possessed for production of goods and services, it is known as Small and Medium Enterprises (SMEs). The production of goods and services in the most efficient manner through the development of Small and Medium Enterprises (SMEs) has been recognized in both developed and developing countries as one of the viable and reliable means for development, growth and survival of any nation's economy According to Poole (2018) developed countries such as United States of America, Japan and France that have made economic breakthroughs demonstrate beyond doubt that the development of SMEs enhances economic growth and development. In a developing country such as Nigeria, integration of SMEs into the global economy is seen as the best way to overcome poverty and inequality.

A study on entrepreneurial skills of undergraduate students in Los Baños explains a preparatory phase on seven colleges that came from different family backgrounds. The students identified 94 businesses of which more than 36% were on retail/trading/selling. The students perceived that businesses fail because of lack of management competency, followed by lack of financial resources, uncompetitiveness, lack of experience/background, and lack of human skills. Personal skills: outstanding strengths or abilities. The Personal Entrepreneurial Development Course of UP ISSI, divided the Personal Entrepreneurial Competencies (PEC's) into three parts: achieving behaviors, planning and organizing behaviors, and power behavior. PECs of students according to priority, included: persistence, systematic planning/ monitoring, opportunity sensing, risk taking, information seeking, goal setting, commitment to contract, demand for quality or efficiency, self- confidence, persuasion, and networking (Gianesini, Cubico, Favretto, & Leitão, 2018).

The high rate of unemployment among the University students after graduation has been attributed to inability of the students to identify and nurture their personal entrepreneurial competences and skills required in the world of work while in schools. Many unemployed

University graduates possessed the required skills and competencies for managing and run an enterprise successfully. However, because they do not realize this or identify these skills and competencies and nurture them while in school, they cannot use them to establish an enterprise and manage or run it successfully. Hence, the study was designed to identify personal entrepreneurial competencies possessed by Technology Education students for establishing SMEs in Kwara State.

Statement of the problem

Entrepreneurship plays a transformative role in economic development by driving innovation, creating jobs, and fostering societal change. While it serves as a vehicle for individual aspirations, such as wealth and independence, it also empowers corporations to remain competitive in dynamic markets. In Nigeria, entrepreneurship has become crucial for sustainable economic growth, with the identification and development of entrepreneurial competencies among students emerging as a priority. Despite the abundance of entrepreneurial talent, many graduates remain unemployed due to the lack of awareness and nurturing of their inherent skills during their academic journey. Small and Medium Enterprises (SMEs), as proven in developed economies like the U.S. and Japan, are vital engines of growth, yet their potential in Nigeria remains underutilized. This study aims to explore how entrepreneurial education can bridge the gap by equipping students with the competencies needed to establish and manage successful ventures, ultimately addressing unemployment and fostering national development.

Purpose of the Study

The study sought to:

1. Identify personal entrepreneurial competencies possessed by Technology Education graduates of University of Ilorin for establishing SMEs
2. Determine the extent to which personal entrepreneurial competencies possessed by Technology Education graduates of University of Ilorin are utilized.

Research Questions

The following research questions were answered in this study.

1. What are the personal competencies possessed by Technology Education graduates of University of Ilorin?

2. To what extent are the personal competencies possessed by Technology Education graduates of University of Ilorin have been utilized for establishing SMEs?

Hypotheses

The following null hypotheses were tested at 05 level of significance guided this study:

HO: There is no significant difference in the mean responses of male and female technology education graduates regarding the personal entrepreneurial competencies required for establishing small and medium enterprises (SMEs).

HO_2: There is no significant difference in the mean responses of male and female technology education graduates regarding the extent to which personal entrepreneurial competencies for establishing small and medium enterprises (SMEs) are utilized.

Methodology

A descriptive survey design was used for the study. The study was carried out, in University of Ilorin, Kwara State. The population for the study comprised 234 technology education students in Ilorin Kwara State. The entire population was used for the study. A 28 item structured questionnaire was used to collect data from the respondents. The questionnaire had 2 parts, A and B. Part A was used to obtain information on personal data of the respondents. Part B was divided into 2 sections which are personal competencies and the extent of utilization. The competency items in each section had a 4-point response of Highly possessed (HP), Moderately possessed (MP), Slightly Possessed (SP) and Not possessed (NP) while extent of utilization items responses are Highly utilized (HU), Moderately utilized (MU), Slightly utilized (SU) and Not utilized (NU). The two items had a corresponding value of 4, 3, 2 and 1 respectively. The instrument was face validated by experts, split half method was used to determine reliability of the instrument which yielded a co-efficient of 0.68. 234 copies of the questionnaire were administered to the respondents with the help of two (2) research assistants. All the copies of the questionnaire were retrieved after two weeks.

The data collected from the study was analyzed using mean and standard deviation to answer the research questions while t-test statistics was used to test the hypotheses formulated. The arithmetic means of the response value was computed and it yielded 2.50 which were used for taking decision on each item. Any item with a mean of 2.50 and above was regarded as possessed or utilized while any item whose weighted mean is less than 2.50 was regarded as not possessed

or not utilized. Any item with a standard deviation between O and 1.96 indicated that the respondents were not too far from the mean and from one another in their opinions.

Results

The findings of this study were presented according to the research questions posed and hypotheses tested.

Table 1: Mean ratings and t-test Analysis of the Male and Female Technology Education Students on the personal entrepreneurial competencies possessed for establishing SMEs

S/N	Item Statement	X	SD	t-Cal	t-tab	Remarks
1	Opportunity Sensing	2.79	0.63	1.04	1.96	*NS
2	Persistence	3.45	0.69	1.37	1.96	"NS
3	Commitment to Contract	2.76	0.83	0.32	1.96	*NS
4	Demand for Quality and Efficiency	2.89	1.03	-0.24	1.96	*NS
5	Risk-Taking	2.96	0.83	1.27	1.96	*NS
6	Goal-Setting	2.68	1.22	0.55	1.96	"NS
7	Information Seeking	2.56	0.78	0.83	1.96	*NS
8	Systematic Planning/Monitoring	2.69	0.88	-1.63	1.96	*NS
9	Persuasion and Networking	2.67	0.72	0.76	1.96	"*NS
10	Self-Confidence	2. 71	0.67	0.89	1.96	*NS
11.	Appraise the performance of the enterprise	3.06	0.89	0.74	1.96	"NS
12.	Management and supervision	3.13	0.64	0.77	1.96	*NS
13	Ability to Organize	2.97	0.70	1.35	1.96	"NS
14	Ability to market products	3.20	0.65	0.96	1.96	'NS

Key:*=Possessed; NS=No significant difference; X=Mean; SD =Standard Deviation; t- cal = t-calculated value; t-tab = t-table value; N — number of respondents. N1 = Male, N2 = Female

Table 1 revealed that all the items had their mean values ranged from 2.55 to 3.45. This showed that the means were above the cut-off point of 2.50 indicating that the respondents possessed the 14 personal entrepreneurial competencies for establishing SMEs. The table also revealed that the standard deviation (SD) of the items ranged from 0.63 to 1.22 which were below 1.96. This indicated that the respondents were not too far from the mean and from one another in their responses.. Furthermore, all the 14 items had their t-calculated values less than their t-table values. Thus, indicating that there was no significant difference in the mean ratings of the responses of male and female students on the PECs possessed by technology education graduates for establishing SMEs

Table 2: Mean Ratings and t-test Analysis of the Male and Female Students on the extent to which personal entrepreneurial competencies possessed for establishing SMES are utilized.

S/N	ItemStatement	X	SD	t-cal	t-tab	Remarks
1	Opportunity Sensing	3.48	0.88	1.72	1.96	*NS
2	Persistence	2.42	0.77	1.37	1.96	**NS
3	Commitment to Contract	3.13	0.63	0.84	1.96	*NS
4	Demand for Quality and Efficiency	2.70	0.71	1.16	1.96	*NS
5	Risk-Taking	2.68	0.84	-0.34	1.96	*NS
6	Goal – Setting	2.71	0.67	0.96	1.96	*NS
7	Information seeking	2.87	0.95	0.2l	1.96	*NS
8	Systematic Planning Monitoring	3.17	0.92	-1.10	1.96	*NS
9	Persuasion and Netivorking	2.72	0.52	0.08	1.96	*NS
10	Self-Confidence	1.84	1.03	0.75	1.96	**NS
11	Appraise the performance of the enterprise	3.67	0.76	1.23	1.96	*NS
12	Management and supervision	2.22	0.57	077	1.96	**NS
13	Ability to Organize	2.94	0.78	0.72	1.96	*NS
14	Ability Io market products	2.34	0.64	1.26	1.96	**NS

Key: * = Utilized; ** = Not Utilized; NS = No Significant difference; x = Mean; SD = Standard Deviation; t-cal = t-calculated value; t-tab = t-table value; N = Number of Respondents; N1 = Male; N2 = Female

The data presented in table 2 revealed that 10 out 14 items had their mean values ranged from 2.67 to 3.48. This showed that the mean scores were above the cut-off point of 2.50 indicating that the 10 items were utilized by the technology education students for establishing SMEs. However, four of the items (no 2, 10, 12 and 14) had the mean values of 2.42, 1.84, 2.22 and 2.34 respectively which are below the cut-off point of 2.50. This showed that the respondents are not utilizing the PECs in establishing SMEs. The table also revealed that the standard deviation (SD) of the items ranged from 0.57 to 1.03 which was below 1.96. This indicated that the respondents were not too far from the mean and from one another in their responses. In addition, all the items had their t-calculated values less than their t-table values. Thus, indicating that there was no significant difference in the mean ratings of the responses of male and female students on the utilization of personal entrepreneurial competencies possessed for establishing SMEs.

Discussion of Findings

The study found out that there are 14 personal entrepreneurial competencies such as opportunity sensing, persistence, commitment to contract, demand for quality and efficiency, Risk taking and among others possessed by technology education students in Kwara. The table findings

in table 1 were in agreement with findings of Bumatay, Sulabo, & Ragus (2008) who carried out a study on an analysis of the personal entrepreneurial competencies of university students and its implications to curriculum designing of entrepreneurship program in Philippines and identified opportunity sensing, persistence, commitment to contract, demand for quality and efficiency, Risk taking, self-confidence and information seeking as personal entrepreneurial competencies possessed by the students. Niyafard *et al.* (2024) also identified risk taking, ability to demonstrate good supervisory skills, make good first impression evaluation as planning and business skills Competencies required by electrical / electronics technology students for establishing small and medium scale enterprise in Kwara State.

Furthermore, Tarigan *et al.* (2023) identified thirty-two entrepreneurship skills such as creativity, self confidence, risk taking, result/goal oriented, ability to set goal, planning, among others and organized them into sixteen personality skills and sixteen management related skills. Fanslow and Compton cited in Anyakoha (1993) also identified ability to take reasonable risks, self-confidence, hard work, as well as ability to set goals, accept the success and failure of one's work and to be innovative as characteristics that are common to most successful entrepreneurs. These characteristics as discovered in this study are parts of personal entrepreneurial competencies possessed by technology education students.

The findings in table 2 revealed that technology education students utilized the following personal entrepreneurial competencies-opportunity sensing, persistence, commitment to contract, demand for quality and efficiency, Risk taking, self-confidence and information seeking as persuasion and networking. This is in line with the opinion of Iloputalfe cited in Satriadi *et al.* (2022) that entrepreneurial ship education serves to identify students possessing entrepreneurial traits, motivate and develop students for launching and managing their own small scale business enterprises and create necessary awareness and motivation in students for promoting self-employment and alternatives to students.

Lastly, the study revealed that there was no significant difference between the mean response of male and female Students on the Personal Entrepreneurial Competencies Possessed by Technology Education students for establishing SMEs. All these personal competencies identified have implications for technology education lecturers for identifying and nurturing entrepreneurial competencies in students.

Conclusion

Entrepreneurship is using one's initiative to identify area of need in the society and starting a business, based on this the graduates should be encouraged to identify their entrepreneurial competencies potentials and start using them to manage and run small business while they are still in schools. The study revealed that competencies possessed and needed are very important both in Nigeria and globally to realize the potentials of every individual in the business world and to contribute to the economic development of the nation. Training and retraining of technology education lecturers should be directed towards assisting students in identifying their entrepreneurial competencies possessed and how to nurture and develop these competencies in the students for gainful employment or to serve as employer of labour.

Recommendations

Based on the findings of this study, the following recommendation are made

1. All the competencies discovered not to be possessed by students in study should be packaged and included in curriculum of Technology Education programme. This will enrich their entrepreneurial knowledge.
2. Lecturers should assist students to identify their personal entrepreneurial competencies and encourage them to utilize the competencies to establish SMEs.
3. Lecturers should receive regular training programs, short training courses and occasional on how to identify entrepreneurial competencies in students. These competencies if identified should nurture and be developed in the students for future employment after graduation.
4. The technology education lecturers should endeavor to make their University students job creators rather than job seekers assisting them to identify entrepreneurial competencies they possessed. This will uplift the socio-economic standard of our country and the university students will also derive pleasure in having a private business of their own and be self-reliant, self-fulfilled and self-actualized after graduations.

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