

CONSTRAINTS OF MOTOR VEHICLE MECHANIC STUDENTS IN ENTREPRENEURSHIP DEVELOPMENT IN TECHNICAL COLLEGES OF NIGER STATE**BY****Abdulkadir, M:** Department of Industrial and Technology Education, Federal University of Technology, Minna, Niger State, Nigeria**Mustapha, A:** Department of Industrial and Technology Education, Federal University of Technology, Minna, Niger State, Nigeria**Hamidu, Y. M:** Department of Industrial and Technology Education, Federal University of Technology, Minna, Niger State, Nigeria**Alawode, O. D.:** Department of Industrial and Technology Education, Federal University of Technology, Minna, Niger State, Nigeria**&****Nma, T. N:** Department of Industrial and Technology Education, Federal University of Technology, Minna, Niger State, Nigeria; E-mail: abd.mohd@futminna.edu.ng**Abstract**

The study investigated the constraints of motor vehicle mechanic students in entrepreneurship development in technical colleges of Niger State. Two research questions and two null hypotheses guided the study. A descriptive survey design was employed for the study. The study was conducted in all the 7 technical colleges in Niger State. A total of 488 respondents comprising of 455 motor vehicle mechanic TCIII students and 33 motor vehicle teachers was used for the study. Twenty four item-questionnaires designed by the researchers and validated by three experts from Industrial and Technology Education, Federal University of Technology, Minna was used for data collection. The reliability co-efficient of the instrument was 0.89 through Cronbach Alpha statistics. Mean and standard deviation were used for answering the research questions while t-test statistics was used to test the null hypotheses at .05 level of significance. The findings of the study revealed among others; technology dependence, shortage of qualified personnel, lack of dynamic curriculum on entrepreneurship courses are some of the constraints of Motor Vehicle Mechanic Students in Entrepreneurship Development; entrepreneurial teaching should go beyond the traditional teaching in the classroom and the concept of risk-taking and wealth creation is encouraged in youths are some of the ways of overcoming the constraints of motor vehicle mechanic in entrepreneurship development. It was recommended that Government should formulate policies and programmes to encourage entrepreneurs to sail smoothly in their investment, such encouragement should include an interest-free loan.

Keywords: Constraints, Entrepreneurship development, Motor vehicle mechanic, Students, Technical Colleges

Introduction

Motor Vehicle Mechanic (MVM) trade is one of the Technical Vocational Education and Training (TVET) programmes which involves the acquisition of scientific knowledge in design, selection of materials, construction, operation and maintenance of motor vehicles. According to National Board for Technical Education (NBTE) (2001), MVM trade students are expected to, upon completion of this training, be able to: test, diagnose, service and repair any fault on conventional motor vehicle assemble main units and systems to the manufacturers' specifications. Abdulkadir (2016) explained that the objectives of the practical aspect of MVM at the technical college include among others, the ability of motor vehicle craft trainees (students) to be able to: test, rebuild and replace injector nozzles, dismantle and reassemble carburetor following appropriate procedure, replace major emission control components, diagnose all problems relating to steering, braking and suspension systems.

The foregoing revealed that MVM job is enterprising, as National Examinations Council (NECO) (2011) identified MVM work as one of trade/entrepreneurship subject to be offered at school certificate level. The overall aim of this according to the council is to prepare students' mind in readiness for the world of work. In support of this, Audu, Aede, Yusri, Muhammad and Inti (2014) corroborated that MVM students need entrepreneurship knowledge right from technical college. This is because entrepreneurship is about initiating ideas and translating such ideas into a profitable enterprise for the purpose of providing goods and services, preparing students' mind in readiness for the world of work in MVM enterprises. Entrepreneurship is the process of wealth creation through the creation of value rather than its manipulation. It involves the destruction of existing market structures by the creation of new markets (or reduction in market shares of current leaders) through improvement of existing products or the development of entirely new products (Mike, 2011). Adeyeye (2008) saw entrepreneurship as the process of putting together creative and innovative ideas and putting these with management and organization skills in order to combine human and material resources to meet an identified need and thereby create wealth so as to improve the standard of living of the people and make profit in a business enterprise. Enterprises are recognized world over as the engine for economic growth because without them there will be few newly available jobs. As such, the entrepreneurs are the agents of creating enterprises (Okwori, 2004). Potential entrepreneurs such as MVM students require skills such as identifying opportunities assessing opportunities, problem-solving, collaboration, networking, and information and communication technology to succeed (Morris, Webb, Fu & Singhal, 2013). The preceding discussion clearly revealed that the master key to producing quality MVM students with entrepreneurship potentialities, goods and services towards ensuring economic growth and sustaining economic stability is effective Entrepreneurship Development (ED).

ED is a practice meant to improve entrepreneurial skills among people. In other words, it is the inculcation, advancement, and grooming of entrepreneurial skills into a person needed to establish and successfully run an enterprise. According to Osemeke (2012), ED is the process of enhancing entrepreneurial knowledge and skills through structured training and institutional building programmes (Onuma, 2016). Therefore, ED in the context of this study means activities designed and implemented in institutions of learning to enhance the knowledge, skills, attitudes and competencies of motor vehicle mechanic trade students to assume the role of Entrepreneur in the economic and social sectors upon graduation. It is about developing key competencies for self-employment.

In spite of the inclusion of entrepreneurship education in the curriculum of Technical colleges in Nigeria and availability of several employment opportunities for the graduate of motor vehicle mechanic trade, evidences from the literature revealed that most graduates of motor vehicle mechanic trade from technical colleges in Nigeria are unemployed thereby spreading to and affecting all other aspect of TVET education. For instance, Nigeria produces about 3500 engineers from its universities, and polytechnics every year and yet there is significant unemployment among the graduates due to poor quality of education (Bukar, 2016). Furthermore, according to the National Bureau of Statistics of Nigeria (2011), the unemployment rate among Nigerian Certificate Education (NCE), National Diploma (ND) is 20.2%, while among graduates of vocational schools (Technical Colleges) is 28.7%. It is not quite clear whether constraints in entrepreneurship development may be responsible for this unemployment rate among motor vehicle mechanic graduates of technical colleges in Niger State. Hence, this necessitates the need for this study.

Purpose of the Study

1. To identify the constraints of motor vehicle mechanic students in entrepreneurship development
2. To suggest ways of overcoming the constraints of motor vehicle mechanic in entrepreneurship development

Research Questions

1. What are the constraints of motor vehicle mechanic students in entrepreneurship development?
2. What are the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development?

Hypotheses

The following null hypotheses were formulated to guide the study and were tested at .05 level of significance:

Ho₁: There is no significant difference in the mean responses of motor vehicle mechanics teachers and TCIII motor vehicle mechanic students as regards the constraints of motor vehicle mechanic students in entrepreneurship development.

Ho₂: There is no significant difference in the mean responses of motor vehicle mechanics teachers and TC III motor vehicle mechanic students as regards the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development.

Methodology

A descriptive survey research was adopted for this study. A total of 488 respondents comprising 455 TC III motor vehicle mechanic students and 33 motor vehicle teachers from all the technical colleges in Niger State formed the population for this study and the entire population was studied; hence no sampling techniques was adopted for the study. A 24 items structured questionnaire developed by the researchers, titled: Constraints of Motor Vehicle Mechanic Students Entrepreneurship Development Questionnaire (CMVMQ) and validated by three experts from Industrial and Technology Education Department was used for data collected for this study. Reliability coefficient of the instrument was determined to be 0.89 through Cronbach Alpha statistics. The questionnaire items were assigned four points rating scale of Strongly Agree (4), Agree (3), Disagree (2), and Strongly Agree (1). 488 copies of the questionnaire were distributed to MVM teachers and MVM students and 420 copies were duly filled by the respondents and returned representing 86.06%. Mean and Standard Deviation were the statistical tools used to analyze the data for answering research questions; While t-test statistics was used to test the hypotheses at .05 level of significance. A mean score of 2.50 was used as a benchmark for accepting or rejecting items. Therefore, items with a mean score of 2.50 and above were considered agreed; while items with mean score of 2.49 and below were considered disagreed. Also, p-value is greater than alpha value at .05 level of significance, the hypotheses was accepted and if otherwise, rejected.

Results

Research Question One: What are the constraints of motor vehicle mechanic students in entrepreneurship development?

Table 1: Mean responses of motor vehicle mechanic teachers and TC III motor vehicle mechanic students on the constraints of entrepreneurship development N= 420

S/No	Items	\bar{X}_t	SD	Decision
1	Technology Dependence	3.61	0.47	Agreed
2	Deplorable state of training facilities	3.52	0.49	Agreed
3	Lack of dynamic curriculum	3.57	0.56	Agreed
4	Shortage of qualified personnel	3.67	0.50	Agreed
5	Inadequate funding of Technical Education Institution	3.66	0.57	Agreed
6	Lack of credit facilities	2.57	0.49	Agreed
7	Negative attitude	3.50	0.43	Agreed
8	Inconsistencies in government policies	3.67	0.61	Agreed
9	Poor product or service	3.78	0.63	Agreed
10	Cultural Barriers	3.79	0.53	Agreed

11	Inadequate equipment and technology	3.70	0.52	Agreed
12	Economic pressure from parents	3.00	0.54	Agreed
13	Inadequate infrastructural facilities	3.89	0.55	Agreed
14	Entrepreneurial attitude	3.85	0.54	Agreed
Grand Mean/SD		3.56	0.53	Agreed

Note: N = Number of Respondents, SD = Standard Deviation

Table 1 shows the mean responses of the respondents on the 14 items posed to determine the constraints of motor vehicle mechanic students in entrepreneurship development with the grand mean of 3.56 which implies that the respondents jointly agreed with all the items as the constraints of motor vehicle mechanic students in ED in Technical Colleges of Niger State. The standard deviation of the items ranges from 0.43-0.61 which further indicates that the respondents were not too far from the mean and were closed to one another in their responses. This closeness of the respondents adds value to the reliability of the mean.

Research Question Two: What are the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development?

Table 2: Mean responses of motor vehicle mechanic teachers and TC III motor vehicle mechanic students on the ways of overcoming constraints of motor vehicle mechanic students in entrepreneurship development
N= 420

S/No	Items	\bar{X}_t	SD	Decision
1	Provision of adequate resources to technical colleges	3.49	0.61	Agreed
2	Regular and re-training of teachers along entrepreneurial lines	3.14	0.72	Agreed
3	Need for the collaboration between technical colleges and industries	3.12	0.87	Agreed
4	Acquisition of practical skill should be stressed on the final outcome	3.08	0.90	Agreed
5	The private sector should be encouraged to provide the fund for the purchase of instructional facilities	3.37	0.81	Agreed
6	Entrepreneurs should be used as an instructor for entrepreneurship education	3.28	0.77	Agreed
7	The government must be consistent in policy formulation and implementation of policies on entrepreneurship	3.06	0.80	Agreed
8	Entrepreneurial teaching should go beyond the traditional teaching in the classroom	3.10	0.96	Agreed
9	The concept of risk-taking and wealth creation be encouraged in youths	3.13	0.88	Agreed
10	The government should encourage commercial banks to issue loans.	3.46	0.65	Agreed
Grand Mean/SD		3.22	0.79	Agreed

Table 2 shows the mean responses of the respondents on the 10 items posed to determine the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development with grand mean of 3.22 which implies that the respondents jointly agreed with all the items as the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development in Technical Colleges of Niger State. The standard deviation of the items ranges from 0.77-0.81 which further indicates that the respondents were not too far from the mean and were closed to one another in their responses. This closeness of the respondents adds value to the reliability of the mean.

Ho₁: There is no significant difference in the mean responses of motor vehicle mechanics teachers and TC III motor vehicle mechanic students as regards the constraints of motor vehicle mechanic students in entrepreneurship development

Table 3: t-test statistical analysis of the respondents as regards the constraints of motor vehicle mechanic students in entrepreneurship development

Sources	N	Df	\bar{X}	SD	p-Val	Level of Sig.	Decision
MVM Students	389	418	3.39	0.03	0.99	NS	Accepted
MVM teachers	31		3.86	0.04			

Keys: N= Number, \bar{X} = Mean, SD= Standard Deviation, df= Degree of freedom, P-val= Probability value

Since the p-value is greater than the alpha value at 0.05 level of significance ($0.99 > 0.05$). Hence, the null hypothesis tested was accepted. This indicates that there is no significant difference between the mean responses of motor vehicle mechanics teachers and TC III motor vehicle mechanic students as regards the constraints of motor vehicle mechanic students in entrepreneurship development.

Ho₂: There is no significant difference in the mean responses of motor vehicle mechanics teachers and TC III motor vehicle mechanic students as regards the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development

Table 4: t-test statistical analysis of the respondents of the respondents as regards to the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development

Sources	N	df	\bar{X}	SD	p-Val	Level of Sig.	Decision
MVM students	389	418	3.23	0.03	0.53	NS	Accepted
MVM teachers	31		3.27	0.04			

Since p-value is greater than the alpha value at 418 degrees of freedom at 0.05 level of significance ($0.53 > 0.05$); the null hypothesis tested was accepted. This indicates that there is no significant difference between the mean responses of the respondents as regards the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development.

Discussion of Findings

The research findings revealed that all respondents agreed on the constraints of motor vehicle mechanic students in entrepreneurship development, these include among others, technology dependence and the shortage of qualified personnel. Of major significance is the lack of dynamic curriculum on entrepreneurship courses. Igbeka (2008) noted that despite the very fact that many institutions have started teaching of learners on general courses in entrepreneurship, they need not developed info peculiar to the demands of every discipline. Moreover, Ugwu (2012) noted that training in entrepreneurship development is not well articulated in Nigerian tertiary institutions. In support of this fact, Omoankhanlen (2010) argued that lack of the framework for entrepreneurship awareness and education in universities is responsible for the unending debate as to "How the old curriculum would be changed to integrate entrepreneurship? What should constitute the scheme? Whose responsibility is it to teach entrepreneurship?" Other important problems such as inadequate ICT facilities, fear of competition and failure are believed to exist as a result of inadequate education and motivation, self-confidence and encouragements.

The study also revealed that if an entrepreneur must succeed, the inconsistencies in government policies will have to be tackled. Ayatse (2013) stated that governance is something entrepreneurs have no control over; all entrepreneurs can do is to influence government's policy with respect to enacting favourable business laws. These findings correspond with Okezie and Asoluka (2013) that governance is something

entrepreneurs have no control over; all entrepreneurs can do is to influence government's policy with high opinion to passing favourable business laws. Therefore, the entrepreneur may not have the political or financial strength to influence government's policy so the best strategy to combating the ever-changing policy of the government is to keep a keen eye on government laws and swiftly adjust business to align with the policies. Thus, the policies of the government are constraints to the success of large-scale entrepreneurial success for many entrepreneurs. The study also revealed that potential entrepreneurs go through many hardships when trying to access credit for their businesses. This is in consonance with Jonathan (2017) that a wide range of financial bodies that put forward business soft loans charged the entrepreneurs with high-interest rates and thus daunting the aspiring entrepreneurs.

In the same vein, there was no significant difference between the mean responses of the respondents in regards the constraints of motor vehicle mechanic students in entrepreneurship development. Since the respondents do not differ significantly, this implies that the respondents did not show the source of major difference. This gives the impetus to conclude that the groups give rise to the constraints of motor vehicle mechanic students in entrepreneurship development. The results of the study concur with the study conducted by Mustapha et.al. (2018) that among some of the challenges faced by the potential Nigerian entrepreneurs go through entrepreneurs is access to credit funds.

On the ways of overcoming the constraints of motor vehicle mechanic students in entrepreneurship development, the result revealed that there was no significant difference in the mean responses of motor vehicle mechanics teachers and TC III motor vehicle mechanic students. This result showed that the respondents did not show the source of major difference. Corroborating this result, Mustapha and Abubakar (2014) stated that entrepreneur with low capital base should be encouraged in getting bank loans and a host of others so as to create wealth.

Conclusion

Based on the findings of the study, it was analyzed that the constraints of Motor Vehicle Mechanic students in entrepreneurship development in Technical Colleges of Niger State constitute among others a threat to social, economic and political development. Entrepreneurship development empowers the Technical Colleges students by training them to make use of their cognitive, affective and psychomotor domain to acquire suitable knowledge and skills for self-reliance and national development. Unfortunately, technology dependence, the shortage of qualified personnel, lack of dynamic curriculum on entrepreneurship courses will never be successfully curbed no matter the employment opportunities, financial support among others if there is no proper entrepreneurship development education as the mounting evidence for national development.

Recommendations

Based on the findings of the study, the following recommendations were preferred:

1. The government should formulate policies and programmes to encourage entrepreneurs to sail smoothly in their investment, such encouragement should include an interest-free loan.
2. Effective entrepreneurship education dealing with practical and theoretical aspect of teaching and learning should be integrated into the school curricula at all facet of education.

References

- Abdulkadir, M. (2016). Entrepreneurship Management Skills Needed by Self-Employed Motor Vehicle Mechanics in the North Central States of Nigeria. *Unpublished PhD thesis*; Department of Industrial and Technology Education. Federal University of Technology, Minna.
- Adeyeye, M. M. (2008). *A fundamental approach to entrepreneurship, small and medium scale enterprises*. Evil Coleman Publications. Ibadan.

- Audu, R., Aede, H. B. M., Yusri, B. K., Muhammad, S. B. S. & Inti, M. M. (2014). Retraining needs of motor vehicle mechanics teachers at the technical college level. *Journal of Technical Education and Training (JTET)*, 6(1), 1-12
- Ayatse, F. A. (2013). Driving entrepreneurship education in Nigeria: issues and challenges. *International Journal of Business and Management Review*, 1(4), 83-90
- Bukar, B. (2016). *Entrepreneurship development in Technical Vocational Education and Training to enhance economic stability in Nigeria*. A Lead Paper Presented at the 14th National Conference and Exhibition of the Nigeria Association of Vocational and Technical Educators in Collaboration with School of Vocational and Technical Education Isa Kaita College of Education, Dustin-ma Katsina, Katsina State.
- Idris, A. M., Saba, T. M. & Mustapha, A. (2014). The Employability Competencies Needed By Automobile Electrical Systems' Technicians in Niger State, Nigeria. *Institute of Education Journal*. University of Nigeria, Nsukka.25 (1), 28-39
- Igbeka, J. U. (2008). *Entrepreneurship in library and information services*. Ibadan: Stirling-Horden
- Jonathan, T. S. (2017). *The Entrepreneur's Guide to Building a Successful Business*. Brussels: EFMD Publishers.
- Mike, D. (2011). Entrepreneurship opportunities and challenges in Nigeria. *Journal of Business and Management Review*. Ahamdu Bello University, Zaria 1 (1), 41-48
- Moris, M., Webb, J., Fu, J. & Singhal, S. (2013). A Competency-based perspective on entrepreneurship education: A conceptual and empirical insights. *Journal of Small Business Management*, 51(1), 353-369
- Mustapha, A., Umar, I. Y., Idris, A. M., Saba, T. M., Audu, R. & Musa, A. E. (2018). Enhancing the acquisition of entrepreneurship skills among youths through effective counselling in Nigeria. *Journal of Education and Applied Psychology*. Ibrahim Badamasi Babangida University Lapai 8(1), 28 – 37
- Mustapha, A. & Abubakar, A. K. (2014). The Role of Small Scale Industry in Vocational and Technical Education: The Impact of Marketing Management. *International Journal of Business and Behavioural Sciences (IJBBS)* 4(10), 1-12.
- National Board for Technical Education (NABTE). (2001). *National technical certificate programme in mechanical engineering craft practice curriculum*. Kaduna: NBTE publication.
- National Examinations Council (NECO). (2011). *Regulations and Syllabus for Senior School Certificate Examination. Revised*. Enugu: Otusun, Nigeria Ltd.
- Okezie, A. I. & Asoluka, C. N. (2013). Challenges and Prospects of Entrepreneurship in Nigeria. *Academic Journal of Interdisciplinary Studies* 2(5), 25-36
- Okwori R. O. (2004). *Fundamentals of Vocational/ Technical Education and Entrepreneurship for schools and colleges*. Jos. Akin Press
- Onuoankhanlen, J. A. (2010). Framework for entrepreneurship education in Nigerian higher institutions of learning. *Journal of Contemporary Research*, 7 (1) retrieved from <http://www.ajol.infor/index.php/watilartick/view/60999> accessed January 20th 2018
- Onuma, N. (2016). Entrepreneurship education in Nigerian tertiary institutions: a remedy to graduates unemployment. *British Journal of Education* 4(5), 16-28
- Osemeke, M. (2012). Entrepreneurship development and intervention agencies in Nigeria. *International Journal of Business and Social Science*, 3(8), 255 – 265
- Sule, M. (2014). The role of entrepreneurship education in job creation among youths in Nigeria. *International letters of social and humanistic sciences*. 4(1), 87-96
- Ugwu, F. N. (2012). *Competencies possessed by Library and Information Science students for entrepreneurship in three Nigerian Universities*. Unpublished master thesis University of Nigeria, Nsukka