

Vocational Training and Youth Empowerment in Nigeria: Evidence from Informal Sector Operators' Activity in Gombe Metropolis

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ABSTRACT

This study was conducted to empirically examine the role of the informal sector in youths' empowerment in Gombe metropolis. A structured questionnaire was used to gather first-hand information on variables of interest and both descriptive statistic and ordered logistic regression analysis were conducted to achieve the major and specific objectives of the study. The primary objectives of the study include to examine (i) how does Vocational training among informal sector operators influence youth empowerment in Gombe metropolis; (ii) how does customers' patronage of the informal sector's services influence youth empowerment in Gombe metropolis; and (iii) how does capital requirement among informal sector operators influence youth empowerment in Gombe metropolis. Empirical results obtained from the study indicated that Vocational training among informal sector operators has a positive and significant influence on the likelihood of youths' empowerment in Gombe metropolis of Gombe state; customers' patronage, as well as capital requirements, were also found to have a positive and significant influence on youths' empowerment in Gombe metropolis; and all the control variables included in the model (except gender) also have positive and significant probability on youth empowerment in Gombe metropolis. We conclude by presenting concluding remarks and policy implications for decision-making toward repositioning technical and vocational education in Nigeria to effectively curb incessant overdependence on the government for job creation in Nigeria.

Keywords: *Entrepreneurship development, Gombe State, Informal sector, Poverty alleviation, Technical and vocational training, Youth empowerment.*

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Highlights of this paper

- This study is among one of the first of its kind to highlights the role technical and vocational training among informal sector operators in youth empowerment in Gombe metropolis, Gombe State – Nigeria.
- Thus, it suggests that adequate provision of instructional materials in vocational and technical schools will go a long way in reducing over dependence on government for provision of employment opportunities.

1. INTRODUCTION

Youth unemployment and the eradication of poverty are some of the greatest challenges to the growth and developmental needs of developing countries and it is, therefore, an indispensable requirement for the attainment of sustainable development (United Nations, 2015). As a result countries as well as regional and international organizations, are committed to youth empowerment and eradication of chronic poverty and hunger in such a way that resources and action plans (e.g Millennium Development Goals) are designed with the view of curbing poverty and job creation. This enthusiasm at the international level led to the declaration of Sustainable Development Goals (SDGs) with well-defined targets and measurable outcomes (United Nations, 2015). Thus, the SDGs declaration is commendable as the performance by developing countries of Asia, Latin America, and Africa in fighting both rural and urban unemployment is not encouraging despite appreciable growth recorded in such economies as documented by Collier (2007). Therefore, the SDGs declaration is pertinent because, despite the decline in the poverty rate in Sub-Saharan Africa, the proportion of those living in extreme poverty as a result of unemployment has been on the rise as noted by Maku, Ogwumike, and Adesoye (2014).

The problem of youth unemployment has become one of the major problems facing Nigeria today. Although the country occupies the sixth position as an oil-exporting country in the world, its poverty and unemployment levels are getting higher. This situation has generated several forms of insecurity within the family, community, and the country at large. This is because; unemployment and poverty go hand in hand where household income and consumption are determined by the formal and informal economic activities of the members of the family. Large-scale structural unemployment among the youth is one of the most unfortunate fallouts from the nation's socioeconomic and political crises. The situation is so disturbing that the federal government decided to tackle it in various ways.

For instance, to fight youth unemployment and poverty in Nigeria successive regimes in the country at both national and sub-national levels formulated one form of poverty alleviation and empowerment or the other meant to reduce the level of poverty, give hope and succor to the poor and/or move towards some sort of wealth creation. Some of these articulated empowerment strategies in Nigeria include Operation Feed the Nation (OFN); the Green Revolution; Directorate of Food Roads and Rural Infrastructure (DFRRI); Agricultural Development Program (ADP); National Directorate of Employment (NDE); National Poverty Eradication Program (NAPEP); National Economic Empowerment and Development Strategy (NEEDS); Small and Medium Enterprise Development Agency of Nigeria (SMEDAN); and Subsidy Reinvestment and Empowerment Program (SURE-P) among others. In a similar passion, the government of Gombe State opted to create technical and vocational schools across the entire 11 Local Government Areas of the state in the year 2005. The policy was conceived to redirect prospective labor toward self-employment and curb the excessive reliance on the government for job opportunities as well as to reduce the level of poverty, particularly among the youth. The policy was timely conceived as there was perceived inaction and marginalization of technical and vocational education and training (TVET) and its role in poverty reduction and job creation by donor investment and governments in developing countries (Bennell, 1999; Hartl, 2006).

Technical training and expertise are believed to drive entrepreneurship development which contributes significantly in terms of poverty reduction through expansion of existing markets and increase social wealth by

creating a new market (Hussain, Bhuiyan, & Bakar, 2014). Technical and vocational education and training (TVET) can serve as an effective mechanism for facilitating poverty reduction, job creation, and economic expansion in the developing countries of Africa. In tandem with the above assertion, there is a general belief that technical training is critical to the acquisition of skills and competencies which empower labor and are capable of poverty reduction (Aoun, 2004; Nwachukwu, 2014; Wallenborn, 2009). In addition, even though the informal sector remains the highest sector that serves as a source of job opportunities for labor in both rural and urban areas in Nigeria. The sector does not receive the treatment it deserves from both policymakers and researchers in Nigeria. Hence, this study was conducted to empirically answer the following questions:

- i. How does Vocational training among informal sector operators influence youth empowerment in Gombe metropolis?
- ii. How does customers' patronage of the informal sector's services influence youth empowerment in Gombe metropolis?
- iii. How does capital requirement among informal sector operators influence youth empowerment in Gombe metropolis?

The remainder of the paper is organized as follows: section two briefly reviews the theoretical framework and literature on informal sector activities and vocational education and training and its impact on youth empowerment. Section three discusses the econometric methodology and sources of data used in the study. Presentation and discussions of results as well as conclusion and policy implication are done in sections four and five respectively.

2. LITERATURE REVIEW

2.1. Theoretical Framework

We adopt the theory of economic dualism to achieve the specific objectives of the study. Implicit in economic structure and structural change theories is the notion of dual societies in developing countries like Nigeria. Dualism is a popular concept in development economics. It depicts the presence of increasing divergence between rich and poor, formal and informal sectors, and traditional and modern sectors. According to [Todaro and Smith \(2011\)](#) the following key arguments persist in the concept of dualism:

- i. Two conditions of which one is superior (formal sector) and regulated while the other is inferior (informal sector) and unregulated exist together;
- ii. The existence is a permanent phenomenon. Therefore, coexistence is no transitional; and
- iii. The relationship between the formal and informal sectors does little or nothing to pull up the informal sector. It may eventually push it down to promote the underdevelopment of the informal sector.

2.2. Empirical Review

The role of the informal sector in poverty alleviation has been empirically investigated by different scholars and researchers both in Nigeria and other countries around the globe. Some of these researchers include ([Tshuma & Jari, 2013](#)) who examined the role of the informal sector in augmenting household income in Alice town in the Eastern Cape province of South Africa. The data used for the study is mainly obtained through an interviewer-administered questionnaire. The study reveals that the informal sector provides employment opportunities for the less educated and formally unemployed thereby providing them with income. Based on their findings they find out that, the contribution that small business or informal sector has to the nation shows that the poverty line can be escaped and a faster rate of economic growth and development can be achieved especially if these informal sectors are supported. [Agupusi \(2007\)](#) examined the role of the small business sector in poverty alleviation through support from

government and private sector initiatives in Alexandra, South Africa. He applied critical analysis of secondary material complemented with primary data obtained through semi-structured interviews with key informants and actors, entrepreneurs, and potential entrepreneurs. They found that with positive interaction between development agencies, and small businesses in Alexandra, predominantly informal and semi-formal Small and Medium Enterprises (SMEs) in Alexandra could not only alleviate poverty but could also contribute to the general transformation process.

Also, [Delbiso \(2013\)](#) investigated the role of the informal sector in reducing youth unemployment. Data for the study are gathered from a sample of 204 youth informal sector operators in Hawassa city, Ethiopia. The study makes use of logistic regression to determine the factor that can contribute to the livelihood improvement of the operators. The study revealed that the informal sector plays a crucial role in alleviating poverty in urban areas through the creation of job opportunities. [Mbeng \(2013\)](#) investigates the role of the informal waste recovery and recycling sector in Douala, Cameroon in alleviating poverty, environmental pollution, and unemployment. The methodology used for the study consists of a quantitative survey using random sampling and qualitative interviews to add depth and details to the survey result. The study reveals that poverty trends in Cameroon are higher in the rural areas than in the urban areas which serve as a major cause of rural-urban migration.

In Nigeria, most of the studies focused on the role of the informal sector in providing job opportunities and income generation. For instance, [Philip, Samson, and Ogwu \(2013\)](#) explored the role of the informal sector as a strategy for reducing poverty in Nigeria with reference to Kogi state. The study makes use of data from both primary and secondary sources. The data were analyzed using tables and chi-square statistical tools. From the study conducted they find out that the informal sector plays a vital role in the socio-economic advancement of Nigeria. [Oluranti \(2011\)](#) examined the role of the urban informal transport sub-sector; motorcycle taxis (popularly called Okada) towards the provision of self-employment and income-generating opportunities to urban unemployed youths in southwest Nigeria. The data for the study was generated from a survey of 777 randomly selected motorcycle riders in the study area. The study uses two econometric models which are specified and estimated using ordinary least square techniques. The study revealed that the sub-sector is a high employer of young school leavers in the accident-prone job of Okada riding. It also revealed that the operators earned above the minimum wage level. [Farinmade and Anyankora \(2012\)](#) investigated the challenges of improving informal sector activities conditions in Lagos Island, Nigeria. The survey was carried out using stratified random sampling to ensure a fair representation of the population on each selected street. The study revealed that there is a relationship between employment in the informal sector and formal sector unemployment, illiteracy, environmental degradation, and the rampant violation of planning regulations.

Furthermore, [Oloyede \(2008\)](#) examined two critical but interrelated issues namely, to what extent has the informal financial sector been able to mobilize rural savings, and to what extent has savings resulting therefrom are channeled to productive investment that helps in rural development in Nigeria. The study critically analyses primary data collected from field surveys and questionnaires, using random sampling techniques in sourcing data. The study shows the relative importance of the informal financial sector over its formal institution in mobilizing funds for rural development. The study also revealed that myriads of problems still be said their effective performance. [Onwe \(2013\)](#) studied the informal sector and its role in the development of the Nigerian economy. The study employed a survey of the Nigerian informal sector carried out by Central Bank of Nigeria (CBN) and it revealed that the traditional or informal sector is continuously expanding in developing countries and has been serving as a safety belt in the provision of employment and income to the teeming poor. [Yusuf, Ijaiya, and Ijaiya \(2009\)](#) evaluated the role of informal financial institutions (rotating savings and credit associations, ROSCAs) in reducing poverty among people in Offa, Kwara State. The study source of data was mainly primary and secondary sources. In analyzing the data

collected p-alpha-class measure and multiple regression analyses were used. The studies revealed that informal financial institutions play an important role in reducing poverty among people.

3. METHODOLOGY

3.1. Sources of Data

This study used cross-sectional data sourced through a survey study during the month of May 2017 in Gombe metropolis with the help of three research assistants. The data were collected using a cluster sampling technique. Informal sector operators in the study area have been divided into clusters consisting of barbing/hairdressing saloons, welding, mechanics, refrigerator repairs, tailoring, and carpentering. Each of these clusters represents the heterogeneity of the population we are studying and they are homogeneous within each unit as posited by Adefila (2008). From the units, simple random sampling techniques were used in administering copies of the questionnaire to 430 informal sector operators in Gombe out of which 400 copies of the questionnaire (i.e. 93.00 percent) were valid and hence processed for this study. This is also in line with the assertion made by Hsieh, Bloch, and Larsen (1998) and Demidenko (2007) that about 350 observations would be required to achieve 95 percent statistical power in logistic regression with less than 10 independent variables and also conformed to central limit theory.

3.2. Model Specification

To achieve the specific objectives of this study the following empirical model is specified as:

$$\frac{\partial \Pr(\text{empower}=k)}{\partial \beta_j} = \frac{\partial \Pr(\gamma_{k+1} - X_i \beta)}{\partial \beta_j} - \frac{\partial \Pr(\gamma_k - X_i \beta)}{\partial \beta_j} \tag{1}$$

Where:

Empower = probability of empowering youths in Gombe metropolis.

k = 1 – 4

X_i = vector of explanatory variables which include vocational training, customers’ patronage, capital requirements, and other control variables.

Table 1. Definition of variables.

Variable	Explanation/measurement
Empower	Number of apprentice(s) trained by an operator yearly (1 – 3 = 1; 4 – 6 =2; 7 – 9 =3; above 9 = 4)
Vocational training	Formal vocational training received by an operator (Yes = 1; Otherwise= 0)
Customers’ patronage	Operator’s perception of customers’ patronage of his/her service (Fairly competitive = 1; Relatively competitive = 2; and Highly competitive = 3)
Capital requirements	Operator's perception of capital requirements effects on expansion needs of his business (Unaffected = 1; Fairly positive = 2; Relatively positive =3; and Highly positive =4)
Age	Age of the operator is measured in years
Male	Gender of an operator (Male = 1 and Female = 0)
Educ	Highest educational qualification of an operator (No formal education = 1; primary = 2; Secondary = 3; and Tertiary = 4)
Hhsize	Household size of an operator

Table 1 indicates definition of variables used in the study. The variables are categorical in nature and their sources is explained in section 3.1 above.

3.3. Estimation Techniques

Both descriptive and econometric analyses were used in the study in analyzing the data to achieve its preoccupation. Specifically, descriptive statistics were used to achieve the first research objective while the impact of technical activities and that of formal vocational training were analyzed with the aid of a discrete choice model. The choice of the discrete model rather than the traditional regression analysis was informed because the study entails a qualitative response in which the dependent variable is non-continues. Hence, the orthodox regression model may not be accurate in the analysis of such a discrete model as specified in section 3.8 above (Baum, 2006; Cameron & Trivedi, 2009; Greene, 2013; Wooldridge, 2002).

3.4. Presentation and Discussion of Empirical Results

3.4.1. Socio-Demographic and Economic Characteristics of the Respondents

Table 2 presents the summarized age distribution, household size, weekly consumption expenditure, and weekly income (revenue) of the respondents. The table shows that the age of the youngest and oldest respondents were 18 years and 67 years respectively. On average the respondents were within the age of 31 years. This indicates that most of the respondents are at their youthful age and can actively engage in various activities in the informal sector of the economy.

Table 2. Summary statistic of respondents age, households size and weekly consumption and income.

Variable	No. of observation	Mean	Std. dev.	Minimum	Maximum
Age	400	31.638	9.0307	18	67
Hhsize	400	5.318	4.6670	1	25
Consumption	400	7942.748	6661.106	700	50000
Income	400	15021.76	14109.91	1000	150000

The table also shows that the minimum and maximum household size were 1 and 25 respectively. On average the respondent's household size is 5. This indicates that the majority of the respondent take care of one or more people. The table also shows that the lowest and highest level of consumption expenditures per week by the respondent were ₦700 and ₦50,000 respectively. On average the weekly consumption expenditure is ₦7,942. This may suggest that an individual lives beyond the poverty line. The table also shows the minimum and maximum income earned per week were ₦1,000 and ₦150,000 respectively. On average the weekly income is ₦15,000. This implies that, on average, monthly revenue generated by the informal sector operator is ₦60,000 which is far more than the minimum wage of ₦18,000 per month in Nigeria. This is also more than the salary of a fresh graduate working with the Gombe State Government.

However, Table 3 presents the socio-demographic characteristics of the respondents. The table shows that most of the respondents interviewed for this study were male as indicated by 81.50 percent against female respondents. This high proportion of male relative to female respondents can be linked to the nature of informal activities studied which by their nature restrict potential female participants.

Also, married respondents constituted 51.25 percent compared to any category of marital status as presented in Table 3. This means that majority of the respondents have either a child or a dependent. This also implies that more than half of respondents know how it takes to shoulder the responsibilities of their families.

Table 3. Socio-demographic characteristics of the informal sector operators in Gombe.

Variable	Frequency	Percentage
Gender		
Male	326	81.50
Female	74	18.50
Marital status		
Single	170	42.50
Married	205	51.25
Divorced	16	4.00
Widow	9	2.25
Educational level		
Non-formal education	41	10.28
Primary education	34	8.52
Secondary education	219	54.89
Tertiary education	105	26.32

In addition, the table shows that respondents who have secondary education accounted for 54.85 percent. This implies that a higher proportion of the respondents obtained at least a secondary school education. This implies that one does not need a higher level of education to start operating in the informal sector. The statistic also means that with secondary education one can earn more than the minimum wage of ₦18,000 per month as a result of his engagement in informal activities. Indeed, with a secondary school education, one can earn income more than an actively engaged graduate who is working with the Gombe state government.

Nevertheless, Table 4 presents the distribution of respondents' informal activity in Gombe. The table indicates that about 23.50 percent of the respondents are engaged in mechanics activities. This may be informed by the decision of the government of Gombe State not to ban the use of commercial motorcycles despite security challenges in North-East and the state in particular. The policy might also be that those in authority foresee a corollary between informal activities and youth empowerment.

Also, the table depicts that 61.40 percent of the respondents are solely engaged in the informal sector. This means that majority of the respondent depends mainly on the informal sector for their livelihood. That is, they do not have any other source of earnings aside from the sector. The table further shows that out of the 38.6 percent that do engage in the formal sector the ratio of those employed in either public or private sector is 50:50.

Table 4. Distribution of the respondents by informal activity in Gombe.

Variable	Frequency	Percentage
Activity		
Tailoring	70	17.50
Hair dressing	35	8.75
Mechanic	94	23.50
Welding	52	13.00
Barbing saloon	43	10.75
Carpentering	55	13.75
Refrigerator repairs	51	12.75
Employed		
Yes	154	38.60
No	245	61.40
Public	77	50.00
Private	77	50.00
Vocational training		
Yes	254	63.66
No	145	36.34

In addition, the table shows that 63.66 percent of the respondent received formal vocational training before starting their business. This implies that in normal circumstances those who received vocational training are expected to excel in their business because of the training they received.

3.4.2. Vocational Training and Youth Empowerment Model Estimates

The empirical results of the effects of vocational training on youth empowerment in the Gombe metropolis have been presented in Table 5. The table shows that all variables included in the model except gender are strong determinants of youth empowerment with specific reference to informal sector activities in the Gombe metropolis. Empirical evidence from the study suggests that operators with formal vocational training, increase customers' patronage, businesses with higher capital requirements, increase in age of the informal sector operator, increase the educational qualification of the operator, and increase in the household size of the operator have a positive likelihood on youths' empowerment in Gombe metropolis. The results mean that operators that attained formal vocational training are more likely to train other youths on various skills acquisition in their respective areas of specialization than those without formal vocational training in the state. Also, an increase in the customers' patronage of services provided by the informal sector operators increased their chances of training more youths to become self-employed in the state. It is also natural to assume businesses that required more capital can attract more revenue in the future which will serve as an incentive for training prospective labor to become self-employed. Equally, it is expected that operators with higher academic qualifications above secondary school will be more concerned with reducing youths' overdependence on the government for employment. There, those with a higher level of education will have the extra zeal or fashion in training youths to gain various productive skills and minimize dependence on the state for "non-existing jobs".

Table 5. Results of determinants of youths' empowerment in the informal sector in Gombe (Dependent variable: Empowerment).

Independent variable	Ordered logit		Odd ratio	
	Coefficient	Std. error	Coefficient	Std. error
Vtrain	0.583**	0.263	1.792**	0.471
Patron	0.310**	0.146	1.363**	0.198
Kreq	0.307***	0.122	1.359***	0.166
Age	0.067***	0.015	1.069***	0.016
Male	-0.273	0.300	0.761	0.228
Educ	0.469***	0.150	1.598***	0.239
Hhsize	0.075***	0.027	1.078***	0.030
Pseudo R – squared	0.109			
Observation	342			

Note: Standard errors ***, ** indicates significance at 5%, and 10% respectively.

Nevertheless, the odd ratio of the determinants of youths' empowerment in Gombe metropolis was presented in the last column of Table 5. Statistic from the table shows that operators that undergo formal vocational training have odd of 1.79 more in terms of empowering youths than those without formal vocational training. Equally, an increase in customers' patronage of informal sector services is associated with an odd of 1.36 more than those that have lower patronage given other variables held constant. Also, a business that requires higher capital for its expansion has an odd of 1.36 more in terms of youth empowerment relative to a business that requires low capital. An increase in the age of an operative by one year has an odd of 1.07 of empowering unemployed youths than the younger operators. In addition, an additional academic qualification by an operator has odd of 1.60 more of empowering prospective labor in contrast with operators with lower educational qualifications. Finally, an increase in the operator's household size by one member has odd of 1.08 more of empowering youths holding other variables unchanged.

4. CONCLUSIONS AND POLICY IMPLICATIONS

Our findings presented above suggest that formal technical and vocational education and training strongly influence the likelihood of youth empowerment in Nigeria. To effectively reduce overdependence on the government for job provision in the country there is a need for effective provision of instructional materials not only to technical

and vocational institutions but also to other institutions of learning. There is also a need for stakeholders in the education sector of the economy as a matter of urgency to consider the need for redesigning the curriculum in such a way that emphasis will be placed on entrepreneurship studies and development.

Secondly, basic infrastructural facilities that can aid and/or enhance productive activities in the informal sector need to be vigorously provided by the government at all levels and encourage public-private partnerships in some cases. Actors in the informal sector must equally ensure quality service provision to their respective clients. This is necessary because quality assurance in terms of service provision can enhance the competitive power of prospective entrepreneurs. Thus, can enhance qualitative service provision by the informal sector operators and also serve as a driving force for industrialization and sustain growth and development in the country.

Finally, the government at various levels should introduce sustainable and affordable financial support to informal sector operators to expand their capital base. This will serve as an inducement for labor participation in the sector and enhance skill acquisition that can increase the productive capacity of our teeming youths in the country.

5. LIMITATIONS OF THE CURRENT STUDY

This study highlighted the role of the informal sector's technical and vocational education and training in skill acquisition and training among youths in Gombe metropolis. Findings from the study suggest that informal sector activities in general and TVET, in particular, is an invaluable weapon that can be used in reducing youth unemployment in Nigeria, the study is not without limitations. Firstly, the main focus of the study is Gombe metropolis therefore its findings may not necessarily be applicable to other geopolitical regions or zones in the country. Also, the fact that the study examines the influence of technical know-how on youths' empowerment in Gombe metropolis does not exclusively study those that have attended the Vocational Training Schools in the State.

However, the above observed limitations of the study do not in any way rendered the empirical findings of the study invalid. Instead, we recommend a similar further study to cover any of the six geopolitical zones in the country or the country in general.

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