



A PANACEA FOR UNEMPLOYMENT AND EXTREME POVERTY

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Abstract

Technical Entrepreneurship is a catalyst for wealth creation, poverty reduction, socioeconomic empowerment, self sustenance and national development. Meanwhile, one of the prominent problems in south-western Nigeria is inadequate skilled labour for technical jobs and inadequate entrepreneurial leadership. Hence, there is need for entrepreneurial skills among technicians in the area of knowledge and network ties for entrepreneurial success. The study was carried out in Osun State. Findings of this research revealed that 40.8% of the respondents were female and 59.2% were male, hence 75.5% of the respondents established their businesses for career purposes. Not only has that but also indicated that 67.3% respondents had both formal and informal collaborations (good forms of network composition), hence, forms of collaborations is positive and significantly related with return on asset, return on sale, profit and sales volumes respectively. While highest educational qualification is both positive and significantly related with staff strength. Performance was measured with return on asset, return on sale, profit, sales volumes and staff strength. This study recommends that technical entrepreneurs should spend more time in knowledge acquisition and be connected to good forms of network composition.

Keywords: Knowledge; Network Tie; Poverty; Unemployment; Technical Entrepreneurship

INTRODUCTION

Technical entrepreneurship deals with the manufacturing of products or provisions of technical services for wealth creation (Ilori, 2010). Technical entrepreneurship can utilize creation of a new company including the expansion of an existing one based on the commercialization of a new product or process from scientific research or technology development (Ilori, 2010). Hence, Schumpeter (1939), posit five basic forms of technical entrepreneurship such as firstly, the introduction of new product in the market, by new product. It means something that has been invented and has not been commercialize before. Secondly, the introduction of a new method of production, by new method, it means the optimization of the existing method of production. Thirdly, the opening of a new market, it means creating new opportunity for the benefits of the populace e.g. education etc. Fourthly, the conquest of a new source which allows the industry to increase its productivity, this new source can be in many forms; the discovery of a natural resource (oil, steel, among others.) or attracting a labour force that hasn't been exposed to the industry, and the fifth form is the carrying out of the new organization of industry that will increase the personal welfare of the entrepreneur.

Sullivan and Marvel (2011) assert that “for developing countries to get out of sluggish rate of decline productivity and the relative creativity, innovation and entrepreneurship, decline productivity there is need for Technical Entrepreneurship Education. Hence, technical entrepreneur is seen as someone who originates something new; as having advantage over the man who simply adapts the existing product or invention (Irefin; 2013). This is because technical entrepreneur emerges as a special person of Science and Technology and Commerce (STC), who seizes upon, or develops an invention and through his own individual efforts or in conjunction with others, commercially exploits new or adaptive product or novel production techniques and processes



(Irefin; 2013). The technical entrepreneurs must combine the skills of the classic entrepreneur with those of research Engineer and Scientist (Irefin; 2013).

Therefore, the purpose of this research is to examine the significance of knowledge and network ties on micro technical enterprises (MTEs) performance in Nigeria, and the pertinent questions for the study are:

- i. What is the number of years spent in knowledge acquisition?
- ii. What is the form of network ties?
- iii. What is the influence of years of knowledge acquisition and form of network ties on the performance of technical enterprises (MTEs)?

Ogbimi (2013) assert that knowledge is seen as the fact of understanding information acquired through learning or experience. Hence, to know means: to be aware of something; to be certain about it; to learn and remember something; to have understanding or grasp of the object of knowledge; to be able to recognize or identify something; ability to distinguish between things, to have enough experience and training; to be intimate with something (Chamber Encyclopedic Dictionary pp. 703). Furthermore, Ogbimi (2013) defined three types of knowledge; empirical, rational and mystical. Empirical knowledge is based on experience, observation or on experiment rather than theory. This knowledge is objective in nature. Meanwhile, rational knowledge is based on rational grounds like on sound reasoning, logic, mathematical procedures because mind of man is created with certain innate principles and truths which are independent of experience. Hence, knowledge that is not open to all and sundry which might be revelation knowledge and can be passed down from parents to their children as a means of heritage, some might be taught in esoteric cults and groups (Ogbimi, 2013). In addition, Siemens (2004) and Downes (2007) argue that Internet has changed the nature of knowledge. Hence, Gilbert (2005) also notes that Knowledge is dynamic, expanding and constantly changing; learners need to develop the skills and learn to use the tools that will enable them to continue learning. It is not sufficient just to teach academic content (applied or not), it is equally important also to enable students to develop the ability to know how to find, analyze, organize and apply information/content within their professional and personal activities, to take responsibility for their own learning, and to be flexible and adaptable in developing new knowledge and skills (Gilbert 2005).

Ogbimi (2013) assert that industrialization is prompted through learning and acquiring knowledge. Hence, Sullivan and Marvel (2011) assert that during early stage of venture development, knowledge is especially critical. This is because early-stage ventures are plagued by resource deficiencies and liabilities of newness that increase the risk and uncertainty associated with the ventures (Wu et al. 2008). In addition, Grant (1996) asserts that knowledge is a necessary resource for new ventures; knowledge is strategically important resource that can form the basis for a new venture's competitive advantage. This is because knowledge enhances an entrepreneur's ability to exploit opportunities (Penrose 1959). In line with Penrose; acquisition of relevant knowledge should be advantageous to new venture development and a resource contributing to a competitive advantage (Sullivan and Marvel 2011). Studies have identified advantages of an individual's business knowledge relative to entrepreneurial outcomes (Davidsson and Honig 2003; Shepherd and Detienne 2005). Hence, research suggests that the more knowledge individuals possess the better able they are to identify entrepreneurial opportunities (Shane 2000), achieve higher level of efficiency when completing job related tasks and develop solutions to challenges that are encountered (Yu 2001). In addition, Sullivan and Marvel (2011) assert that if a person has knowledge across business functions; the better able they are to optimize aspects of the business like minimizing costs or maximizing revenue. A person's stock of business related knowledge helps to frame newly acquired information, thus enhancing the individual's ability to interpret and act on it in useful ways (Cohen and Levinthal 1990; Shane 2000; Yu 2001). Hence, knowledge is a primary resource for achieving favorable entrepreneurial outcomes because privately held knowledge (tacit knowledge) is a basic source

of advantage in competition (Kogut and Zander 1992). In addition, Sullivan and Marvel (2011) asserts that business relevant knowledge possessed by the entrepreneur may relate to desirable outcomes like employing workers during the early stages of venture development.

One critical resource young ventures need to accumulate during venture development is employees (Sullivan and Marvel 2011). Many new venture failures are attributed to a lack of qualified personnel (Brush et al. 2001) and new ventures that lack adequate size in terms of employees face lower chances of survival (Freeman et al. 1983). For new ventures, employing workers is about achieving viability in the marketplace (Gilbert et al. 2006). Further, employing workers is a key indicator of early venture survival because having employees indicates that founders are able to concentrate on the more complex operational tasks required of their developing firms and delegate less complex tasks to employees (Gilbert, et al. 2006). Also, there is no consensus on the specific criteria that should be adopted in measuring the performance of firms but some of the most prominent indicators that have surfaced in literatures are output, profits, sales volumes, assets and the number of employees. Also, it is very important since it assists managerial development through collecting and analyzing information. In addition, it helps the organization translate its strategy into results and provides feedback to managers on the progress towards the goals of the organization, (Sullivan and Marvel 2011). In addition, there are two types of performance measurements: objective and subjective. Financial or accounting measures like profits, returns on sales and returns on assets (ROA) are objective measures while customer satisfaction and quality of a product or service are also examples of non-financial and subjective measures (Sullivan and Marvel 2011).

Entrepreneurship

Akpomi (2009) assert that Entrepreneurship Education focuses on developing understanding and capacity for pursuit of entrepreneurial behaviours, skills, and attributes in widely different contexts. Siyanbola (2013) posits that entrepreneurs are those who can combine different components of knowledge and translate it into products and processes. J.B. Say (1824) assert that entrepreneur is not a factor of production but plays a major role which is to direct the application of acquired knowledge to the production of goods for human consumptions. Meanwhile, Schumpeter (1939) notes that entrepreneur is an innovator; it carries out the new combination of productive resources. More also, entrepreneurs are calculated risk takers, they enjoy the excitement of a challenge, but they do not gamble (Irefin 2013). “Entrepreneurship is the process of value creation and the entrepreneur creates the value. Entrepreneurship is learned and the entrepreneur is made. In this premise, entrepreneurship education is paramount importance in building industries and creating ventures” (Dinco-Adetayo, 2014).

Fidelis (2000) assert that reduction of poverty is the most difficult challenge facing any country in the developing world where on the average majority of the population is considered poor. Evidences in Nigeria show that the number of those in poverty has continued to increase, the number of those in poverty increased from 27% in 1980 to 46% in 1985; it declined slightly to 42% in 1992, and increased very sharply to 67% in 1996. By 1999 estimates had it that more than 70% of Nigerians lived in poverty (Fidelis, 2000). In addition Fidelis (2000) note that the lower the educational level the higher the poverty rates tended to be, also, households headed by those with no formal education were consistently the major contributors to total poverty in Nigeria.

Ilori (2013) assert that innovation improves product or production process and the use of process innovation can help to bring product cost down considerably. Innovations engender a switch to a new experience curve on which all competitors are forced to start from (Ilori, 2013). Hence, innovation is the process by which the invention is first brought into use, it involves the improvement or refinement of the invention, the initial design and production of prototypes, pilot plant testing, and construction of production facilities and the date of innovation are defined as the first time it is available for use (Irefin, 2013). Therefore, Innovation is the commercialization of invention. Ilori (2013) defined two forms of innovation; process innovation and product innova-



tion. Irefin (2013) assert that “the process of technological innovation is a complex set of activities that transform ideas and scientific knowledge into physical reality and real-world application. It is a process that converts knowledge into useful products and services that have socioeconomic impact.

Therefore, entrepreneur is an important agent of growth of innovation and technical progress. The development and utilization of his technical and commercial skills create growth potentials in micro, small and medium scale enterprise. Meanwhile, if technological superiority is being sought after and pursued vigorously through technical entrepreneur in developed countries, it sounds logical that Nigeria and other countries that are aspiring to be developed technologically must harness their technical entrepreneur capability, failure to do so will condemn these countries to remain exporters of raw materials to aid industrialization of the developed world (Irefin; 2013). In addition, these countries will be found to be engaged in importing the refined products of these raw materials they have exported but which have been processed by ingenuity of technical entrepreneurs of other countries (Irefin 2013).

RESEARCH METHODOLOGY

This study was conducted in Osun State and adopted survey research design. A structured Questionnaire was designed for a selected sample of 50 micro scale technical enterprises (MSTEs) out of which, 49 technical entrepreneurs activities were finally used for the study. Micro technical enterprises considered had at least 3 years experience and years of establishment were used for verification of accuracy. Hence, ownership and nature of the business was introduced in the questionnaire to determine that its ownerships’ response and to discern technical entrepreneurship from other forms of entrepreneurship respectively. Data were analyzed using descriptive and inferential statistics. Descriptive statistics involved the use of frequencies, mean, Standard deviation and percentage while the inferential statistics employ the use of regression for impact and Analysis of variance for the significance of predictors on response variables. Impact of knowledge and network ties on performance was considered using these variables; return on asset, profit, return on sales, sales volumes and staff strength. These variables; return on asset, profit, sales volumes and return on sales were measured using 4 point Likert scale of 1 for very low and 4 for very high while staff strengths were also measured with Likert scale of 1 for no increase, 2 for fluctuating, 3 for low increase and 4 for high increase. Cronbach alpha was used to assess the consistency of the entire scale. According to Pallant (2004), reliability scores greater than 0.70 are acceptable. Since all of the items had an alpha above the standard guideline of 0.70, the scale is suitable for analysis with acceptable reliability. Cronbach alpha score of 0.786 was obtained for the entire scale see (Appendix II). This indicates internal consistency of the entire variable scale and that variable construct exhibited strong internal consistency reliability. The test of parameters of these estimators reveals that there is no autocorrelation using scatter diagram method which shows no trend, therefore, the disturbance term is independent; see Appendix III a-c.

Appendix I a

Model Summary of the simple regression for predictors to Return on Asset

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795 ^a	.632	.604	.533

a. Predictors: (Constant), Form of collaborations that your business involve in, Years of apprenticeship, Highest Educational Qualification



Appendix I b

Model Summary of the simple regression for predictors to profit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.941 ^a	.885	.876	.301

a. Predictors: (Constant), Form of collaborations that your business involve in, Year(s) of apprenticeship, Highest Educational Qualification

Appendix I c

Model Summary of the simple regression for predictors to sales volume

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917 ^a	.841	.829	.386

a. Predictors: (Constant), Form of collaborations that your business involve in, Years of apprenticeship, Highest Educational Qualification

Appendix I d

Model Summary of the simple regression for predictors to return on sales

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.882 ^a	.778	.761	.389

a. Predictors: (Constant), Form of collaborations that your business involve in, Years of apprenticeship, Highest Educational Qualification

Appendix I f

Model Summary of the simple regression for predictors to staff strength

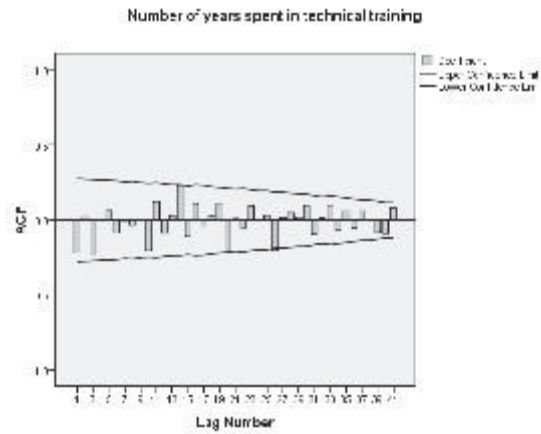
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.151 ^a	.023	-.052	.780

a. Predictors: (Constant), Form of collaborations that your business involve in, Years of apprenticeship, Highest Educational Qualification

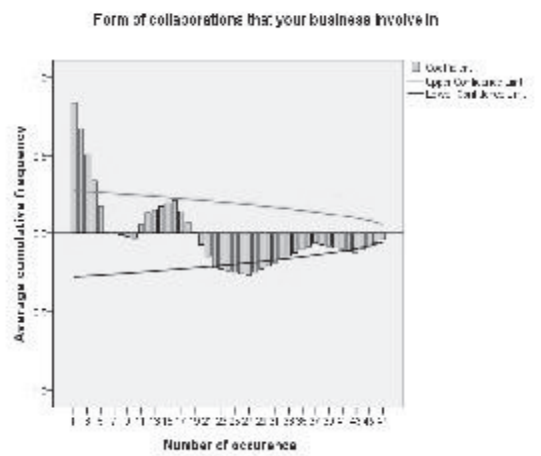
Appendix II

VALIDITY TEST		
Cronbach alpha	Test scale = mean (standardized items)	Test scale = mean (unstandardized items)
	Number of items in the scale: 5	Number of items in the scale: 5
	Scale Reliability coefficient: 786	Scale Reliability coefficient: 789

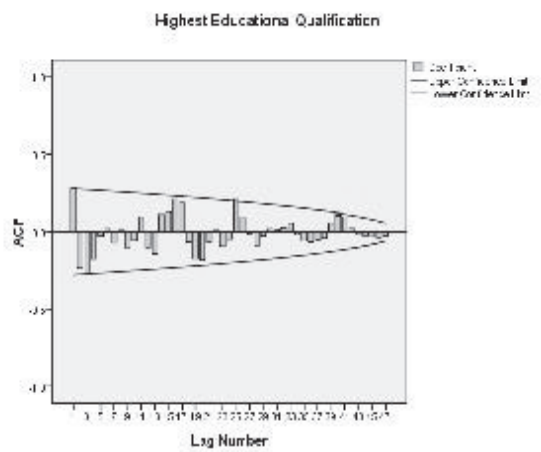
Appendix III a



Appendix III b



Appendix III c



Note: The required model for this study is $Y=F(X) +E \equiv Y= a + b_1X_1+B_2X_2 + E$

where $Y= Performance$, and $X= F(X_1, X_2)$ and $E= Error term$

$Y = F (ROA, P, SV, ROS, SS)$. Where:

$ROA= Return on asset$, $P= Profit$, $SV=Sales volume$, $ROS= Return on sales$, $SS=Staff strengths$.

$X_1 = Year spent in knowledge acquisition$, $X_2 = Forms of Collaborations$.

$X_1= F (HEQ, YST)$, Where:

$YST= Year spent in Technical Training$ and $HEQ= Highest Educational Qualifications$

$X_2 = F (IFC, FC, BIFF)$.Where:

$IFC = Informal collaborations only$,

$FC = Formal collaborations only$, and $BIFF=Both Informal and formal collaborations$.

RESULTS AND DISCUSSION

Table 1 shows the distribution of technical entrepreneurs' characteristics as measured by gender, marital status, age of respondents, opening hour, nature of business and reason for establishing business likewise their mean and standard deviation. In the survey of gender participation in technical entrepreneurship for this study, the results showed that 59.2% male participated in technical entrepreneurship ventures while only 40.8 % were female. According to Kasim (2002), entrepreneurship can be cumbersome venture with the entrepreneur playing multifaceted role, such roles can be effectively played by males than females who prefer to engage in trading activities rather than production.

The result further showed that 89.8% of the respondents were married and 10.2% were single. About 63.3% of the respondents were in the age group 31-40 years, while 2%, 24.5%, and 10.2% were in the age groups of under 21 years, 21-30 years, and 41 years and above respectively.

The result also revealed that those actively engaged in technical entrepreneurship are within the age bracket 21 and 40 years. Therefore, the under 21 years of age are still under tutelage yet to discover their ambition while age 41 and above could not be effective and efficient in strenuous technical business activities as compare to age bracket 21 and 40. This result affirm the findings of Adeyemo (2014), "the strength to engage in ventures of older people may have been drastically reduced and may not be able to engage in strenuous business activities".

The result shows that 63.3% opening hour is 7 am which correspond to an adage that says "punctuality is the key to business", while 12.2% and 24.5% opening hour is 8.00 am and 9.00 am respectively.

Majority (22.4%) of the respondents specialize in wood and wood products; furniture carpentry and carving, followed by Electrical and Electronic equipment (20.4%) – electric control maintenance installation while 14.3% in Textile, clothing, garment and leather, 2% in publishing and printing, 14.3% in block fabrication, also 10.2% in Graphic; Art design, Painter, Photographer and video production and 2% in Salon; Hairdressing and Barber.

The analysis of the reason why the technical entrepreneurs establish their businesses revealed that 75.5 % started with the intention of making it as career, 6.1% had the intention of selling it after making profit and 18.4% had the intention of not being out of cash. The intention of anyone is significant on the performance of its dealings because, that intention will tailor/guide or focus the focus of the person to the success and not just on the fruits of success and also serve as instigator.



Table 1: Distribution of technical entrepreneurs' Characteristics in Osun State

Characteristics		Frequency	Percentages (%)
Gender	Male	29	59.2
	Female	20	40.8
Marital Status	Married	44	89.8
	Single	5	10.2
Age range of respondents	Under 21	1	2
	21-30	12	24.5
	31-40	31	63.3
	41 and above	5	10.2
Opening hour	7.00 am	31	63.3
	8.00 am	6	12.2
	9.00 am	12	24.5
Nature of the business (Areas of specialty)	Textile, Clothing, garment, and leather (leather shoe making, tailoring, Uphosory etc)	7	14.3
	Wood and wood products (furniture and carpentry, carving etc)	11	22.4
	Publishing and printing	1	2.0
	Machinery and equipment (Iron and Alumniun fabrication, welding, mechanic)	7	14.3
	Electrical and Electronic equipment-electric control maintenance installation	10	20.4
	Block fabrication	7	14.3
	Graphic (Art Design, Painter, Photographer and video production)	5	10.2
	Salon (Hairdresser and Berber	1	2.0
Reason for Establishment	Make profit and sell/ Speculative motive	3	6.1
	To avoid being out of cash / Precautionary motive	9	18.4
	Career purpose/ Transactions motive	37	75.5

Source: Field Survey, 2014

Table 2: Distribution of technical entrepreneur performance's predictors in Osun State

Predictors	Predictors' variables	Frequency	Percentage (%)	Mean	SD
Forms of Collaborations	Informal Collaboration only (Collaboration with; customers, my competitors, relative and friends)	16	32.7	3.05	1.234
	Formal Collaboration only: (Collaboration with; Government organization, top managers of my suppliers, social organization/clubs, recruiting firms and research institutes)	0	0		
	Both formal and informal collaborations	33	67.3		
Year (s) of apprenticeship	A year	9	18.4	3.05	1.234
	2 Years	4	8.2		
	3 Years	6	12.2		
	4 years and above	24	49.0		
Highest Educational Qualifications	Primary School Leaving	36	73.5	3.05	1.234
	Senior Secondary School	9	18.4		
	B.Sc./HND	4	8.2		

Source: Field Survey, 2014

Table 2 revealed the distribution of predictors which are form of collaborations of the business, year of apprenticeship and highest educational qualification (FHY). 67.3% respondents had both formal and informal forms of collaboration. According to Sullivan and Marvel (2011), those entrepreneurs with greater number of collaborations appear better positioned to reap knowledge advantages and the relationship between their knowledge and number of workers employed is strengthened. Those with more collaboration may have an advantage because they may better able to frame or refine their own extant knowledge (Sullivan and Marvel, 2011). 32.7% of the respondent had only informal collaboration; collaboration with customers, competitors, relative and friends and none (0%) of the respondent had only formal collaboration; collaboration with government organization, top managers of suppliers, social organization/clubs, recruiting firms and research institutes. Apprenticeship is an informal form of knowledge acquisition. Oxford Advanced Learner's Dictionary defined apprentice as a young person who works for an employer for a fixed period of time in order to learn the particular skills needed in their job. The respondents that spent four years and above (4 years and above) as an apprentice displays the highest number with 49.0% followed by respondents (18.4%) that spent a year and 3 years (12.2%) of apprenticeship. The mean value of apprenticeship is 4 years with standard deviation of 2 years which shows a negligible difference and had a very close range. As defined by Oxford that "a fixed period of time in order to learn the particular skills needed in their job" therefore, it is expected that years spent in knowledge acquisition either formal or informal form of acquisition should positively influence the performance of the technical entrepreneurs. Furthermore, the highest educational qualification of the respondents included Primary School Certificate, Secondary School Certificate and B.Sc./HND. Majority (73.5%) of the respondents considered had Primary School Certificate as their highest qualification followed by Senior Secondary School that had 18.4% while B.Sc./HND had 8.2% Meanwhile one of the MDG goals was to providing universal primary education, all by the target date of 2015 which form a blue print agreed to by all the world's countries and the entire world's leading development institutions, by implication, the entire respondents had primary school certificate and invariably revealing MDGs goal 2; the achieving universal primary education.

Table 3 shows that about 79.5%, 94.1%, 91.7% and 88.2% of positive relationship exist among forms of collaborations, highest educational qualifications, years of apprenticeship (FHY) and return on assets, profit, sales volume, return on sales for Osun State respectively. Also, it revealed that only 63.2%, 88.5%, 84.1% and 77.8% variations in return on assets, profit, sales volume and return on sales are being accounted for by the change in forms of collaborations, highest educational qualifications and year(s) of apprenticeship of technical entrepreneurs respectively. Hence, there is strong goodness of fit (60.4%, 87.7%, 82.9% and

76.1%) respectively See Appendix I (a-f). Furthermore, there are relative standard errors of the estimate of about 53.3%, 30.1%, 38.6% and 38.9% which shows that there is a deviation from the true population respectively and the relative lower standard error of 30.1% had a more precise measurement for the true population. Furthermore, about 15.1% of relationship exists between forms of collaborations, highest educational qualifications, years of apprenticeship (FHY) and staff strength. It also revealed that 2.3% variation in staff strength is being accounted for by the change in forms of collaborations, highest educational qualifications and year(s) of apprenticeship of technical entrepreneurs. Hence, there is a weak goodness of fit (5.2%). The standard error of 78% showed that there is a wider deviation from the true population.

Using the ANOVA value of forms of collaborations, highest educational qualifications, year(s) of apprenticeship (FHY) as shown in Table 3, it revealed that forms of collaborations is statistically significant on return on assets, profit, sales volume, and return on sales ($F=86.693$, $p<0.05$, $F=291.114$, $p<0.05$, $F=223.023$, $p<0.05$, and $F=145.419$, $p<0.05$) respectively. Hence, highest educational qualification is statistically significant on staff strength only ($F=5.902$, $p<0.05$), this result affirmed the precision of Sullivan and Marvel (2011), "entrepreneurs' business related knowledge set would be positively and significantly related to the numbers of workers employed by the SME. Meanwhile, year(s) of apprenticeship in overall is not significant at 5% though revealed positive relationship

Table 3: Summary of Regression and ANOVA for predictors' relationship and Significance

Predictor variables	Response variables	F values	P values 5%	R	R ²	Adjusted R ²	Std. Error of the estimate
Forms of collaborations	Return on assets	86.693	0.000**	0.795	0.632	0.604	0.533
	Profit	291.114	0.000**	0.941	0.885	0.875	0.301
	Sales volume	223.023	0.000**	0.917	0.841	0.829	0.386
	Return on sales	145.419	0.000**	0.882	0.778	0.761	0.389
	Staff strength	0.436	0.512	0.151	0.023	(0.052)	0.780
Highest Educational Qualifications	Return on assets	0.407	0.668	0.795	0.632	0.604	0.533
	Profit	0.165	0.848	0.941	0.885	0.875	0.301
	Sales volume	0.299	0.743	0.917	0.841	0.829	0.386
	Return on sales	0.020	0.980	0.882	0.882	0.778	0.389
	Staff strength	5.903	0.005**	0.151	0.023	(0.052)	0.780
Years of apprenticeship	Return on assets	0.044	0.987	0.795	0.632	0.604	0.533
	Profit	1.162	0.337	0.941	0.885	0.875	0.301
	Sales volume	1.692	0.185	0.917	0.841	0.829	0.386
	Return on sales	0.468	0.706	0.882	0.882	0.778	0.389
	Staff strength	0.447	0.721	0.151	0.023	(0.052)	0.780

Source: Field survey, 2014**Significant at $p<0.05$



CONCLUSIONS AND RECOMMENDATIONS

From this study, result as reported in Table 3, it revealed that forms of collaborations is positively and significantly related to return on assets, profit, sales volume, and return on sales. The variations of the response variables; return on assets, profit, sales volume, and return on sales was highly accounted for by change in the forms of collaborations and also had strong goodness of fit with a more precise measurement of Osun State population at large, this was in line with Sullivan and Marvel (2011), “entrepreneurs with larger numbers of collaborations (both former and informal) perform better than those ones with smaller collaborations. Hence, technical entrepreneurs who are interested in increasing his/her return on assets, profit, sales volume, and return on sales may be challenged to pursue good forms of collaborations that ensure they have more support when the needs arises. Likewise, highest educational qualifications is statistically significant on staff strength only and also had a positive relationship in which the variation was negligible accounted for and also had a very weak goodness of fit but not having a more precise measurement of Osun State population at large. Though its positive relationship is weak and not to some extent help in predicting staff strength, it is recommended to some extent that technical entrepreneurs who are interested in increasing their staff strength may be challenged to pursue more educational qualifications in order to acquire knowledge that will increase their understanding of the business environment. This will directly or indirectly increases their performance and curtail poverty to a larger extent. According to Fidelis (2000) note that the lower the educational level the higher the poverty rates tended to be, also, households headed by those with no formal education were consistently the major contributors to total poverty in Nigeria. Meanwhile, years of apprenticeship is not significant on response variables at large but had a positive relationship with response variables and the variation of return on assets, profit, sales volume, and return on sales was highly accounted for by change in predictor and also had strong goodness of fit with profit, sales volume and return on sales having a more precise measurement of Osun State population at large as showed in Table 3. Therefore, for policy makers who seek to encourage the performance of technical entrepreneurs within their regions, the findings of this study provide some actionable advice. Of particular note, the role of years of apprenticeship in explaining the return on assets, profit, sales volume, return on sales and staff strength is negligible compared with highest educational qualifications and forms of collaborations. This suggests that programs aimed at educating business owners may be especially beneficial in terms of generating employment opportunities, increasing return on assets, profit, sales volume, and return on sales respectively and also encourage populace to increase the level of their educational qualification status. According to Fidelis (2000) note that the lower the educational level the higher the poverty rates tended to be, also, households headed by those with no formal education were consistently the major contributors to total poverty in Nigeria”.

This study examined only technical entrepreneurs while other forms of entrepreneurship were omitted. Finally, because the sample of technical entrepreneurs was within the Osun State, the applicability of the findings may not generalize to other geographic regions or cultures.

References

- Adeyemo F.S. (2014) “Assessment of Support Services Provided by Institutions to Technical Entrepreneurs in South Western Nigeria”: Unpublished PhD. Thesis, Obafemi Awolowo University , Ile-Ife, Nigeria.
- Akpomi, M. (2009). “Achieving Millenium Development Goals (MDGs) through Teaching Entreprensceinces”. Vol. No 1 pp 155-1559.eurship Education in Nigeria Higher Education Institutions (HEIs). European Journal of Social pp 152-158
- Brush, C.G., P.G. Greene, and M.M. Hart, (2011). “From Initial Idea to Unique Advantage: The Entrepreneurial Challenge of Constructing A Resource Base,” *Academy of Management Executive* 15(1), 64-78



- Chamber Encyclopedic Dictionary pp. 703
- Cohen, J.P., and D.A. Levinthal (1990). "Absorptive Capacity: A New Perspective on Learning and Innovation," *Administrative Science Quarterly* 35(1), 128-152. Davidsson, P., and B. Honig (2003). "The Role of Social and Human Capital among Nascent Entrepreneurs," *Journal of Business Venturing* 18(3), 301-331.
- Dinco-Adetayo, E.A. (2014), "Entrepreneurship Education: A Panacea to Graduate Unemployment" Inaugural Lecture Series 269, Obafemi Awolowo University Press Limited Ile-Ife, Nigeria.
- Downes, S. (2007) "what connectivism is Half An Hour", February 3
- Fidelis O. Ogwumike (2000) "An appraisal of poverty reduction Strategies in Nigeria" *CBN Economic & Financial Review*, Vol. 39 NO. 4 pp 1-17
- Freeman, J., G.R. Carroll, and M.T. Hannan (1983). "The Liability of Newness: Age Dependence in Organizational Death Rates," *American Sociological Review* 48, 692-710
- Gilbert, B.A., P.P. McDougall, and D.B. Audretsh (2006). "New Venture Growth: A Review and Extension," *Journal of Management* 32(6), 926-950.
- Gilbert, J. (2005) "*Catching the Knowledge Wave: the Knowledge Society and the Future of Education*" Wellington, NZ: New Zealand Council for Educational Research.
- Grant, R.M. (1996). "Toward a Knowledge-Based Theory of the Firm," *Strategic Management Journal* 17, 109-122
- Ilori, M.O. (2010). "Technical Entrepreneurship Development", Paper Presented at the Yaba College of Technology Lagos, pp. 1-2.
- Irefin I.A. (2013). "Technical Entrepreneurship", Unpublished Lecture Paper, Technology Planning and Development Unit, Obafemi Awolowo University, Ile-Ife, pp. 4-5.
- Kasim, M.O. (2002). "An overview of technology utilization within the SMEs". Paper presented at the 6th International Conference, Lagos, October 28, PP.7-9
- Kogut, B., and U. Zander (1992). "Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology," *Organization Science* 3(3), 383-397.
- Ogbimi F.E. (2013). "Epistemology" Unpublished Lecture Paper, Technology Planning and Development Unit, Obafemi Awolowo University, Ile-Ife.
- Oxford Advanced Learner's Dictionary (NEW 7th Edition), International Student's Edition.
- Pallant J. (2004). *Statistical Package for Social Scientist, Survival Manual*: Open University Press, McGraw-Hill, London
- Penrose, E. (1959). "The Theory of the Growth of the Firm". New York: Wiley.
- Say, J.B. (1824). "A Treatise on Political Economic Principle," C.K. Trans 4th ed. Wells and Lily, Boston M.A., U.S.A.
- Schumpeter, J. (1939). "Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process" New York's and London McGraw-Hill
- Shane, S.(2000). "Prior Knowledge and Entrepreneurial Opportunities," *Organization Science* 11(4), 448-469
- Shepherd, D.A., and D.R. DeTienne (2005). "Prior Knowledge, Potential Financial Reward, and Opportunity Identification," *Entrepreneurship, Theory and Practice* 29(1), 91-112. Siemens, G. (2004) '*Connectivism: a theory for the digital age*' eLearning Space, December 12,
- Siyanbola W.O (2013) "Opportunities for Technology Entrepreneurs within the National Innovation System in Nigeria"; NACETEM, Obafemi Awolowo University, Ile-Ife
- Sullivan D. and Marvel M. (2011). "How Entrepreneurs' Knowledge and Network Ties Relate to the Number of Employees in New SMEs". *Journal of small Business Management* pp. 185-206
- Wu, L.C. Wang, C. Chen, and L.Pan (2008). "Internal Resources, External Network, and Competitiveness during the Growth Stage: A Study of Taiwanese High-Tech Ventures," *Entrepreneurship, Theory and Practice* 32(3) 529-549.
- Yu, T. (2001). "Entrepreneurial Alertness and Discovery," *The Review of Austrian Economics* 14(1), 47-63.