

Effect of Human Capital Development on the Performance of Small and Medium Scale Enterprises in Nigeria

¹Ojokuku, R.M. and ²Sajuyigbe, A.S.

¹Department of Management and Accounting,
Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

²Department of Business Administration and Management,
Osun State Polytechnic, Iree, Nigeria.

Corresponding Author: Ojokuku, R.M.

Abstract

In today's knowledge economy, firm performance and competitive advantage are derived more from what a firm knows and the human capital that permits the firm to use what it knows. Thus, human capital has been identified as one of the most critical agents of SMEs' performance, while human capital development has been recognised as one of the most vital tools for improving SMEs' performance. This study offers a field insight into the relationship between human capital development and SMEs' performance in Nigeria, through a survey of 80 randomly selected SMEs operating in Ibadan, south western Nigeria. A structured questionnaire was used to collect data from the study participants. Pearson Product Moment Correlation Coefficient and Multiple Regression Analysis were used to analyse the data. The result showed that human capital development variables have significant effect on SMEs performance. The coefficient of correlation (R) = 0.921; the coefficient of determination (R^2) = 0.849; and the standard error estimate of 0.31254, indicated that 84.9% of the sampled SME's performance can be associated with the promotion of on-the-job training; level of formal education; level of participation in seminars, conferences and workshops, and level of participation in trade fairs and exhibitions, as strategies of human capital development for the SMEs' employees. The paper therefore recommends that SME operators should actively promote participation in seminars, trade fairs, workshops and exhibitions in order to acquire current knowledge that will positively impact on the performance of the SMEs and enhance their capacity for growth and survival.

Keywords: human capital development, smes' performance, competitive advantage, Nigeria.

INTRODUCTION

Small and medium scale enterprises (SMEs) have played a major role in generating employment and advancing economic development globally. According to Ojokuku and Sajuyigbe (2014), SMEs have been recognised globally as engines of economy growth and development. Ofoegbu, Akanbi and Joseph (2013) also noted that SMEs are the solution to the problem of slow economic development among developing countries. SMEs have historically been the main players in domestic economic activities, especially as providers of employment opportunities, and hence generators of primary or secondary sources of income for many households (Palmarudi and Agussalim, 2013). The contribution of SMEs to Nigeria's economy has, however, not been felt. According to Olowe, Moradeyo and Babalola (2013), many SMEs in Nigeria could not reach the growth stage of their life cycle. Ojokuku (2012) also argued that SMEs are usually unwilling to spend a lot of money on key human resource management practices that can ensure their survival, such as full blown recruitment efforts, because of the costs associated with such endeavours. Small businesses are also usually unable to offer attractive compensation

packages as those of larger, more established firms. Most importantly, the findings of Herrington *et al* (2009) pointed to lack of human capital development as the most vital cause of failure for new SMEs.

Human capital development has been recognized as one of managerial tools that can improve SMEs performance (Ganotakis, 2010; Oforegbunam and Okorafor, 2010; Ofoegbu *et al* 2013; Franssila, Okkonen, Savolainen, and Talja, 2012; and McIver, Lengnick-Hall, Lengnick-Hall, and Ramachandran, 2013). Oforegbunam and Okorafor (2010) observed that human capital is the most critical agent of small and medium enterprise (SME) performance. Sullivan and Sheffrin (2003) defined human capital as the stock of competences, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value. Human capital represents the investment people make in themselves or by their organisations that enhance their economic productivity. According to Hessels and Terjesen (2008), entrepreneurial human capital refers to an individual's knowledge, skills and experiences related to entrepreneurial activity. Entrepreneurial human capital is important to entrepreneurial

development. Shiu (2006) also defined human capital as the productive capabilities of people skills, experience and knowledge that have economic value to organizations.

Hatch and Dyer (2004) noted that in today's knowledge economy, firm performance and competitive advantage are derived more from what a firm knows and the human capital that permit the firm to use what it knows. According to the author, work knowledge is considered more of a product of the human mind and creativity where implicit information is located. Rogers (2003) also agreed that ability to build successful management knowledge has a significant impact on SMEs survival.

STATEMENT OF THE PROBLEM

Research interest in SMEs has been predicated on their recognised economic contributions and benefits, particularly in the area of employment generation and poverty alleviation. A school of thought has indeed postulated that SMEs are the panacea for the economic problems of the less developed and developing countries. In Nigeria today, a lot of attention is being directed at SMEs because of the expected contribution they could make in providing training ground for the development and growth of indigenous entrepreneurs. However, according to Onugu (2005), most SMEs die within their first five years of existence, another smaller percentage goes into extinction between the sixth and tenth year. Thus, only about five to ten percent of young SMEs survive, thrive and grow to maturity. The implication of this is that the survival rate of SMEs in Nigeria is less than 5% in the first five years of existence. This also suggests that SMEs in Nigeria have not been able to contribute to economic development as much as expected. A general observation of efforts at boosting SMEs' growth and performance has shown that such efforts have mostly been targeted at the aspect of financing and provision of infrastructure. It is however imperative that other aspects should be looked into in order to generate workable solutions to the growth and survival challenge faced by SMEs. It is against this backdrop that this study set out to examine the effect of human capital development on SMEs' performance in Ibadan, south western Nigeria.

LITERATURE REVIEW

The important role of human capital development in SMEs growth and development cannot be undermined. According to Coff (2007), human capital theory suggests that people possess skill, knowledge, and ability that have the potential to generate economic rent. Economic rent refers to profits in excess of formal economic returns. Like other assets, human capital has value in the market place, but unlike other assets, the potential value of human capital can be fully realized only with the cooperation of the person, since firm investment to

increase employee skills, knowledge, and abilities carry cost to the organization, they are only justified if they produce future returns by means of increased productivity and overall firm performance. According to Fatoki (2011), entrepreneurs with higher general and specific human capital can be expected to show higher levels of performance than those with lower levels of general and specific human capital. Becker (1964) in his book entitled 'Human Capital' views human capital as similar to physical means of production such as factories and machines. Human capital is a means of production into which additional investment yields additional output.

Sullivan and Sheffrin (2003) defined human capital as the stock of competences, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value. According to Fatoki (2011), human capital represents the investment people make in themselves or by their organisations that enhance their economic productivity. Hessels and Terjesen (2008) also observed that entrepreneurial human capital refers to an individual's knowledge, skills and experiences related to entrepreneurial activity. Several authors and researchers have asserted that entrepreneurial human capital is important to entrepreneurial development. For example, Ganotakis (2010) noted that human capital development is a managerial tool for competitive advantage for entrepreneurial firms by using the Resource Based Theory (RBT) to explain the importance of human capital to entrepreneurship. Ofoegbe and Joseph (2013) also argued that adequate human capital development is indispensable for survival of SMEs.

SMEs need people with specialized skills to develop innovative solutions that give competitive advantages to organizations in which they work, and to help them improve their productivity and redesign business processes by taking advantage of opportunities that provide process technologies, products and information.

DEFINITION AND SIGNIFICANCE OF SMALL AND MEDIUM ENTERPRISES

The definition of SMEs varies from country to country. For instance, in Great Britain, Small Scale Industries include those with an annual turnover of two million pounds or less and with less than 200 paid employees. This definition makes no reference to capital investment. In Indonesia, they refer to those employing less than 10 full-time workers while to the Japanese and Americans, they refer to those employing between 300 and 500 workers. For countries like Japan, India, Philippines, and Korea, there are really no distinctions between a small and a medium sized industry. The Small Business Administration (SBA) in the U.S.A defines Small

scale enterprises by its loan purpose and nature of services.

The definition of Small Scale Enterprise or industry in Nigeria is varied like the international perspectives. According to the Central Bank Nigeria's (CBN) Credit Guidelines, a small Scale Industry is any manufacturing or service enterprise whose annual business turnover does not exceed ₦500,000 ceiling which was imposed on the Agricultural Credit Guarantee Scheme (ACGS) and not more than ₦1 million (one million Naira). According to SMEDAN (2009), a business is defined as small in the manufacturing sector if it employs fewer than 100 employees. SMEs are the pillar of economic growth and development globally. SMEDAN (2009) found that SMEs represents 90% of the enterprises in Nigeria. Culkin and Smith (2000) have observed that small businesses employ 53% of the private workforce and accounts for 47% of sales and 51% of private sector gross domestic product and also argued that SMEs make up the largest business sector in every world economy.

EMPIRICAL REVIEW OF HUMAN CAPITAL DEVELOPMENT AND SMES PERFORMANCE

Past studies on effects of human capital development on SMEs performance are inconclusive. For instance, Oforegbunam and Okorafor, (2010) examined the effects of human capital development on the performance of small and medium scaled enterprises in the South Eastern Region of Nigeria. The result of the analysis shows that increased human capital development by sampled SMEs leads to significant improvements in their performances. Moreover, on-the-job training was identified as the most significant option for developing the human capital of SMEs for enhanced performance. Fatoki (2011) also examined the impact of human, social and financial capital on the performance of Small and Medium-Sized Enterprises (SMES) in South Africa. The results indicated that there is a significant positive relationship between human capital and the performance of SMEs. Lussiers and Pfeifer (2001) also found that human capital of individual entrepreneurs play a role in contributing to the success of entrepreneurs. The study found that entrepreneur with industrial experience, motivation and business start up, has greater chance of succeeding than people minimal industrial experience, and with little motivation. Datta *et al.*, (2005) also affirmed that human capital scheme have been found, within a number of different establishments, to positively affect organizational performance. The finding of Bosma *et al.* (2004) is

also consistent with other researchers that human capital development has positive relationship with SMEs performance. In the same vein, Hisrich and Drnovsek (2002) found that managerial competencies as measured by education, managerial experience, start-up experience and knowledge of the industry, positively impact on the performance of new SMEs. However, other empirical studies such as Shiu (2006), Appuhami (2007) and Chan (2009), found insignificant relationship between human capital development and SMEs performance.

METHODOLOGY

Registered SMEs operating in Ibadan, as shown on the register of the Oyo State Ministry of Commerce and Industry, constituted the target population for the study. 80 SMEs operators were randomly selected from manufacturing; fabrication and construction; trading and professional services. Structured questionnaire using a 5-point Likert scale developed by the researchers was used to collect data from the participants and the instrument was subjected to a test and re-test process in order to establish the reliability. And also, validity of the instrument was established by giving the instrument to professionals for scrutiny and evaluation. The result of the reliability test was 0.82; this indicates that the instrument is reliable.

Model Specification

The economic model used in the study:

SMEs Performance = f (Human Capital Development)
SMEs Performance is measured by the ability to meet planned output quantities; the ability to meet market demand for product/service; the ability to deliver quality products/service to customers; and the ability to meet planned profit levels.

Human Capital Development (HCD) = f (level on-the-job training, level of formal education, level of participation in seminars/conferences and workshops and level of participation in trade fairs and Exhibitions).

Therefore, SMEs Performance = F (X₁, X₂, X₃, X₄)
SMEs Performance = $\beta_0 + \beta_1 X_1 + \beta_1 X_2 + \beta_1 X_3 + \beta_1 X_4 + U_i$

where;

the a priori expectation is $\beta_1, \dots, \beta_4 > 0$

X₁ = Level on- the-job training; X₂ = Level of formal education; X₃ = Level of participation in seminars/ conferences and workshop; X₄ = Level of participation in trade fairs and exhibitions.

U_i = Disturbance Term

β = Intercept

$\beta_1 - \beta_4$ = Coefficient of the independent variables.

RESULT AND DISCUSSION**Table 1: Correlation Result**

Variable	Mean	SD	1	2	3	4	5
1. SMEs Performance	4.0875	0.7826	1				
2. Level on- the- job training	4.0750	0.7424	0.838**	1			
3. Level of formal education	4.1375	0.7753	0.773**	0.576**	1		
4. Level of participation in seminars/ conference and workshop	4.2125	0.7579	0.182	0.241*	-0.050	1	
5. Level of participation in trade fairs and exhibitions	4.1385	0.8073	0.562**	0.468**	0.374**	0.427**	1

Note: ** correlation is significant at the 0.01 level (2 – tailed)

*correlation is significant at the 0.05 level (2-tailed)

Table 1 shows that level on-the-job training, level of formal education and level of participation in trade fairs and exhibitions have positive relationship with SMEs performance with $r = 0.838, 0.773$ and 0.562 respectively. This implies that level on-the-job training, level of formal education and level of participation in trade fairs and exhibitions are the key options of human capital development that improve SMEs performance. The study is consistent with the assertion of Industrial Training Fund (2006) that on-the-job training, formal education and participation in trade fairs and exhibitions for serving employees, help them adjust to rapidly changing job requirements and market conditions.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921 ^a	.849	.841	.31254

a. Predictors: (Constant), Level of participation in trade fairs and exhibitions, Level of formal education, level of participation in seminars/conferences and workshop, Level on the -job training

Table 2 shows the summary statistics of the analysis of the human capital development variables on SMEs performance. The coefficient of correlation (R) = 0.921; the coefficient of determination (R^2) = 0.849; and the standard error estimate of 0.31254, indicating 84.9% of the sampled SME's performance can be associated to the promotion of on-the-job training; level of formal education; level of participation in seminars, conferences, and workshops and level of participation in trade fair and exhibitions as strategies of human capital development for SME employees. This result is in line with the findings of Ofoegbunam and Okorafor, (2010).

Table 3: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	41.061	4	10.265	105.090	.000 ^b
Residual	7.326	75	.098		
Total	48.387	79			

a. Dependent Variable: SMEs Performance

b. Predictors: (Constant), Level of participation in trade fairs and exhibitions, Level of formal education, level of participation in seminars/conferences and workshop, Level on the -job training

Table 3 revealed that, jointly, all the independent variables contributed significantly on the regression plane.

Table 4: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.557	.283		-1.968	.053
1 Level on the -job training	.554	.063	.525	8.816	.000
Level of formal education	.415	.059	.412	7.030	.000
level of participation in seminars/conferences and workshop	.008	.054	.008	.151	.881
Level of participation in trade fairs and exhibitions	.154	.055	.159	2.804	.006

a. Dependent Variable: SMEs Performance

Table 4 shows that SMEs performance = 0.554 level on the – job training + 0.415 level of formal education + 0.154 level of participation in trade fair and exhibitions. This means that level on –the- job training, formal education and level of participation in trade fair and exhibitions, independently contributed significantly to SMEs performance. The result is consistent with that of Hisrich and Drnovsek (2002) that managerial competencies as measured by education, managerial experience, start-up experience and knowledge of the industry, positively impact on the performance of new SMEs.

CONCLUSION

The conclusion from findings of this study is that human capital development activities that can enhance the human capital (i.e knowledge, skills and competencies) of SME operators have positive impact on SMEs' performance. Specifically, this study has drawn attention to the need for SME operators to key into the benefits of participating in seminars, trade fairs, workshops and exhibitions as a means of developing their human capital through the acquisition of current knowledge that will positively impact their performance, thereby enhancing the SMEs' capacity for growth and potentials for survival.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Survey research method was adopted for this study and this may have constituted a limitation to the outcome. It is suggested that other research methods should be applied in future research to generate even more robust findings.

REFERENCES

- Appuhami, R. (2007). The Impact of Intellectual Capital on Investors' Capital Gains on Shares: An Empirical Investigation of Thai Banking, Finance and Insurance Sector. *Inter Man Review*, 3(2): 14-25.
- Becker, G. (1994). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago: The University of Chicago Press.
- Bosma N, Van Praag M., Thurik R., and De Wit G. (2004). The Value of Human and Social Capital Investments for the Business Performance of Start-ups. *Small Business Economics*, 23(1): 227 - 236.
- Chan, K.H (2009). Impact of Intellectual Capital on Organisational Performance. An Empirical Study of Companies in the Hang Seng Index (Part 1). *The Learning Organisation*, 16(1): 4-21.
- Coff, R.W., (2007). Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-Based Theory. *Academy of Management Review* 22 (2), 374–402.
- Culkin, N. and Smith, D. (2000). An Emotional Business: A Guide to Understanding the Motivations of Small Business Decision Takers. *Qualitative Market Research: An International Journal*, 3 (3), 145-158.
- Datta, D.K., J.P. Guthrie and P.M. Wright, (2005). Human Resource Management and Labour Productivity: Does Industry Matter. *Academy of Management Journal*, 48: 135-145.
- Fatoki, O.O (2011). The Impact of Human, Social and Financial Capital on the Performance of Small and Medium-Sized Enterprises (SMES) In South Africa. *Journal of Social Sciences*, 29(3); 193-204.
- Franssila, H., Okkonen, J. Savolainen, R., & Talja, S. (2012). The Formation of Coordinative Knowledge Practices in Distributed Work: Towards an Explanatory Model. *Journal of Knowledge Management*, 16(4), 650–665.
- Ganotakis, P. (2010). Founder's Human Capital and the Performance of UK New Technology - based Firms. *Small Business Economics*, 35(4): 1-21.
- Hatch, N. W., & Dyer, J. H. (2004). Human Capital and Learning as a Source of Sustainable Competitive Advantage. *Strategic Management Journal*, 25, 1155–1178.
- Herrington M, Kew J, and Kew P (2009). *Global Entrepreneurship Monitor, South African Report*. From http://www.gbs.nct.ac.za/gbswebb/userfiles/gem_southafrica_2000pdf.
- Hessel J, and Terjesen S (2008). Entrepreneurial Carrier Capital, Innovation and New Venture Export Orientation. From <http://www.entrepreneurship-sme.eu/pdf-ez/H200808.pdf>.
- Hisrich RD, and Drnovsek, M. (2002). Entrepreneurship and Small Business Research. *Journal of Small Business and Enterprise Development*, 9(2): 172-222.
- Industrial Training Fund (2006). *Training for Higher Productivity*. Abuja: Industrial Training Fund.
- Lussiers, R.N. and Pfeifer, S. (2001). A Crossnational Prediction Model for Business success. *Journal of Small Business Management*, 30(3), 228-239.
- McIver, D., Lengnick-Hall, C. A., Lengnick-Hall, M. L., & Ramachandran, I. (2013). Understanding Work and Knowledge Management from a Knowledge-in-Practice Perspective. *Academy of Management Review*, 38(4), 597–620.
- Ofoegbu E.O, P.A. Akanbi and A.I. Joseph (2013). Effects of Contextual Factors on the Performance of Small and Medium Scale Enterprises in Nigeria: A Case Study of Ilorin Metropolis. *Advances in Management & Applied Economics*.3(1), 95-114.
- Oforegbunam, T. E and G. F. Okorafor (2010). Effects of Human Capital Development on the Performance of Small and Medium Scale Enterprises in the South Eastern Region of Nigeria. *Journal of Sustainable Development in Africa*. 12(8); 49-58.
- Ojokuku, R.M (2012). Human Resources Management Demands and Challenges in Small and Medium Scale Enterprises. *International Journal of Economic Development Research and Investment*. 3(3); 1-10.
- Ojokuku, R.M and Sajuyigbe, A.S (2014). Effect of Employee Participation in Decision Making on Performance of Selected Small and Medium Scale Enterprises in Lagos, Nigeria. *European Journal of Business and Management*.6(10); 93-97.

Olowe, F.T, Moradeyo, O.A and Babalola, A.T (2013). Empirical Study of the impact of Microfinance Banks on SMEs Growth in Nigria. International Journal of Academic Research inEconomic and Management Sciences. 2(6); 116 - 127.

Onugu, B. (2005). Small and Medium Enterprises in Nigeria: Problems and Prospects, doctoral thesis., ST. Clements University, Cambodia.

Palmarudi .M and Agussalim. M (2013). Human Capital and Survival of Small Scale Food Processing Firms under Economic Crisis in Central Java Indonesia, Australian Journal of Business and Management Research. 3(1); 16-29.

Rogers, E., M. (2003). Diffusion of Innovations. New York: Simon and Schuster.

Shiu HJ (2006). The Application of the Value added Intellectual Coefficient to Measure Corporate Performance: Evidence from Technological Firms. International Journal of Management, 23(2): 356-365.

SMEDAN, (2009). Small and Medium Enterprises and Funding in Nigeria", <http://cc.msns-cache.com>.

Sullivan A, and Sheffrin, DM (2003). Economic Principles in Action. Upper Saddle River, New Jersey: Pearson Prentice Hall.