Effect of Health Condition of Employee on Performance: Evidence from Small and Medium Scale Firms

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Abstract
This paper assessed the effect of the health condition of employees on the performance of small and medium-scale firms in Nigeria. The cross-sectional survey design was utilized and a questionnaire was administered to three hundred and fifty-three (353) employees of small and medium-scale firms in three (3) states of the south-east geopolitical zone of Nigeria namely Anambra, Enugu and Imo. The data obtained from the field survey were analyzed via descriptive and inferential statistical tools. The findings of the study showed that the health condition of employees significantly contributes to the performance of small and medium-scale firms in Nigeria. Based on the findings of the study, it was recommended among other management of small and medium scale firms should consider investing in the wellbeing of employees in order to ascertain their health condition. As a matter of fact, small and medium scale firms can actualize this via the provision of health insurance schemes, mental health promotion and support for mental illness, health promotion via physical activity and nutrition programmes among others. As a matter of urgency, the management of small and medium scale firms should formulate programmes aimed at improving occupational health safety.
Keywords:*Employee health condition; small and medium scale firms; performance;human capital development*

Introduction

Over the years, Nigeria has had a series of developmental programmes with education and health reforms being at the center stage. According to Malik, Nawab, Naeem and Danish (2010), health is one of the most fundamental dynamics in human capital development; given the fact that health condition of employee is seen as energy that improves labour productivity or performance of organizations(Emmanuel, 2010); hence, organizations do not toil with it.In spite of the pivotal role played by the health condition of employees in augmenting productivity or performance of organizations,much attention has not been paid to it in the informal sector, especially those of small and medium-scale firms. In Nigeria, the governments at both federal and state levels via budgetary allocations have signified interest in the critical role of small and medium scale firms and therefore made policies for enlivening the same (Muhammad & Naintara, 2013). There have also been financial incentives and grants for small and medium-scale firms via loans, bilateral and multilateral agencies support and aids and dedicated institutions, all geared towards making small and medium scale firms energetic.

In spite of these efforts to promote the expansion of small and medium-scale firms, they still lack behind, particularly in the area of development of the health condition of employees (Ossai, 2017; and Christian & Omodero, 2016). This according to Nural, Ehsan and Hardy (2017), has drastically reduced the performance of small and medium-scale firms in terms of profitability. The allusion of the assertion above is that small and medium scale firms may not be able to make meaningful economic progress or augment their performance without developing the health condition of the employee (Ismaila & Yusuf, 2013). It is an incontrovertible fact therefore that the health condition of employees constitutes the most precious asset of any organization. This underscores the imperative for organizations requisite for sustaining the health condition of employees in order to enhance performance.

Similarly, prior studies (Salwa & Mara, 2016; Farah & Nina, 2016; Paul & Nealia, 2015; and Oforegbunam & Okorafor, 2010) have shown that there exists a connection between health conditions of employees and organizational performance. More worrisome is the fact that there are conflicting findings on this nexus between the health condition of employees and organizational performance. Perhaps the conflicting findings may be connected to the diverse methodologies employed by various studies. In light of the above, this study employs a different methodological approach in resolving the puzzle on the subject and hence hypothesized as follows:

H_o: The health condition of employees has not significantly improved the performance of small and medium-scale firms in Nigeria.

Review of Related Literature

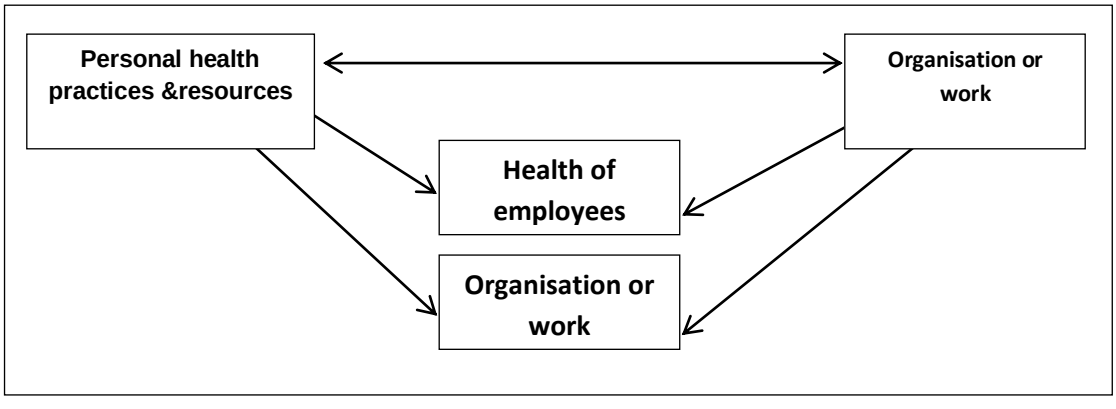
Health Condition of Employee and Organizational Performance

The concern of a healthy workplace is an ever-increasing preoccupation for organisations. This concern is mostly attributable to the positive connections that have been established between the health and wellbeing of employees and performance. Given the fact that there is such a link, there is the motivation for employers to intervene to support and elevate the health and wellbeing of their employees. Depending on the intervention plans, there is potential for the gains from intervening to overshadow the costs of not intervening. Besides, to enhancing productivity, interventions to uphold health promotion in the workplace can lessen the cost of healthcare for the employee which is predominantly fundamental in nations such as the US where health insurance is paid unswervingly by employers. Such intrusion can also be a share of the tactic to respond to duties and regulations around responsible employment. However, the most cited basis for intrusion in the workplace is to enhance the quality of life and workers' productivity and to decrease economic losses via absence, sickness, disability among others.

Today numerous employers relate poor health with decreased employee performance, safety and morale. The organisational costs of workers in poor health, and those with behavioural risk factors, comprise high medical, disability, and workers; compensation expenses; lofty absenteeism and employee turnover; and decreased productivity (often referred to as presenteeism). Besides, an employee's poor health may negatively affect the performance of other employees (Goetzel &Ozminkowski, 2006). According to Shain and Kramer (2004), health in the workplace and indirectly productivity is influenced by a number of factors namely:

(i) Things that employees bring with them to the work environment: Personal resources, hereditary endowments, attitudes, values, health practices and beliefs; and

(ii) What the place of work does to and for employees when they are there: the organisation of work in both the physical and psychosocial senses and how this affects the interaction between the physical and psychosocial environment (e.g., work culture and climate).



Source: Shain and Kramer (2004)

Figure 1: The relationship between workplace health and performance

The combination of these dynamics leads to the association between health, wellbeing and performance as depicted in figure 1.

Theoretical Framework

In this paper, the theoretical framework is anchored on Solow's Neo-Classical Growth Model (SNCGM). The SNCGM exhibited declining returns to labour and capital independently and constant returns to both factors together. Technological advancement became a residual dynamic for illustrating long-term growth, and this level of technological advancement is assumed by most neo-classical growth theorists including Solow, to be exogenously resolute; i.e., it is treated as an independent variable (determining growth compared to other variables like labour and capital).

The implication of this model for this study is that there is the increasing recognition of the fact that in order to experience output growth in all sector of an economy, there must be increase in the quantity and quality

of labour force via health condition, growth in population, education, savings and investment and as well as enhancement in technology. Whenever there is an enhancement in the national output of an economy that cannot be attributed to short-term modification in labour and capital, it is more often than not ascribed to a third group usually known to as the Solow's residual. It has been recorded from time immemorial that the growth experienced by most advanced nations is connected with this residual concept of technological progress.

Empirical Studies

There is scanty empirical evidence on the effects of the health condition of employees on organizational performance, especially for small and medium scale enterprises. For instance, Ossai (2017) investigated the problems and prospects associated with SMEs growth and development in Delta State, Nigeria. The study research design was a survey as much as it is a descriptive research design. The t-test statistical tool was employed in ascertaining the extent to which the problems of SMEs affect the growth and development of SMEs. The study found that the challenges of SMEs have a significant impact on the growth and development of SMEs.

Farah and Nina (2016) investigated the factors affecting profitability of small and medium enterprises (SMEs) firms listed in the Indonesia stock exchange. The study used descriptive statistics. They found that firm size, growth, lagged profitability, productivity and industry affiliation significantly impact the level of profitability. The results of the regression coefficient indicated that the variables firm size, growth, lagged profitability have a negative effect on profitability, while the variable productivity and industry affiliation have a positive impact on profitability.

In Nigeria, Christian and Omodero (2016) explored the impact of human capital development on financial performance of banks by means of cross-sectional survey design. Time series data that comprises PDW, PAT, TR and NA of quoted commercial banks in the NSE were the secondary data used. Statistical tools of Multiple Linear Regression and student t- test were used for the analysis. The study proved that the level of human capital development in Nigeria banks is so insignificant that it does not have a positive effect on their financial performance.

Zahid et al. (2015) investigated the impact of human capital variables on the effectiveness of the organizations. A simple random sampling technique was employed and primary data was obtained via the administration of questionnaires. Questionnaires were administered to a sample of 112 members of Isra University, Hyderabad, Pakistan. The results of the study revealed that human capital development has a strong significant positive connection with job satisfaction and customers-relation, which eventually leads to organizational performance.

Paul and Nealia (2015) evaluated the relationship between human resource management and organizational performance among SMEs in Nigeria by means of survey design. The study used a sample of 236 respondents to test the relevant hypotheses of the study and multiple regression statistical tool was used. Findings indicated that human capital development, occupational health and safety had a direct association with non-financial and employee performance management and non-financial performance. The result of this study in part, supports a model of a positive association between HRM practice and firm performance.

Onyekwelu et al. (2015) examined the impact of Human Capital Accounting (HCA) on financial performance and market valuation using four publicly quoted companies (banks) in Nigeria. Secondary data were obtained from the annual reports of accounts of five (5) selected firms and the data so obtained were analyzed via simple percentages and chi-Square statistical tests. The study revealed among others that human capital development results in a significant increase in firms' net worth.

Ismaila and Yusuf (2013) studied the association between human capital efficiency and financial performance among quoted Nigerian banks. Two hypotheses stating that human capital efficiency has no significant impact on EPS and human capital efficiency has no significant impact on ROE of Nigerian banks were tested. The study found that proficient use of human capital does not have any significant effect on ROE of banks. Besides, the size of the bank has no significant effect on ROE while the ROE of banks cannot be predicted by human capital efficiency and size of banks.

Muhammad and Naintara (2013) studied the impact of human capital on company performance and the mediating effect of employees' satisfaction. The research type for the study is quantitative and the collection of data questionnaires was used. The sample size utilized was 200 telecom companies in Pakistan such as

Mobilink, Telenor and Ufone. The study revealed that human capital investment has a strong association with firm performance. Besides, employee's satisfaction mediates the process between human capital investments and firm performance variants in Pakistan.

Akintoye, Philip and Opeyemi (2013) carried out an investigation on the role of human capital in industrial development. Time series data covering the period between 1980 –2010 were used with an appropriate econometric technique. It was revealed that, to a large extent, human capital affects the industry value-added in Nigeria; however, in terms of output generated industrially, the impact of human capital remained significantly low.

Nixon, Augustine and Joseph (2011) examined the mediating effect of competitive advantage in the relationship between intellectual capital and financial performance in Uganda's microfinance institutions. The study adopted the MelGraph program (Excel version), Sobel tests and the Kenny and Boran approach to test for mediation effects. It was revealed that competitive advantage is a significant mediator in the relation between intellectual capital and firm performance. Besides, it boosts the relationship between the two by 22.4 percent.

A study of SMEs in South Africa by Fatoki (2011) revealed that social capital has a positive relationship with firm performance. This study demonstrated among 122 entrepreneurs who involved in four sectors such as manufacturing, retail, wholesale and service. An addition, this study also found out the positive relationship between human and financial capital with firm performance.

Oforegbunam and Okorafor (2010) carried out a study on the effects of human capital development on the performance of SMEs in the south-eastern region of Nigeria. On the job training, educational institutions and participation in the training program by employees were used as main factors for human development capacity. Llikert 5 point scale was used for the quantification of data. Multiple regression tools used to explore the effects of human capital developments on the performance. The results of this research show that with the increase of human capital development performance of SME's improved and human capital in SME can be enhanced with 'on the job training programme.

Research Method

In this paper, the cross-sectional survey was utilized and the population of the study comprised all registered SMEs in three south-east geopolitical states of Nigeria namely Anambra, Enugu and Imo. Given the large nature of the SMEs in the selected states, a convenience sampling technique was adopted by selecting three hundred and fifty-three (353) respondents. In view of this, a questionnaire was designed on a 4-point Likert scale of 1=strongly disagree, 2=disagree, 3=agree and 4=strongly agree to elicit responses from the research subjects on the health condition of employees and organizational performance

The reliability of the research instrument was carried out by means of Cronbach Alpha and the result of the pilot test showed *Cronbachalpha*of 0.874 which is found to be consistent. Hence the instrument was deemed reliable.The data obtained from the field survey were analyzed via descriptive (simple percentages, mean and standard deviation) and inferential (simple regression) statistical tools. Given the variables of the study, the below regression models were estimated:

$$PERF = f(HELT) \quad - \quad - \quad eq.\ 1$$

Model 1: Health Condition of Employee and Performance

$$PERF_i = \alpha_0 + ß_1 HELT_i + \mu_t \quad - \quad - \quad eq.\ 2$$

Description of Variables:

PERF = Performance (measured by financial and non-financial performance);HELT = Health condition of employee; α_0 $ß_1$=Regression coefficients; i =individualfirm; μt =Error term.

Results and Discussions

Table 1a: Demographic Variables of Respondents

Ranks	Variables	Respondents	Frequency N=353	Percent(%)
1	Gender	Male	218	61.76%
		Female	135	38.24%
		Total	**353**	**100.0%**
2	Marital Status	Single	127	35.98%
		Married	211	59.77%
		Others	15	4.25%
		Total	**353**	**100.0%**
3	Age	18-37years	133	37.68%
		38-57years	166	47.03%
		58-77years	54	15.30%
		78years & above	-	-
		Total	**353**	**100%**
4	Level of Education	No formal	11	3.12%
		Primary	27	7.65%
		Secondary	62	17.56%
		Tertiary	253	71.67%
		Total	**353**	**100.0%**
5	Location of SMEs	Rural Area	123	34.84%
		Urban Area	230	65.16%
		Total	**353**	**100.0%**
6	Operational Years of SMEs	0-5years	236	66.86%
		6-10years	90	25.50%
		11-15years	18	5.10%
		16-20years	9	2.55%
		21years & above	-	-
	Sector of SMEs	**Total**	**353**	**100.0%**
7.		Agriculture	78	22.10%
		Mining/Quarrying	-	-
		Manufacturing	54	15.30%
		Water Supply	36	10.20%
		Construction	-	-
		Wholesale/Retail	38	10.76%
		Transportation	28	7.93%
		Accommodation	24	6.80%
		ICT	19	5.38%
		Real Estate	15	4.82%
		Admin & Support	19	5.38%
		Education	17	4.82%
		Social Works	10	2.83%
		Arts/Entertainment	15	4.25%
		Total	**353**	**100.0%**

Source: Field Survey, 2018

Table 1b: Demographic Variables of Respondents (Continued)

Ranks	Variables	Respondents	Frequency N=353	Percent (%)
8	Ownership Structure	Sole Proprietorship	162	45.89%
		Partnership	66	18.70%
		Public Ltd Liability	24	6.80%
		Cooperative	80	22.66%
		Faith Based Org.	21	5.95%
		Others	-	**100.0%**
		Total	**353**	
9	Number of Employees	Less than 10	206	58.36%
		10-49	147	41.64%
		50-199	-	-
		200-300	-	-
		Total	**353**	**100.0%**
10	Assets (excluding Land/Building)	Less than ₦5m	314	88.95%
		N5m –₦50m	39	11.05%
		₦50 – ₦300m	-	-
		Total	**353**	**100.0%**
11	SMEs Capital Source	Personal Savings	151	42.78%
		Loan	107	30.31%
		Family Source	18	5.10%
		Cooperative/Esusu	77	21.81%
		Grant	-	-
		Total	**353**	**100.0%**

Source: Field Survey, 2018

Presented in Tables 1a and 1b are the demographic variables of three hundred and fifty-three (353) registered SMEs operators across the south-south geopolitical zone of Nigeria which comprised of Cross Rivers, Delta, and the Rivers States. The result revealed that 218(38.24%) of the respondents are male, while 135(61.76%) are female. On the marital status of the respondents, it was shown that 127(35.98%) and 211(59.77%) are single and married respectively, while only 15(4.25%) are either divorced or widowed. The data shows that 133(37.68%) and 166(47.03%) of the respondents are within the age brackets of 18-37years and 38-57years respectively, while only 54(15.305) within the age brackets of 78years and above. On the level of education, it was observed that 11(3.12%) and 27(7.65%) of the respondents had no formal education and primary education respectively, while 62(17.56%) and 253(71.67%) had secondary and tertiary education. It thus shows that the majority of the respondents had tertiary education and may be able to comprehend the issues raised in the questionnaire.

Furthermore, it was found that 123(34.84%) of the registered SMEs are domiciled in rural areas while 230(65.16%) in urban areas. On the operational years ofSMEs, it was shown that 236(66.86%) and 90(25.50%) of the SMEs had been in operations for 0-5years and 6-10years, respectively, while 18(5.10%) and 9(2.55%) for 11-15years and 16-20years. None of the SMEs had been in operations for more than 20years and above. Also, it was shown that majority of the SMEs are domiciled in the Agricultural sector representing 78(22.10%), followed by manufacturing 54(15.30%), wholesale/retail 38(10.76%), water supply 36(10.20%), and transportation 28(7.93%) while there are few registered SMEs in sectors such as accommodation 24(6.80%), ICT 19(5.38%), admin and support services 19(5.38%), education 17(4.82%), real estate 15(4.82%) arts/entertainment 15(4.82%) and social works 10(2.83%).

In terms of ownership structure, it was revealed that the majority of the registered SMEs were sole proprietorship 162(45.89%), followed by cooperative 80(22.66%) and partnership 66(18.70%). However, there are few registered SMEs ownership structure in the form of public limited liability 24(6.80%) and faith-based organization 21(5.95%). The number of employees in the registered SMEs investigated ranges from less than 10 representing 206(58.36%) and 10-49 representing 147(41.64%). More importantly, is the fact that the assets based (excluding land and building) of the registered SMEs investigated were less than ₦5million representing 314(88.95%) and between ₦5million to ₦50million representing 39(11.05%). In addition, it was found that the registered SMEs investigated in this study obtained sourced capital based on personal savings 151(42.78%) and 107(30.31%) from loans and advances from formal lending institutions such as banks and other non-formal lending entities like money lenders. However, 77(21.81%) sourced capital from cooperative societies while 18(5.10%) from family members and associates.

Table 2: Descriptive Statistics of Health Condition of Employee and Organizational Performance

S/N	Items	Mean	Std. Dev.
1	In my organization, I provide health care for employees	2.759	1.423
2	In my organization, I render special aids, adjustments or assistance on health-related issues to employees	1.972	1.363
3	In my organization, I give compensation to employees for injury/illness during the course of executing their job responsibilities	2.210	1.460
4	In my organization, I give time-off, especially when employees are sick	2.484	1.489
5	In my organization, I give health tips aimed at sustaining the health condition of the employee	2.793	1.418
6	Employee health condition affects SMEs performance	2.584	1.473
	GRAND MEAN/STD. DEV.	**2.467**	**1.438**

Source: Field Survey, 2018

Table 2 presents the questions on the health condition of the employee (HELT) among the selected registered small and medium scale firms in the south-east region of Nigeria (Anambra, Enugu and Imo). The result showed that out of the six (6) items on employee health condition, five (5) scored above 2.00 cut-off point of the meanwhile one (1) is below the cut-off point of the mean. This suggests that the five (5) items determine employee health condition among the selected registered small and medium scale firms. On the overall, the

grand mean (2.467) which is above the cut-off point of mean is an indication that the selected registered small and medium scale firms consider employee health condition as a driver of performance.

Table 3: Regression results for an employee health condition and organizational performance

Source	SS	df	MS		
				Number of obs =	353
				F(1, 351) =	495.37
Model	3956.25767	1	3956.25767	Prob > F =	0.0000
Residual	2803.27202	351	7.98652996	R-squared =	0.5853
				Adj R-squared =	0.5841
Total	6759.52969	352	19.2032093	Root MSE =	2.826

perf	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
helt	1.037593	.0466191	22.26	0.000	.9459049	1.129281
_cons	5.845557	.6085538	9.61	0.000	4.648687	7.042428

Source: Field Survey, 2018

Presented in Table 3 is the regression result for the health condition of the employee (HELT) and Performance (PERF) of small and medium-scale firms in the south-east geopolitical zone of Nigeria. The R-squared for HELT is 0.5853, suggesting that the independent jointly explain about 58.5% of the systematic variations in PERF for the selected small and medium scale firms in the south-east geopolitical zone of Nigeria. The f-ratio indicates that the health condition of employees (F= 495.37; Prob.< f =0.000) significantly affects the performance of small and medium-scale firms. Also, the p-value of HELT (0.000) is an indication that the health condition of employees has significantly improved the performance of small and medium-scale firms in the south-east geopolitical zone of Nigeria. Hence, the null hypothesis was rejected and the alternate hypothesis was accepted.

Conclusion and Recommendations

This paper evaluated the connection between the health condition of employees and the performance of small and medium-scale firms in Nigeria. In order to achieve this, the cross-sectional survey design was adopted and a questionnaire was administered to three hundred and fifty-three (353) small and medium scale firms in three (3) states of the south-east geopolitical zone of Nigeria (Anambra, Enugu and Imo). Data obtained in the field survey were subjected to both descriptive and inferential statistical technique and findings indicated that the health condition of employees significantly contributes to the level of small and medium-scale firms' performance in Nigeria. The finding of the study corroborates with prior studies conducted by Paul and Nealia (2015) that occupational health and safety had a direct relationship with employee performance.

On the basis of the findings, it was recommended that the management of small and medium scale firms should consider investing in the wellbeing of employees in order to ascertain their health condition. As a matter of fact, small and medium scale firms can actualize this via the provision of health insurance schemes, mental health promotion and support for mental illness, health promotion via physical activity and nutrition programmes among others. As a matter of urgency, the management of small and medium scale firms should formulate programmes aimed at improving occupational health safety. This should be an utmost consideration for the management of small and medium scale firms if performance must be augmented.

REFERENCES

i. *Akintoye V.A., Philip A.O. & Opeyemi, O.A. (2013). The role of human capital in industrial development: The Nigerian case (1980 -2010). Journal of Management Development, 4(3)15-28.*
ii. *Christian, N.W & Omodero, C.O. (2016). The effect of human capital development of financial performance of banks in Nigeria. Global Journal of Human Resource Management, 4(6), 133-147.*
iii. *Emmanuel, S. (2010). Human capital in a developing country. Review of Economic Studies. 64(3), 311-352.*
iv. *Farah M. &Nina S. (2016). Factors affecting profitability of small and medium enterprises (SMEs) firm listed in Indonesia stock exchange. Journal of Economics and Management, 4(2), 40-54.*
v. *Fatoki, 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), 21-33.*
vi. *Goetzel, R.Z. & Ozminkowski, R.J. (2006). What's holding you back: why should (or shouldn't) employers invest in health promotion programs for their workers? N.C. Medical Journals. 6(7), 23-33.*
vii. *Ismaila Y (2013). The relationship between human capital efficiency and financial performance: an empirical investigation of quoted Nigerian banks. RJFA, 4(4), 44-51.*
viii. *Malik, M.E., Nawab, S., Naeem, B. & Danish, R.Q. (2010). Job satisfaction and organization commitment of university teachers in public sectors of Pakistan. International Journal of Business and Management, 5(6),33-39.*
ix. *Muhammad, A.S.A. (2013). Impact of human capital on company performance and the mediating effect of employee's satisfaction. Journal of Business and Management,8(2), 16-28.*
x. *Nixon K., Augustine A. & Joseph M.N. (2011). Competitive advantage: mediator of intellectual capital and performance. Journal of Intellectual Capital, 12(3), 14-27.*
xi. *Nural N. Z., Ehsan F. M. S. & Hardy L.R. (2017). A conceptual framework of human capital, self- efficacy and firm performance among SMEs in Malaysia. International Academic Research Journal of Social Science, 3(2), 31-47.*
xii. *Oforegbunam, T. E. & Okorafor, G.F. (2010). Effects of human capital development on the performance of small and medium scale enterprises in the southern region of Nigeria. Journal of Sustainable Development in Africa, 12(8), 49-58.*
xiii. *Onyekwelu, U.L.F., Osisioma, B.C. &Ugwuanyi, U.B. (2015). Impact of human capital accounting on corporate financial performance – a case study of selected banks in Nigeria. EJAAFR,3(5), 112-125.*
xiv. *Ossai, A. (2017). The problems and prospects of small and medium scale enterprises (SMEs) growth and development in Nigeria: A study of selected SMEs in Delta State. International Journal of Scientific Research in Education, 10(3), 15-27.*
xv. *Paul, O.I & Nealia, S.B. (2015). Human resources management and organizational performance of small and medium enterprises (SMEs) in Nigeria. The International Journal of Human Resource Management, 10(3), 51-65.*
xvi. *Salwa M. &Mara, C.A.R. (2016). Human capital in SMEs life cycle perspective. Procedia Economics and Finance, 3(5), 32-44.*
xvii. *Shain, M. & Kramer, D.M. (2004). Health promotion in the workplace: framing the concept; reviewing the evidence. Occup. Environ. Med., 6(1), 643–648.*
xviii. *Zahid, A. C., Sareeta T. &Manisha B. (2015).Impact of human capital variables on the effectiveness of the organisations. Pakistan Journal of Commerce and Social Sciences, 9(1), 44-61.*