
Human Capital Development and Productivity of Secondary School Teachers in Imo State

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ABSTRACT

The study sought to assess the influence of human capital development on the productivity of Secondary School Teachers in Imo State. Ex-post facto research design was adopted for the study. The study area was in Imo State of Nigeria. The population of the study comprised principals, vice principal (academic and administration) and teachers in secondary schools in Imo State. Simple random sampling technique was used to select 50 principals, 100 vice principals (academic and administration) and 100 teachers, giving a total of 250 respondents as the sample size for the study. The Main Instrument used in this study was a Questionnaire titled "Human Capital Development and Productivity Questionnaire (HCDPQ)". Face validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.84 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistics and simple regression. The test for significance was done at 0.05 alpha levels. The study concluded that there is significant influence to which creation of innovative ideas, new competencies, and skill development influences teacher's productivity in secondary schools in Imo State. One of the recommendations was that government and school administrators should make human capital development an important aspect of their corporate strategic plan to help in upgrading teacher's skills, enhancing their conceptual knowledge, and broadening their understanding of education total objectives and values.

KEYWORDS: Human Capital Development, Teachers Productivity, Innovative Ideas, New Competencies, and Skill Development

Introduction

Human capital has been recognized globally as one of the major factor that is responsible for the wealth of nations (Oluwatobi & Ogunrinola, 2011). Human capital

development refers to a conscious and continuous process of acquiring and increasing the number of people with requisite knowledge, education, skill and experience that are crucial for the economic development of a country. It entails building a nation's human resource endowment to make them knowledgeable, skillful, healthy and productive, which provides for the optimal exploitation and utilization of other resources to stimulate growth and development (Atoyebi, Olaleye, Ishola, Adekunjo, & Kadiri, 2013). It can also be seen as the development of education and health to cultivate and develop individual capacities for optimal performance.

In the same vein, Nigerian governments over the years recognized the importance of human capital formation in the development process and have embarked on various programmes and projects such as Universal Basic Education (UBE), presidential scholarship programme, residency programme for medical graduates and National Health Insurance Scheme (NHIS), among others which led to the establishment of educational institutions and health centres throughout the country (Oladoyin & Dauda, 2010). The process of developing human capital requires creating the necessary environments in which employees can learn better and apply innovative ideas, acquire new competencies, skills development, and positive change of behaviour and attitude. Therefore, you can state that human capital development revolves around: Talent management, Change management, Performance management, HR management, Learning and development, Succession planning, Strategic planning, Workforce planning, Knowledge planning, Human capital development tools.

Statement of the Problem

The utilization of human capital in education process is one of the preconditions for improving students' academic achievement. The performance of secondary school students in external examinations is not satisfactory. This unpleasant situation seems to suggest lapses in principals' application of human capital development practices especially in the areas of creation of innovative ideas, creation of new competencies and skill development. Hence, this hampers instructional delivery by the teachers and students' performance. It is in the light of the above that this study sought to investigate the extent of the relationship that exists between the above components of human capital development and productivity of teachers in Imo State.

Objectives of the Study

The main objective of the study was to assess human capital development and productivity of secondary school teachers in Imo State. Specifically:

1. To find out the influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State.
2. To find out the influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State.
3. To find out the influence to which skill development influences teacher's productivity in secondary schools in Imo State.

Research Questions

1. What is the influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State?

2. What is the influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State?
3. What is the influence to which skill development influences teacher's productivity in secondary schools in Imo State?

Hypotheses

H₀₁: There is no significant influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State.

H₀₂: There is no significant influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State.

H₀₃: There is no significant influence to which skill development influences teacher's productivity in secondary schools in Imo State.

Literature Review

Concept of Human Capital Development

According to Aigbokhan, Imahe, and Ailemen (2007), human capital development is described as an end or objective of development. It is a way to fulfill the potential of people by enlarging their capabilities, and this necessarily implies empowerment of people, enabling them to participate actively in their own development. Human capital development is also a means since it enhances the skills, knowledge, productivity and inventiveness of people through a process of human capital formation broadly conceived (Aigbokhan, 2017).

Averred by Nedomlelova, & Kocoure, (2016), being diverse and comprehensive, human capital development can range from on-the-job training to tuition assistance to team-building activities-not only along any given spectrum (in terms of quantitative and qualitative commitments), but also along multiple spectrums, such as skill development, project management and morale building. Development can take many forms. It can be done through coaching, continuing education, job training, leadership training, mentoring, personality assessments, psychometric training, workshop and other means. The human capital development has further been described by Garavan et al., (2001) that human capitals have four key attributes as follows: (1) flexibility and adaptability, resulting to emanation of innovative ideas (2) enhancement of individual skill development (3) the development of individual competencies and (4) individual employability through exhibition of positive behavior and attitude.

Concept of Innovative Ideas from Human Capital Development

The creation of innovative ideas and technologies is considered uniquely human, and it is fundamental to advances in all sectors and aspects of human life (Marlin-Bennett 2004). Firms have long been alerted to the advantages of making the management and development of people their number one priority. Innovation requires short-term investment in the hope of long-term returns. According to Marques (2014), innovative idea is frequently the result of changes happening at the same time in various areas, whereby interrelation and reliance are conspicuous components.

Mohammad, Loiy, Diana & Kamal (2019), in their study on "The bilateral relationship between human capital investment and innovation in Jordan" concluded that innovation and human capital are closely related concepts, and together they have a major impact on a

country's economy. However, certain steps must be taken in order to achieve this positive impact, the first of which is to rehabilitate the minds of youth through changing the entire educational system into something more practical, where they can show their full creative potential, instead of being taught and examined on how well they can memorize textbooks. The second step is to provide more opportunities for young people to implement and develop their ideas; this goes hand in hand with entrepreneurship, the third step toward economic development. The final step is eliminating the concept of power distance from the leadership of the country, in order to make every citizen feel equally important, and that their ideas matter just as much as those of anyone in power. A combination of these four steps or pillars will help an underdeveloped country reach full economic development and achieve a competitive advantage through its human capital and the innovation that lies in the minds of individuals.

Concept of New Competencies from Human Capital Development

Spencer & Spencer in Noerchoidah, & Anis (2015), stated that competence is the ability characteristic of employees to carry out tasks and work activities were revealed of motives, trait, self-concept, knowledge and skills. A strategy for improving workforce productivity to drive higher value for the firms has become an important focus. Firms seek to optimize their workforce through comprehensive human capital development programmes not only to achieve business goals but most important is for a long-term survival and sustainability. To accomplish this undertaking, firms will need to invest resources to ensure that employees have the knowledge, skills, and competencies they need to work effectively in a rapidly changing and complex environment. According to Wright and Geroy (2001), employee competencies change through effective training programs. It improves employee's overall performance and also enhance skills, knowledge, and attitude of the workers, to contribute to superior organizational outcome.

Superior competence gives firms the ability to generate and act based on knowledge about the actions and reactions of competitors, which will help to build competitive advantage (Noerchoidah, & Anis, 2015). The value of human capital is inherently dependent on the potential to contribute to competitive advantage or core competency of the company. Unless the stakes are high, the manager (principals in case of schools) can allow employees to stumble and to bounce back from failure-this help facilitates their growth and reinforces trust in their competence.

Concept of Skill Development from Human Capital Development

Training and development of employee is considered very crucial to human capital development. Skill development is aimed at developing competencies; such as technical, human, conceptual and organizational growth. According to Nwaeke and Obiekwe (2017) the success and prosperous future of any organizations is a function of the skills, knowledge, abilities and competencies of the employees. Skill development represents and includes all activities undertaking to expose an employee to perform additional duties and assume positions of importance in an organizational hierarchy (Nwachukwu, 2006).

According to Kum et al. (2014), the best way for organizations to develop employees' skills to enhance their motivation, commitment and job involvement in order to ensure performance and survival is to provide employees with effective training programme like job rotation, as it is carried out at trainee's own place of working same methods, materials and procedures that will continued to be use, subsequent to the training on their actual jobs. Imeh (2001) identifies several benefits of training and development programme. These include reduction

in number and amount of labour wasted, increase in the level of productivity and satisfaction, increase in operational efficiency and improvement in product/service quality.

Human Capital Development and Teachers Productivity

Teacher's human capital base can be enhanced through improved public investment in education in the area of teacher motivation and provision of adequate teaching and learning materials. Investing in teachers' human capital has significant returns in the classroom. In fact, several studies published in the economics literature have identified higher teacher human capital as a positive contributor to student achievement (Ost, 2014).

Hansen, (2013) posits that there is strong, consistent evidence of human capital development (i.e., improvements in the productivity of the teachers and principals already in the school) accounting for the increased performance in schools. Unsatisfactory performance of secondary school students is as a result of lapses in principals' application of human capital development practices especially in the areas of training and mentoring of teachers to enhance instructional delivery (Nnebedum & Akinfolarin, 2017). However, two human capital development practices assist in accelerating teacher's performance, namely: training and mentoring. Eleje, Maduagwu and Odigbo (2013) pointed out that for a teacher to deliver effective service, he or she must keep track of new ideas, knowledge and development in the world through continuous training and re-training programmes. The training practices entails providing opportunities for teachers to attend workshops, seminars and conferences, granting study leave to them at when necessary, encouraging them to attend refresher courses and organizing orientation programmes and symposium for them among others. Mentoring is a practice whereby a more experienced person provides information, support, guidance and assistance to a less experienced person so as to enhance his or her skills and knowledge. Mentoring entails coaching, supervising and guiding the teachers in the school. It plays an important role not only in the case of support for the development of teachers' professional skills (competencies) but particularly in the process of support for the professional growth of teachers who strive to increase the quality of their teaching (Suchankova & Hrbackova, 2017).

Method

Ex-post facto research design was adopted for the study and the study area was Imo State of Nigeria. The population of the study comprised principals, vice principals (academic and administration) and teachers in secondary schools in Imo State. Simple random sampling technique was used to select 50 principals, 100 vice principals (academic and administration) and 100 teachers giving a total of 250 respondents constituting the sample size for the study. The Main Instrument used in this study was a Questionnaire titled "Human Capital Development and Productivity Questionnaire (HCDPQ)". Face validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.84 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistics and simple regression. The test for significance was done at 0.05 alpha levels.

Results and Discussion

Hypothesis One

The null hypothesis states that there is no significant influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State. In order to test the hypothesis simple regression analysis was performed on the data, (see table 1).

TABLE 1: Simple Regression Analysis of the influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.96a	0.92	0.91	1.38	0.92

***Significant at 0.05 level; df= 248; N= 250; critical R-value = 0.139**

The above table 1 shows that the calculated R-value (0.96) was greater than the critical R-value of 0.139 at 0.5 alpha levels with 248 degrees of freedom. The R-Square value of 0.92 predicts 92% of the influence to which creation of innovative ideas influences teacher's productivity. This rate of percentage is highly positive and therefore means that there is significant influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State. It was also deemed necessary to find out the influence of the variance of each class of independent variable as responded by each respondent (see table 2).

TABLE 2: Analysis of variance of the to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5089.28	1	5089.28	2656.83	
	.000b				
Residual	475.06	248	1.92		
Total	5564.34	249			

a. Dependent Variable: Teacher's Productivity

b. Predictors: (Constant), Innovative Ideas

The above table 2 presents the calculated F-value as (2656.83) and the P-value as (.000b). Being that the P-value (.000b) is below the probability level of 0.05, the result therefore means that there is significant influence exerted by the independent variables innovative ideas on the dependent variable which is teacher's productivity. The result implies that there is significant influence to which creation of innovative ideas influences teacher's productivity in secondary schools in Imo State. The result therefore is in agreement with the research findings of Marques (2014), innovative idea is frequently the result of changes happening at the same time in various areas, whereby interrelation and reliance are conspicuous components. Also Marlin-Bennett (2004), the creation of innovative ideas and technologies is considered uniquely human, and it is fundamental to advances in all sectors and aspects of human life. The significance of the result caused the null hypotheses to be rejected while the alternative was accepted.

Hypothesis Two

The null hypothesis states that there is no significant influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State. In order to test the hypothesis simple regression analysis was performed on the data, (see table 3).

TABLE 3: Simple Regression Analysis of the influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.90a	0.81	0.81	2.04	0.81

*Significant at 0.05 level; df= 248; N= 250; critical R-value = 0.139

The above table 3 shows that the calculated R-value (0.90) was greater than the critical R-value of 0.139 at 0.5 alpha levels with 248 degrees of freedom. The R-Square value of 0.81 predicts 81% of the influence to which creation of new competencies influences teacher's productivity. This rate of percentage is highly positive and therefore means that there is significant influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State. It was also deemed necessary to find out the influence of the variance of each class of independent variable as responded by each respondent (see table 4).

TABLE 4: Analysis of variance of the influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4530.84	1	4530.84	1087.23	
	.000b				
Residual	1033.49	248	4.17		
Total	5564.34	249			

a. Dependent Variable: Teacher's Productivity

b. Predictors: (Constant), New Competencies

The above table 4 presents the calculated F-value as (173.30) and the P-value as (.000b). Being that the P-value (.000b) is below the probability level of 0.05, the result therefore means that there is significant influence exerted by the independent variables new competencies on the dependent variable which is teacher's productivity. The result implies that there is significant influence to which creation of new competencies influences teacher's productivity in secondary schools in Imo State. The result therefore is in agreement with the research findings of Wright and Geroy (2001), employee competencies change through effective training programs. It improves employee's overall performance and also enhances the knowledge, skills and attitude of the workers necessary to contribute to superior organizational performance. The significance of the result caused the null hypotheses to be rejected while the alternative was accepted.

Hypothesis Three

The null hypothesis states that there is no significant influence to which skill development influences teacher's productivity in secondary schools in Imo State. In order to test the hypothesis simple regression analysis was performed on the data, (see table 5).

TABLE 5: Simple Regression Analysis of the influence to which skill development influences teacher's productivity in secondary schools in Imo State

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
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1	0.92a	0.84	0.84	1.88	0.84
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***Significant at 0.05 level; df= 248; N= 250; critical R-value = 0.139**

The above table 5 shows that the calculated R-value (0.92) was greater than the critical R-value of 0.139 at 0.5 alpha levels with 248 degrees of freedom. The R-Square value of 0.84 predicts 84% of the influence to which skill development influences teacher's productivity in secondary schools in Imo State. This rate of percentage is highly positive and therefore means that there is significant influence to which skill development influences teacher's productivity in secondary schools in Imo State. It was also deemed necessary to find out the influence of the variance of each class of independent variable as responded by each respondent (see table 6).

TABLE 6: Analysis of variance of the influence to which skill development influences teacher's productivity in secondary schools in Imo State

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4691.94	1	4691.94	1333.79	
	.000b				
Residual	872.40	248	3.52		
Total	5564.34	249			

a. Dependent Variable: Teacher's Productivity

b. Predictors: (Constant), Skill Development

The above table 6 presents the calculated F-value as (1333.79) and the P-value as (.000b). Being that the P-value (.000b) is below the probability level of 0.05, the result therefore means that there is significant influence exerted by the independent variables skill development on the dependent variable which is teacher's productivity. The result implies that there is significant influence to which skill development influences teacher's productivity in secondary schools in Imo State. The result therefore is in agreement with the research findings of Nwachukwu, (2006) Skill development represents and includes all activities undertaking to expose an employee to perform additional duties and assume positions of importance in an organizational hierarchy. The significance of the result caused the null hypotheses to be rejected while the alternative was accepted.

Conclusion

This study has attempted to identify the human capital development factors that influence teacher's productivity growth in Imo state. The study insightfully explores human capital development and productivity growth by reviewing some previous studies that have been conducted. It was revealed that there is strong, consistent evidence of human capital development i.e., improvements in the productivity of the teachers and principals already in the school, accounting for the increased performance in schools. Unfortunately, unsatisfactory performance of secondary school students is as a result of lapses in principals' application of human capital development practices especially in the areas of training and mentoring of teachers to enhance instructional delivery. Based on the findings of the study, it was concluded that there is significant influence to which creation of innovative ideas, new

competencies, and skill development influences teacher's productivity in secondary schools in Imo State.

Recommendations

1. Government and school administrators should make human capital development an important aspect of their corporate strategic plan to readily and timely upgrade their employee's skills, enhance their conceptual knowledge, and broadens their understanding of education total objectives and values.
2. Government should provide annual grants for principals to sponsor teachers workshops, seminars and conferences to enable them update their skills and knowledge on current issues and also help them adapt to innovation in educational practices.
3. There is need for principals to mentor teachers on various classroom management strategies and formulating examination questions. This will help them develop new competencies for educational activities.

REFERENCES

- Aigbokhan, B., Imahe, O., and Ailemen, M. I. (2007). *Education Expenditure and Human Capital Development in Nigeria: Any Correlation so far*, Research Paper, Ambrose Alli University.
- Atoyebi, K. O., Olaleye, S. O., Ishola, A. S., Adekunjo, F. O., & Kadiri, K. I. (2013). Human capital and economic growth in Nigeria (1970 – 2010): An empirical analysis. *International Journal of Humanities and Social Science Invention*. 2(2), 58-69.
- Eleje, J., Maduagwu, N. & Odigbo, B.E. (2013). Marketing teachers training and re-training programmes in Enugu State to educational policy makers & administrators. *Journal of Law, Policy and Globalization*, 20(1), 10-21.
- Garavan, T. N., Morley, M., Gunnigle, P., & Collins, E. (2001). Human Capital accumulation: The role of human resource development. *Journal of European Industrial Training*, 25(2/3/4), 48-68.
- Hansen, M. (2013). *Investigating the Role of Human Resources in School Turnaround: A Decomposition of Improving Schools in Two States*. National Center for Analysis of Longitudinal Data in Education Research.
- Marques, J. (2014). Closed versus open innovation: evolution or combination? *International Journal of Business and Management*, 9(3), 196–203.
- Mohammad A., Loiy B. I., Diana A. & Kamal J. A. (2019). The bilateral relationship between human capital investment and innovation in Jordan. *Journal of Innovation and Entrepreneurship* 8(6), 56-66
- Nedomlelova, I., Kocoure K, A. (2016). *Human Capital: Relationship between Education and Labor Productivity in the European Countries*. 10-th International Days of Statistics and Economics, Prague, sept. 8-10
- Nnebedum C, & Akinfolarin A. V. (2017). Principals' Human Capital Development Practices For Enhancing Staff Personnel Administration In Secondary Schools In Oyo State, Nigeria. *International Journal of Advanced Research and Publications*. 1(5), 70-78
- Noerchoidah, and Anis E. (2015). The Study between Competence and Human Capital: Towards A Competitive Advantage. *Journal of Business and Management* 17(2), PP 14-17
- Nwachukwu, C.C., (2006). *Management theory and practice*. Onitsha, Nigeria: African First Publishers Limited
- Nwaeke, L.I. and Obiekwe, O. (2017). Impact of manpower training and development on organizational productivity and performance: A theoretical review. *European Journal of Business and Management*, 9(4): 154-159.
- Onyebuchi O. (2018). Human Capital Development and Organizational Survival: A Theoretical Review. *International Journal of Management and Sustainability*, 7(4): 194-203
- Ost, B. (2014). *How do Teachers Improve? The Relative Importance of Spec.*

Simon-Oke, O. O. (2012). Human capital investment and industrial productivity in Nigeria. *International Journal of Humanities and Social Science*. 2(16), 298-307.

Suchankova, E. & Hrbackova, K. (2017). Mentoring in the professional development of primary and secondary school teachers. *Journal of Efficiency and Responsibility in Education and Science*, 10(1), 7-15.