



(RESEARCH ARTICLE)



Assessment of the factors affecting government employees' productivity in Nigeria: Using Electronics Development Institute (ELDI) Awka as a Case study

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Abstract

Employee productivity is one of the basic determinants of business success. The growth rate of any organization to a large extent depends on the productivity of its employee. A comparison of the level of advancement between productivity in governmental organizations and those in the private sector shows that the government establishments have not kept pace with the rate of increase in productivity as found in the private sector. Thus, identifying the productivity factors relevant to government staff and the degree of impact of each factor will present an opportunity for enhancement. In this study, the factors affecting government employees' productivity in Nigeria were assessed through a cross-sectional survey design using ELDI Awka as a case study. A total of 98 ELDI staff were enrolled into the study via a random sampling technique. The quantitative approach used was regression analysis and statistical package for social sciences [SPSS] software window version 20 was employed to process the large volume of data gathered. Literature review of the classical management theories, contemporary research and field work on employee productivity led to the identification of eight factors affecting government employee productivity in Nigeria as Staff Training, Time Management, Use of modern Equipment, Employees' Attitude towards work, Leadership Style, Orientation/Duty Awareness, Staff Welfare, and Academic/Professional Qualification. When considered together, all the factors significantly affect employee productivity with 0.001 significant level of confidence. However, Staff Training, Leadership style, Staff Welfare, Employees' Attitude towards work and Time management are the only significant factors affecting staff productivity when considering the individual effect of the factors. The study showed that there is a strong correlation between leadership and productivity as poor and uninspiring leadership tends to kill productivity. It also revealed that training aimed at boosting workers capacity is the most influential factor of government employees' productivity in Nigeria. Lastly, employees' welfare has direct impact on their motivation and the more motivated employees' are, the higher the likelihood of greater level of productivity.

Keywords: Productivity; Employee; Factors; Government; Significant level of confidence

1. Introduction

Every organization has an objective which is either to produce goods or render services. To attain this goal, such an organization must have the required factors of production and one of the most critical factors of production is human resources. The success of any organization largely depends on the productivity of its employee. Sultana et al [1] define productivity as the ability to achieve certain tasks according to specified accuracy standards and time. Thus, employee productivity can be assessed in terms of the efficiency of employees in doing their tasks by comparing their output to input over a specific period [2]; such output could be the quality of goods or services produced by the organizations [3].

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Also, Mathis and Jackson [4] stated that employee productivity is a function of the quantity and quality of work done by an employee taking into consideration the costs of resources being used to accomplish such task. According to Kien [5], increasing employee's productivity gives competitive advantage and boost organization's income level in addition to fulfilling stakeholders' value propositions.

The major concern of management in any organization is exploring the possible ways of enhancing employee productivity. Chebet [6] argues that investigating and understanding those factors that influence the employee performance and productivity is of enormous concern in every economy. Despite the important of this topic, very few studies have been carried out to determine the factors affecting government employee productivity in Nigerian context.

Objective of Study

The broad objective of the study is to assess the factors affecting government employee productivity in Nigeria.

The specific objectives include:

- Identification of factors affecting government employees' productivity in Nigeria
- Assessing the individual effect of each of these factors on employee productivity
- Ranking these factors according to the weight of their effect on employee productivity

1.1. Research Questions

Based on the statement of problem and objectives of the study, the researcher posed the following questions to himself:

- What are the factors affecting government employee productivity in Nigeria?
- To what extent does each factor influence employee productivity?
- How can these factors be ranked in relation to their impact on employee productivity?

These questions will be answered based on facts and figures collected in the course of this study.

1.2. Statement of Hypothesis

On the basis of the statement of problem, objective and research questions of the study, the researcher also formulated the following hypothesis to be tested:

- Ho1 There is no significant effect of Staff Training on employee productivity
- Ho2 There is no significant effect of Time Management on employee productivity
- Ho3 There is no significant effect of Use of modern Equipment on employee productivity
- Ho4 There is no significant effect of Employees' attitude towards work on employee productivity
- Ho5 There is no significant effect of Leadership Style on employee productivity
- Ho6 There is no significant effect of Orientation/Duty Awareness on employee productivity
- Ho7 There is no significant effect of Staff Welfare on employee productivity
- Ho8 There is no significant effect of Academic/Professional Qualification on employee productivity

1.3. Significance of study

The findings of this research work will be very useful to the Ministry of Labour and Productivity as it will help in resource allocation for optimum performance. Also, it will guide the head of government establishments in Nigeria in formulating human resource policies that will enhance productivity and boost revenue generation. Finally, the study will give other researchers in related field insight on the factors affecting government employee productivity in Nigeria and serve as a bench mark for future work.

2. Literature Review

2.1. Research Frameworks

The theories relevant to this research are Classical Approach and Motivation Theory. The Classical Approach theory emphasizes training on the job and the provision of monetary incentives as a means of raising employee performance. Using this method, workers are made to believe that they will get compensation commensurate with their input. An employee will obtain maximize compensation when the peak performance is reach.

Motivation theory is established on the fact that motivation is the driving force behind human behaviour. Hatch et al [7] describes Motivation as a managerial process of engaging employees into behaviour whose objective is to drive the organization to effectively achieve its objectives. They explained that the management needs to know how best to elicit the cooperation of staff and direct their efforts to achieving the goals and objectives of the organization. According to the authors, people have to be interested enough in what they are set out to do in the organization; if they are to perform in the way they are expected to. Motivation could be extrinsic or intrinsic. A tangible reward (such as salary and fringe benefits, security, promotion, contract or service) leads to External Motivation whereas Intrinsic Motivation is the result of psychological rewards which include appreciation, recognition and training to boost employees' capacity. For organizations to become competitive, it must have the skills needed for its sector. This means that organizations whose leaders go out of their way to have their employees acquire the necessary skills will ultimately do better than others.

According to Gandolfi and stone [8] there is no specific definition of leadership style. However, there is a common agreement of the great impact of leadership style on employee productivity. Leadership style has become a global topic [9] and researchers have settled on five main styles which are Autocratic Leadership, Democratic Leadership, Laissez-faire Leadership, Transactional Leadership, and Transformational Leadership style [10]

The Autocratic Leadership style gives less emphasis on employee's welfare. In this case, all the decisions are taken by the top managers [11]. The managers structure the work path and develop ways of accomplishing the organization's goal without the employees' involvement. This kind of leadership is the direct opposite of Democratic Leadership Style. It leads to employees' dissatisfaction and disloyalty since they were not given room to participate in the decision making process [12].

The Transactional Leadership Style is based on the concept of rendering service for remuneration and focus on the importance of giving incentives or punishments as a way to motivate the employees [13].

The Laissez-faire Leadership Style gives priority to the freedom of staff. The leader depends on the employee to take decisions and establish objectives. This has some negative impact in productivity as some employees have a low level of intelligence, abilities, competence and commitment which could lead to wrong decision [13].

The transformational Leadership Style focuses on ways to boost the moral and motivate subordinates to achieve the organizational goals. It also makes employees proactive and enhance their problem-solving skills by teaching them based on expected future challenges and threats. A transformational leader believes in giving support and inspiration to employees which leads to an increase in productivity.

A close look at the available literature reveals that there are many factors affecting employee productivity and several theories have been put forth to explain this phenomenon. However, not one scholar has determined the individual and collective impact of the various factors on the productivity of government employees in Nigeria.

2.1.1. Factors that affect government employees' productivity in Nigeria

The employees' productivity is affected by many factors. Generally, employers attract and retain highly productive staff by paying good salary. However, most managers presently focus on how to increase staff productivity without incurring additional costs. Literature review of the classical management theories, contemporary studies and field work led to the identification of eight factors which have both individual and collective effect on the productivity of government employees as-

Staff Training

Organizational activity aimed at improving employee competency levels to enhance their efficiency and effectiveness.

Leadership Style

This refers to manager's or supervisor's way of providing direction to the team being supervised, implementing plans and making decisions in their day to day job roles.

Staff Welfare

Welfare scheme is the organization's plan aimed at ensuring the wellbeing of its employee. The level of commitment of a staff towards achieving the organization's goal is affected by the organization's ability to meet the worker's need.

Time management

This is a measure of the employees’ ability to discharge satisfactorily and timely the assigned task. Time is a crucial asset and when it is not properly utilize, productivity is adversely affected.

Employee attitude towards work

This focus on the mind-set of the workers as they carry out their duty. It is generally believed that most government staff in Nigeria display high level of truancy, laxity and lack of focus since salary is paid based on the grade level scale instead of the employees’ output. This contributed to the wide gap that exists in the level of advancement between productivity in governmental organizations and those in the private sector.

Orientation/Duty Awareness

Orientation/Duty Awareness deal with the provision of a clear job description and the necessary information in line with the management expectation as it concerns the activity of each staff. Research has shown that employees who have a comprehensive knowledge of the task to be carried out and the scope of activity; tend to be more focus and as such, more productive than others.

Academic/Professional Qualification

This refers to the educational level and specialized skill acquired by an employee. Although academic qualification is important in employee’s performance, it is not always a decisive factor on the productivity of employee as experience together with accumulated training affect the competence of an individual.

Use of modern Equipment

Advancement in Technology has led to the manufacturing of modern tools and machines which have more capacity to do work than the dated ones. Availability and proper usage of such tools have the tendency to boost productivity. One of the major challenges facing most government establishment in Nigeria is poor funding which made it difficult to purchase modern tools and train staff on how to use them.

2.1.2. Conceptual framework

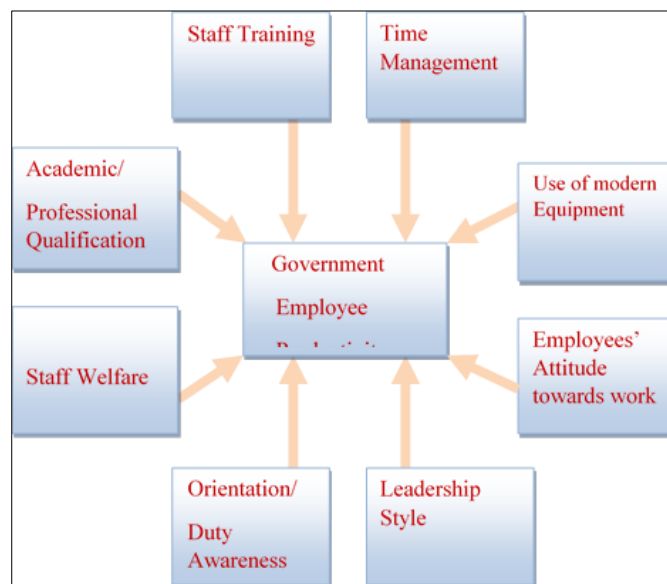


Figure 1 Conceptual framework

Research framework is a framework that builds from a combination of wide range of ideas and theories and helps studies identify problems, develop questions and search for relevant literature [14]. Figure 1 depicts the conceptual model of this paper. The model included nine variables, eight of which are independent (Staff Training, Use of modern Equipment, Employees’ Attitude towards work, Time Management, Leadership Style, Orientation/Duty Awareness, Staff Welfare, and Academic/Professional Qualification) and one dependent, namely Employee productivity. Conceivably,

these eight variables affect the government employee productivity in Nigeria and have been presented in the hypotheses developed.

The first three constructs (Staff training, Orientation/Duty Awareness and Use of modern Equipment) were confirmed in similar study carried out by Alinaitwe et al [15], and Dermol and Cater [16] whereas the next five; Leadership Style, Time management, Academic/profession Qualification and Employees' welfare were employed by Enshassi [17] and Jerry [8].

2.2. Contribution of Related Works and Research Gap

A significant amount of research has been carried out to assess the factors that affect employee productivity. Studies carried out by Haas et al [19], have indicated that technological advances appear to have a big role in increasing productivity rates. The studies presented a historical comparison of technological innovation in manufacturing and construction industries and its impact on productivity. The outcome revealed that productivity in the construction industries is enhanced by the use of modern machines.

Alinaitwe et al [15] conducted a survey of building projects in Uganda and ranked the major factors affecting productivity according to the weight of their impact as; lack of skills, breakdown of tools/ equipment and incompetent supervision.

Also, Enshassi [17] in his survey of factors affecting the labour productivity in Gaza, grouped factors negatively affecting productivity and ranked them in order of their importance as: Materials and Tools Factors, Supervision & Leadership Factors, Quality Factors and Time Factors. However, the impact of the individual Employee productivity factors on Employee productivity was studied in isolation. From the literature reviewed, it is quite obvious that there is need for the development of assessment approach that gives an objective measurement of the Government /employee productivity in Nigeria. The aim of this research work is to provide solution to this challenge.

3. Material and methods

The primary source of data used in this research work was questionnaire while the secondary source of data includes data from the researchers in related topical issues. The questionnaire consisted of 3 sections. Section A elicited respondents' demographic characteristics such as age, gender, educational qualification and category (i.e. Technical or Non-Technical). Section B and Section C contain questions asked to determine the staffer's view of the factors affecting employee productivity in Nigeria.

To obtain the sample size of the targeted population, Yamani's formula (1967) expressed as; $n = N / 1 + N(e)^2$ was used. Where "n" represent the sample size, "N" is the size of population, and "e" is the allowable error (0.05). The total number of Staff is 130. Applying these values to the equation, the sample size is calculated as; $n = 130 / 1 + 130(0.05)^2 = 98$

In all, 98 questionnaires were distributed to the staff but 60 (61.2%) copies were retrieved and used for the analysis. The variables used to measure the influencing factors using the 5-point Likert scale were coded as: Strongly Disagree(SD)-1, Disagree(D)-2, Neither Agree nor Disagree(N)-3, Agree(A)-4 and Strongly Agree(SA)-5. Data collected were subjected to multiple regression analysis using the SPSS 22 (Statistical package for Social Sciences) software.

3.1. Data Presentation

Table 1 Staff Productivity Model Summary (a. Predictors: (Constant), Staff Training, Time Management, Use_of_Modern_Equipment, Employees' Attitude_Towards Work, Leadership Style, Orientation_Duty_Awareness, Staff_Welfare, Academic_Professional_Qualification)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.552a	0.649	0.481	3.140

Source: FIELD WORK

Table 2 ANOVA for Staff Productivity (a. Dependent Variable: Staff Productivity; b. Independent Variables: Staff Training, Time Management, Use_of_Modern_Equipment, Employees’ Attitude_Towards_Work, Leadership_Style, Orientation_Duty_Awareness, Staff_Welfare, Academic_Professional_Qualification)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	309.355	8	38.669	3.921	0.001 ^b
	Residual	424.088	43	9.863		
	Total	733.442	51			

Source: FIELD WORK

Table 3 Staff Productivity and its independent variables Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.921	7.782		1.018	0.314
	Staff Training	0.793	0.304	0.379	2.612	0.000
	Time_Management	0.232	0.338	0.095	.686	0.046
	Use_of_Modern_Equipment	0.274	0.273	0.164	1.002	0.322
	Employees’ Attitude_Towards_Work	0.307	0.422	0.110	.728	0.027
	Leadership_Style	0.756	0.433	0.294	1.746	0.000
	Orientation_and_Duty_Awareness	0.379	0.365	0.173	1.036	0.306
	Staff Welfare	0.451	0.267	0.275	1.691	0.008
	Academic_and_Professional Qualification	0.103	0.129	0.514	3.894	0.058

Table 4 Model Coefficient Matrix table continue

Model		95.0% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-7.772	23.614
	Staff Training	-1.406	-0.181
	Time_Management	-0.450	0.915
	Use_of_Modern_Equipment	-0.278	0.826
	Employees’ Attitude_Towards_Work	-0.543	1.157
	Leadership_Style	-0.117	1.629
	Orientation_Duty_Awareness	-0.358	1.115
	Staff_Welfare	-0.990	0.087
	Academic_Professional Qualification	0.242	0.763

Source: FIELD WORK

3.2. Hypothesis Testing

Table 5 Hypothesis Testing

S/N	Independent Variables	Sig Value	Hypothesis (Ho2) Testing Result at 95% confidence interval	Interpretation
1	Staff Training	0.000	Null Hypothesis Rejected (0.000<0.05)	There is a significant change in Staff productivity due to Staff training. This is because the Sig. value is 0.012, which is less than the acceptable limit of 0.05.
2	Time Management	0.046	Null Hypothesis Rejected (0.046<0.05)	There is a significant change in Staff productivity due to Time management. This is because the Sig. value is 0.046, which is less than the acceptable limit of 0.05.
3	Use of Modern Equipment	0.322	Null Hypothesis Accepted (0.322>0.05)	There is no significant change in Staff productivity due to the use of modern Equipment. This is because the Sig. value is 0.322, which is greater than the acceptable limit of 0.05.
4	Employees' Attitude towards work	0.027	Null Hypothesis Rejected (0.027<0.05)	There is a significant change in Staff productivity due to Attitude towards work. This is because the Sig. value is 0.027, which is less than the acceptable limit of 0.05.
5	Leadership style	0.000	Null Hypothesis Rejected (0.000<0.05)	There is a significant change in Staff productivity due to Leadership Style. This is because the Sig. value is 0.048, which is less than the acceptable limit of 0.05.
6	Orientation/Duty Awareness	0.306	Null Hypothesis Accepted (0.306>0.05)	There is no significant change in Staff productivity due to Orientation and duty awareness. This is because the Sig. value is 0.306, which is greater than the acceptable limit of 0.05.
7	Staff welfare	0.008	Null Hypothesis Rejected (0.008<0.05)	There is a significant change in Staff productivity due to Staff welfare. This is because the Sig. value is 0.008, which is less than the acceptable limit of 0.05
8	Academic/ Professional Qualification	0.058	Null Hypothesis Accepted (0.058>0.05)	There is no significant change in Staff productivity due to Academic and Professional Qualification. This is because the Sig. value is 0.058, which is greater than the acceptable limit of 0.05.

Source: FIELD WORK

Table 6 Pearson correlation

Variable	Correlation
Staff Training	0.444
Leadership Style	0.334
Staff Welfare	0.250
Orientation/Duty Awareness	0.222
Employees' Attitude Towards work	0.216
Availability of Equipment	0.215
Time Management	0.131
Academic and Professional Qualification	0.095

Source: FIELD WORK

4. Results and Discussion

Results are discussed here in the context of the research questions.

4.1. Question One: What are the factors affecting Staff productivity in Nigeria?

From the literature review as well as the results of test carried out, several factors were discovered to affect government employee productivity in Nigeria. The factors identified in this research were as follows: Staff Training, Time Management, Use of Modern Equipment, Employees' Attitude towards work, Leadership Style, Orientation/Duty Awareness, Staff Welfare, Academic/Professional Qualification.

4.2. Question Two: To what extent does each factor influence staff productivity?

From the result of Hypothesis test interpreted in table 4, Staff Training, Leadership Style, Staff Welfare, Staffer's Attitude towards work, and Time management were the only significant factors that affect government employee productivity in Nigeria while other factors (i.e. Academic and Professional Qualification, Orientation and duty awareness, and Use of modern Equipment) were observed to be insignificant when considering the individual effect of the factors on Staff productivity.

Also among the significant factors, Staff Training and Leadership Style have Sig. value 0.000 meaning that their effects on Staff productivity are most significant. Conversely, Time Management with Sig. value 0.046 is the least significant factor when considered individually.

4.3. Question Four: How can these factors be ranked in relation to their influence on staff productivity?

From table 5, the Pearson correlation which shows the level of correlation between the factors (independent variable) and Staff productivity (dependent variable) indicates that there is a significant difference between the effects of the factors on Staff Productivity. It revealed the order of effect (ranking) with Staff Training, Leadership Style, and Staff Welfare topping the chart.

5. Conclusion

The factors affecting Government employee productivity in Nigeria were identified as Staff Training, Time Management, Use of Modern Equipment, Employee Attitude towards work, Leadership Style, Orientation/Duty Awareness, Staff Welfare, and Academic and Professional Qualification of staff.

The result of this research showed that the most important factor affecting government employee productivity in Nigeria is Staff Training. This is followed by Leadership Style, and Staff Welfare. On the other hand, Academic/Professional Qualification has the least impact on employee productivity. The value of R-Square of .649 shows that 64.9% of Staff productivity in Nigeria is explainable by the factors captured in this research work.

Recommendation

In line with the findings of this research work, it is recommended that Staff Training and welfare be given priority in resources allocation to boost productivity. Also, adequate resources be committed to the training of management staff, Head of Departments and Units in government establishment on leadership development. Finally, all the identified factors have 64.9% impact on staff productivity; this implies that several other factors influence government employee productivity, it is recommended that further research be carried out to discover the remaining factors not captured in this work.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare that they have no conflicts of interest.

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