

Work Environment and Productivity of Primary School Teachers in Oshimili South Local Government Area of Delta State, Nigeria

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Abstract

This paper investigated the impact of work environment on teachers' productivity in public primary schools in Oshimili South Local Government Area, Delta State, Nigeria. All education systems rely heavily on the quality and productivity of teachers to improve and maintain standards and quality. This survey adopted a descriptive survey. Two research questions and two hypotheses were established for this study. The population of the survey consisted of all teachers and principals of 409 public primary schools in Oshimili South LGA of Delta State. The data collecting instrument was called "Work Environment and Teacher Productivity Questionnaire" (WETPQ). The survey questions were answered using the mean and standard deviation, a benchmark score of 2.50 was considered acceptable. Conversely, the hypotheses were tested using a z-test with an alpha level of 0.05. The results show that the availability of adequate lighting and space has a significant impact on the productivity of primary school teachers. Based on the results, it was recommended that classrooms and offices should be properly lit, classrooms should be large enough to support effective and efficient teaching and learning, and policy makers should improve working conditions for primary school teachers.

Keywords: Working Environment, Productivity, Primary Education, Organisational Goal, Supportive Environment

Introduction

Teachers are influenced by activities in the work environment. The work environment is where you work. Work environment refers to all existing situations that affect work in the workplace, such as working hours, physical aspects, legal rights and obligations, available space for comparison, organizational climate and workload. It is a social and professional environment where teachers interact with students, school management and stakeholders in the same environment. A comfortable work environment is one in which an individual can work in an ideal, safe, healthy and comfortable environment (Akintayo, 2010). Unhealthy and unsafe work environments such as poor ventilation, excessive noise and insufficient lighting affect the productivity and health of employees. The work environment is created by the interaction of employees with the climate of the organization and includes both mental and physical working conditions. For Liblebici (2012), a work environment includes a friendly, well-designed and safe physical space, excellent equipment and effective communication to increase productivity. In addition, well-designed and organized offices and workspaces contribute significantly to how people perceive work. The work environment provides information about how important the

organization is to teachers and what standards they expect from teachers to achieve expected productivity (Ali & Zia, 2010). Humphries (2005) also argued that some factors that affect the workplace include cleanliness, lighting, water, security and music. These popular employee features make a significant contribution to workplace satisfaction and productivity. According to Obakpolo (2015), productivity is a measure of how well an organization (individual, industry, country) converts its inputs/resources into goods or services. Productivity also refers to the effort to produce with minimum effort using human, machine and material resources. Working conditions are very important for the growth of an organization. If employees perceive their working conditions negatively, they may be absent, suffer from stress-related illnesses, and be less productive and engaged.

Again, the main aim of primary education is to encourage the individual to read, write and do arithmetic. Recently, it has been found that many graduates of primary schools cannot read and write properly. Judging by the output of primary schools in Nigeria, there is a big question mark over the success and productivity of teachers. It has also been observed that many Nigerians avoid sending their children to public primary schools because the products of public primary schools are more victims of literacy. Tragic stories related to their work environment emerge from interactions with public school or elementary school teachers. Primary school teachers complain terribly about the irregular payment of salaries and allowances. They are dissatisfied with the infrastructure, equipment and overall environment of the school. Their offices are not well equipped, the classrooms are dilapidated and basic materials are lacking. These lead to indifference, concentration and continuity among teachers, thereby reducing teacher performance and productivity. The new challenge for managers is to create an environment where they can enjoy their work, feel meaningful, take pride in their work and use their full potential. This work environment has both positive and negative effects on teacher morale, productivity and engagement. Factors that have a positive or negative effect on teacher productivity are temperature, humidity, air flow, noise, lighting, personal aspects of the teacher, pollution and hazards of the work environment (Oludeji, 2015). According to Yesufu in Ali et al., (2013), the type of physical condition in which a teacher works is important for productivity. Too hot and poorly ventilated offices affect teacher productivity. Sufficient work clothing, potable water, toilets and first aid equipment are required. This leads to greater teacher involvement. In schools where teachers are exposed to stressful working conditions, engagement is constantly compromised and their performance suffers. Good working conditions, on the other hand, increase teacher engagement and have a positive effect on performance and thus high productivity.

Statement of the problem

The work environment is where people work to achieve their organizational goals. This means systems, processes, structures, tools, and anything that interacts with employees and has a positive or negative impact on employee performance. An attractive and supportive work environment can be described as one that attracts teachers, develops the workforce and operates effectively. In addition, a supportive work environment provides the conditions for teachers to work effectively and to maximize their knowledge, skills, abilities and available resources to provide quality

services. Despite the efforts of the government and the management of the State Universal Basic Education Board (SUBEB) to increase the effectiveness of primary school teachers, there is still a challenge. The overcrowding of classrooms and offices, where there is not enough space for specialized learning activities, affects the ability of teachers to do their job effectively. It therefore informs scholars to study the working environment and productivity of public primary school teachers in Oshimili South Local Government Area of Delta State.

Objectives of the Study

The general objective of this study is to investigate the effect of work environment on the productivity of teachers in public primary schools in Oshimili South LGA of Delta State, Nigeria.

The specific objectives include:

1. Examine how lighting within the learning environment affects the productivity of teachers.
2. Examine how availability of space for learning affects the productivity of teachers.

Research Questions

How does the provision of adequate light within the learning environment affect The following research questions guided the study:

1. productivity of teachers in public primary schools in Oshimili South LGA?
2. How does the availability of space for learning affect the productivity of teachers in public primary schools in Oshimili South LGA?

Hypotheses

The study tested the following hypotheses.

1. There is no significant difference between the perceptions of Teachers and Headmasters on how adequate lighting within the learning environment affect the productivity of teachers in public primary schools in Oshimili South LGA of Delta State.
2. There is no significant difference between the perceptions of Teachers and Headmasters on how the availability of space for learning affect the productivity of teachers in public primary schools in Oshimili South LGA of Delta State.

Theoretical framework

This study is based on relational theory. This theory was developed by Eton Mayo et al., (1888-1949) as cited in Onday (2016). The theory focuses on putting people and their needs first to achieve organizational engagement and high productivity. Relationship theory assumes that employees have many needs for managers. This includes a comfortable work environment, including: Effective and timely communication, interpersonal relationships, workload, physical working conditions, and incentives to increase engagement. The result is high productivity. Therefore, the work environment affects the productivity of employees. This is because people are

the main factor in production, and if there is no comfortable work environment and no focus on work, the organization will collapse over time.

Conceptual framework

A) Work Environment

In Yusuf and Metiboba (2012), Opperman defines environment as the composition of three main sub-environments, including technical environment, human environment and organizational environment. Therefore, the technical environment means tools, equipment, technical infrastructure and other physical or technical elements of the workplace. The human environment includes tasks involving colleagues and employees, teams and work groups, issues of interaction, leadership and management. The human environment can be interpreted as a network of formal and informal interactions between colleagues, relationships between teams, superiors and subordinates within an organization. Another type of work environment is the organizational environment, which contains systems, processes and values that operate under the control of the manager (Yusuf and Metiboba, 2012). This means that the work environment is the sum of the mutual relationships that exist between workers and employers and the environment in which they work. According to Linguli (2013), the work environment is often said to be good or bad. A good environment is one where workers feel comfortable and productive. A bad environment is where workers feel undervalued and threatened. In this environment, employees turnover is often low and employees are usually unable to reach their full potential. A positive work environment makes teachers happy, which motivates them to work all day. A healthy work environment improves the health and well-being of teachers, staff, students and communities. This allows teachers to stay engaged in their work and be highly productive.

(b) Lighting and Teacher Productivity.

Light is understood as essential to the human condition. The required quality of light at work depends on the type of tasks performed outdoors or indoors, or whether they are performed during the day or at night. The result is an improvement or reduction in performance. Unpleasant lighting is a source of stress and can lead to poor work performance. This occurs when a teacher is exposed to an unpleasant office work environment with glare, low, high or insufficient natural light.

The brightness of office light affects concentration, alertness and task performance (Seghal, 2021). A recent study by Zemba (2003) demonstrates the link between lighting and human performance and health. This study showed that windows and light can improve students' physical and mental health and affect their mood.

(c) Spatial Availability and Teacher Productivity

Spatial availability refers to the allocation to classrooms, science laboratories, offices and open spaces. It is defined in relation to the psychological and educational results and attitudes of the teacher. Spatial characteristics play an important role in improving school teaching and learning and have been identified as an important determinant of teacher productivity. When it comes to maximizing teacher performance, the actual physical design of the work environment is high. According to Sehgal (2012), office furniture such as desks, chairs, filing cabinets, shelves and drawers play a special role and should be placed so that they do not interfere with work in the

office or classroom. Therefore, a design that reflects a cozy and comfortable entry space, a private space for students, and a public space that promotes a sense of community with particular emphasis on colors that are most visible to teachers and students is desirable (McGregor, 2004). A decent institution adds value to the work of teachers. In his work, Sehgal (2012) found a direct connection between architecture and teacher collaboration. He found that the placement of space has immediate and far-reaching implications for teachers' ability to carry out their daily activities effectively and efficiently, even as social and professional relationships are formed and information and knowledge are shared.

The Relationship between Work Environment and Teachers' Productivity.

Education is a complex process and many variables affect the quality of education and learning, such as the teacher's environment. Nigerian teachers seem to be looked down upon because of the poor working environment that manifests in poor service conditions. Primary schools' classrooms in Nigeria are not well equipped and do not even have chairs for students. There are no facilities or infrastructure to facilitate proper education and learning. Some teachers teach for years without developing expertise to update skills and methods. The organizational climate of most schools is very bad. Employees' overall awareness of the work environment has a significant impact on job satisfaction and productivity. A healthy work environment can be considered as one that promotes job satisfaction, high productivity, low stress and high morale (Nakpodia 2000). The poor working environment is similar to those found in most schools today, with no teacher's office or very poorly equipped. Many schools do not have chairs for teachers and students. Some schools are so devastated that teachers are ashamed to relate to them (Nakpodia 2011). Teachers are unmotivated, dissatisfied with their work and do not want to put in enough effort to achieve their educational goals due to lack of motivation. As a result of the poor working environment, primary school teachers were unnecessarily involved in industrial activity, which became the only way for governments to respond to their needs and frustrations. During this time, pupils stay at home, roam the streets and collect and record animal behavior. Such pupils cannot read, write or show signs of learning. Many pupils have failed the common entrance test and have very low discipline and morale. In fact, many elementary school teachers even send their children to private schools rather than the public schools they teach because of the poor performance of public schools. Lack of interest in the work of teachers' leads to a decrease in productivity and failure to fulfill the laudable goal of basic education. The productivity of teachers can be measured by the quality of students, which is determined by how much they have learned to be useful citizens and their grades in external examinations. Primary school teachers have low turnover and very low productivity due to lack of motivation.

Methodology

In this study, we used a descriptive survey method. Attempts were made to ascertain the views of Headmasters and Teachers on the effect of working environment on the productivity of primary school teachers in public primary schools in Oshimili South Local Government Area of Delta State. The subjects of this survey consisted of all Headmasters and Teachers of 27 public primary schools in Oshimili South LGA of Delta. In total, the sample consisted of 20 headmasters and 200

teachers. The researchers designed an instrument called the Working Environment and Teacher Productivity Questionnaire (WETPQ). The survey consists of two parts. Section "A" contains questions related to demographic information and Section "B" contains questions that are organized around survey questions. A Likert scale is used and respondents choose one of four options (Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)).

For instrument validation, content and face validity were determined by two experts in the field of Educational Administration and Measurement and Evaluation. Proposals for range, complex face, and logical validity were used to display the latter option. Test and repeat test methods were used for device reliability. The device was administered to 20 respondents outside the study area. The first and second scores were analyzed using the pearson product moment correlation coefficient. The overall reliability estimate obtained was 0.78. The researchers worked with two research assistants to administer the instruments to teachers and school headmasters. This is for quick delivery and retrieval of the research instrument. Respondents' data collected during the administration of the instrument were analyzed using a frequency table. The survey questions were analyzed using mean and standard deviation. The reference value of the acceptable level was 2.50 and any mean below this reference value were rejected, but a z-test at the 0.05 Alpha value was used to test the hypotheses.

Presentation of Results

Research question 1: How does the provision of adequate light within the learning environment affect the productivity of teachers in public primary schools in Oshilimi South LGA?

Table 1: Responses on provision of adequate light and the productivity of teachers

S/N	Items	X	Teachers No. 200		Headmasters No. 20		Grand mean	Remark
			Std	X	Std	X		
1	Inadequate lighting is a source of distress to teaching and learning	3.05	0.22	3.4	0.76	3.22	Agreed	
2	The brightness of classrooms light influences	3.08	0.22	3.1	0.69	3.09	Agreed	

	concentration and task performance						
3	Teachers' physical and psychological health is negatively affected when the light is blurred	3.05	0.22	3.1	0.69	3.07	Agreed
4	Offices and classrooms with adequate lighting enhance concentration and relaxation	3.18	0.22	2.9	0.65	3.04	Agreed
5	It reduces inconvenienced hence provide comfortable environment for teaching and learning	3.12	0.32	3.13	0.70	3.19	Agreed
	Total	3.12	0.32	3.13	0.70	3.12	

Table 1 above reveals that inconvenient lighting is a distress to teaching and learning (3.22), the brightness of classrooms light influence concentration, alertness and task performance (3.09), teachers physical and psychological health is negatively affected when the light is blurred (3.07), offices with adequate lighting encourages concentration and relaxation (3.04) and reduces inconvenience hence provide for comfortable environment for teaching and learning (3.19). From the mean response by teachers and headmasters, all the items had a mean score of above 2.50, which was set for the study. Thus, the average mean score of 3.12 indicates that both teachers and headmasters accepted that lighting within the learning environment affect productivity of teachers.

Research question 2: How does the availability of space for learning affect the productivity of teachers in public primary schools in Oshimili South LGA?

Table 2: Responses on the availability of space and teachers' productivity.

S/N	Items	X	Teachers No. 200		Headmasters No. 20		Remark
			Std	x	Std	Grand mean	
6	Adequate ventilation and indoor air facility and lighting for effective teaching and learning.	3.22	0.23	3.05	0.68	3.19	Agreed
7	Protect teachers from injury due to bad posture.	3.22	0.22	3.2	0.72	3.21	Agreed
8	Reduces the risk of distraction or fidgeting due to discomfort.	2.98	0.21	2.95	0.66	2.97	Agreed

9	Allows learning task to be carried out efficiently without fatigue	3.23	0.23	3.1	0.69	3.17	Agreed
10	Creates space for special learning activities in the classroom	3.14	0.22	3.15	0.70	3.1	Agreed
Total		3.18	0.22	3.09	0.69	3.14	

The result from Table 2 indicates that spacing allows learning task to be carried efficiently without fatigue (3.17), adequate spacing protects teachers from injury due to bad posture (3.21), reduces the risk of distraction or fidgeting due to discomfort (2.97), adequate ventilation and indoor air facility and lighting for effective teaching and learning (3.19) and creates space for special learning activities in the classroom (3.15). From the mean responses of teachers and Headmasters all the items had a mean score of above 2.50, which was set for the study. Thus, the overall average mean of 3.14 denotes that space availability for learning affects the productivity of teachers.

Hypothesis 1: There is no significant difference between the perceptions of teachers and headmasters on how adequate lighting within the learning environment affect the productivity of teachers in public primary schools in Oshimili South LGA of Delta State.

Table 3: Z-test of significant difference between teachers and headmasters on adequate classroom lighting and teachers productivity

Group	N	X	SD	Z-Cal	Z-Critical	Decision
Teachers	200	3.12	0.32			Not significant
Headmasters	20	3.13	0.70	0.03	1.96	

At the 0.05 level of significance, the Z-calculated (0.03) was less than the Z-critical (1.96). Hence, the null hypothesis of no significant difference in the perception of teachers and headmasters on how lighting within the learning environment affects productivity of the teachers is hereby not rejected.

Hypothesis 2: There is no significant difference between the perceptions of teachers and headmasters on how the availability of space for learning affects the productivity of teachers in public primary schools in Oshimili South LGA of Delta State.

Table 4: Z-test of significant difference between teachers and Headmasters on how the availability of space for learning affect the productivity of teachers.

Group	N	X	SD	Z-Cal	Z-Critical	Decision
Teachers	200	3.18	0.22			Not significant
Headmasters	20	3.09	0.69	0.28	1.96	

The result of Table 4, indicated that the Z-calculated (0.28) was less than the Z-critical (1.96) at 0.05 level of significant. Therefore, the null hypothesis that stated, there is no significant difference in the opinion of teachers and headmasters on how the availability of space for learning affect the productivity of teachers is hereby not rejected.

Discussion of Findings

The results of the study under hypothesis 1 revealed that there is no significant difference in teachers' and headmasters' perceptions of how lighting in the learning environment affects teachers' productivity. Respondents understood the importance of making light available in the teaching and learning environment. In fact, the study revealed that office and classroom light brightness affects concentration and task performance; blurred light affects the physical and mental health of teachers; insufficient lighting is a source of stress in teaching and learning; and offices and classrooms with adequate lighting increase concentration and relaxation, leading to increased productivity. This is in line with Humphries (2005) who stated that lighting, colours, security, ventilation rates and access to natural environments affect teacher productivity.

The second hypothesis again showed no significant difference in teachers' perceptions and headmasters on how availability of learning space affects teachers' productivity. In fact, the availability of space allows teaching and learning to take place effectively and efficiently without fatigue. Adequate ventilation and indoor facilities and lighting are provided for effective teaching and learning. It also protects the teacher from injury caused by poor posture. Also, it reduces the risk of distraction or fidgeting due to discomfort. The arrangement of space has immediate and far-reaching implications for teachers' ability to effectively and efficiently carry out daily activities as well as forging social and professional relationships and sharing knowledge and information. Consideration of spaces where teachers meet and collaborate is just as important as classroom design. This is consistent with McGregor (2004) who hypothesized that desirable designs that reflect friendly and a welcoming entrance area, private spaces for students and public spaces promote a sense of community. According to Sehgal (2012), office furniture such as desks, chairs, filing cabinet, shelves, drawers, etc. have a specific role and therefore must be placed or designed in such a way that it does not affect the work activities even in the office or classroom.

Conclusion

The quality of a teacher and his commitment affect the level of his work. The level of his work determines the quality of performance of the children he teaches. If a good level of children's education is to be maintained, it is necessary to improve the quality of the teacher not only by improving his academic and professional competence, but also the working environment. Improving the working environment of primary school teachers will improve their productivity. In fact, adequate lighting in the learning environment and spacious offices and classrooms create opportunities for special learning activities, thereby reducing the risk of distraction. Therefore, teacher productivity is attributed to the work environment.

Recommendations

Based on the findings, the following recommendations are made.

1. The working conditions of primary school teachers should be the same as the working conditions of workers in other government departments and agencies.

2. Sufficient lighting should be provided in offices and classrooms for the comfort of teaching and learning.
3. The temperature of the working environment should be moderate with the help of air conditioning which can be controlled based on the capacity needed by the individual.
4. Classroom and offices should be spacious enough to support adequate teaching and learning.

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