



WORK ENVIRONMENT AND PRODUCTIVITY OF TEACHERS AT PUBLIC ELEMENTARY SCHOOLS IN THE DELTA NORTH SENATE DISTRICT OF DELTA, NIGERIA.

ABSTRACT

This paper investigated the impact of the work environment on the productivity of teachers in public primary schools in Delta North, Delta. All education systems rely heavily on teacher quality and productivity to improve and maintain standards and quality. This survey adopted a descriptive survey. Two research questions and two hypotheses were laid down for this study. The subjects of the survey consisted of all teachers and principals of 409 public elementary

ANTHONY GREAT OSSAI (P.hD)

Faculty of Education, University of Delta, Agbor.

INTRODUCTION

Teachers are influenced by activities in the work environment. The work environment is where you work. Working environment refers to all existing situations that affect work in the workplace, such as working hours, physical aspects, legal rights and responsibilities, available comparison space, organizational climate, and workload. This is a social and professional environment where teachers interact with students, school leaders, and stakeholders in the same environment. A comfortable working environment is one in which an individual can work in an ideal, safe, healthy and comfortable environment (Akintayo, 2010). Unhealthy and dangerous working environments such as poor ventilation, excessive noise and inadequate lighting affect employee productivity and health. The working environment is created through the interaction of employees with the organizational climate and includes both mental and physical working conditions. For Liblebici (2012), the work environment includes friendly, well-designed and secure physical space, excellent equipment, and effective communication to improve productivity. In addition, well-designed and organized offices and workspaces contribute significantly to how people perceive their work. The work environment provides information on how important an organization is to teachers and what standards they expect from teachers to achieve



schools in the Delta North Senate district. The sample consists of 200 teachers and 20 principals. The instrument was titled Questionnaire. Work environment and teacher productivity questionnaire (WETPQ). Answering the survey questions using mean and standard deviation, the acceptable level benchmark was 2.50. The hypothesis, on the other hand, was tested using the z-test with a significance level of 0.05. The results show that the availability of adequate lighting and space has a significant impact on primary school teacher productivity. Based on the results, classrooms and offices are properly illuminated, classrooms are large enough to promote efficient and effective education and learning, and policy makers improve working conditions for primary school teachers. It was recommended to do.

Keywords: *Teacher, Work Environment, Productivity, Classroom, Elementary School.*

expected productivity (Ali & Zia2010). Humphries (2005) also argued that some factors that affect the workplace include cleanliness, lighting, water, security, and music. These employee favorite features contribute significantly 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 minimal effort using human resources, machinery and material resources. Working conditions are very important to the growth of an organization. If employees are negatively aware of their working conditions, they may be absent, suffer from stress-related illnesses, and be less productive and engaged. Again, the main goal of primary education is to encourage individuals to read, write and do math. Recently, it has been noticed that many elementary school levels cannot read and write correctly. Judging from the products of elementary schools in Nigeria, there is a big question mark on teacher achievement and productivity. It has also been observed that many Nigerians avoid sending their children to public elementary schools because the products of public elementary schools are the greater victims of literacy. From interacting with public or public school primary school teachers, there are tragic stories related to their poor working environment. Elementary school teachers are terribly complaining about irregular salary and allowance payments. They are dissatisfied with the school's infrastructure, facilities and general environment. Their offices are not well equipped, classrooms are dilapidated, and there is little lack of regular materials. These lead to indifference, concentration and continuity between teachers, thus reducing teacher performance and productivity. A new challenge for managers is to



create an environment that influences, maintains and motivates teachers. Teachers need to create an environment where they can enjoy their work, feel meaningful, take pride in their work, and reach their full potential. This work environment has both positive and negative impacts on teacher morale, productivity and engagement. However, factors that have a positive or negative impact on teacher productivity are temperature, humidity, airflow, noise, lighting, the teacher's personal aspects, pollution, and the dangers of the working environment (Oludeji, 2015). .. According to Yesufu of Ali, Abdiazia and Abdiquani (2013), the type of physical condition in which the teacher works is important for productivity. Offices that are too hot and poorly ventilated affect teacher productivity. Sufficient work clothes, drinking water, toilets, and first aid facilities are required. This leads to more involvement of teachers. In fact, in schools where teachers are exposed to stressful working conditions, engagement is constantly compromised and performance suffers. Good working conditions, on the other hand, increase teacher commitment and have a positive effect on performance and thus high productivity.

Theoretical Framework

This study is based on the theory of relationships. This theory was developed by Eton Mayo et al. (1888-1949), as quoted in Ondoy (2016). Theory focuses on putting people and their needs first in order to achieve organizational involvement and high productivity. Relationship theory assumes that employees have many needs for managers. This includes a comfortable working environment, including: B. Effective and timely communication, interpersonal relationships, workload, physical working conditions, and motivation to increase engagement. The result is high productivity. Therefore, the working environment affects employee productivity. This is because people are a major factor in production, and if there is no comfortable working environment and no focus on work, the organization will collapse over time.

Conceptual Framework

(a) Working Environment

In Yusuf and Metiboba (2012), Opperman defines an environment as a composition of three major sub-environments, including a technical environment, a human environment, and an organizational environment. Therefore, the technical environment refers to tools, equipment, technical infrastructure, and other physical or technical elements of the workplace. The human environment includes tasks involving colleagues and employees, teams and working groups, interaction issues, 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 the organization. The third type of work environment is an organizational environment that contains systems, processes, and values that operate under the control of an administrator (Yusuf and Metiboba 2012). This means that the working environment is the sum of the interrelationships 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 working environment is where workers feel underestimated and threatened. In this environment, employee turnover is often high and employees are usually unable to reach their full potential. A positive work environment keeps teachers happy, which motivates them to continue working all day long. A healthy working environment improves the health and well-being of teachers, employees, students and communities. This allows teachers to stay engaged in their work and be highly productive.

(b) Lighting and teacher productivity.

Light is understood to be essential to the human condition. The quality of light required at work depends on the type of tasks performed either outdoors or indoors, or whether they are performed during the day or at night. As a result, performance is improved or degraded. Unpleasant lighting is a source of stress and can lead to poor work performance. This happens when the teacher is exposed to an unpleasant work environment in the office with glare, dim, high or inadequate natural light. The brightness of the office light affects concentration, alertness, and task performance (Seghal, 2021). A recent study by Zemba (2003) demonstrates a link between lighting and human performance and health. This study showed that windows and sunlight can improve students' physical and mental health and affect their mood.

(c) Space Availability and Teacher Productivity

Space availability refers to the allocation to classrooms, scientific laboratories, offices, and open spaces. It is defined in relation to the psychological and educational outcomes and attitudes of the teacher. Spatial characteristics play an important role in improving school education 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 systems, 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 desirable design that reflects a cozy and comfortable entrance area, a private space for students, and a public space that promotes a sense of the community with particular attention to the colors used is most visible to teachers and students. It is believed to be visible (McGregor, 2004). A decent institution adds value to the work of teachers. In his work, Siegel (1999) found a direct link between architecture and teacher collaboration. He found that the placement of space has immediate and widespread consequences for teachers' ability to carry out their daily activities effectively and efficiently, even when social and professional relationships are formed and information and knowledge are shared. Suggested to bring.

The relationship between the work environment and teacher productivity.

Education is a complex process and there are many variables that affect the quality of education and learning, such as the teacher's environment. Nigerian teachers appear to be looked down upon due to the poor working environment manifested in poor service conditions. Elementary school 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 have been teaching for years without the development of expertise to update their skills and methods. The organizational climate of most schools is very bad. Employees' overall awareness of the work environment has a significant impact on work satisfaction and productivity. A healthy work environment can be considered as an environment that promotes work satisfaction, high productivity, low stress and high morale (Nakpodia 2000). Poor working environments are 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 have a relationship with them (Nakpodia2011). Teachers are unmotivated, unsatisfied with their work, and do not want to make sufficient efforts to achieve their educational goals due to lack of motivation. As a result of the poor working environment, primary school teachers were unnecessarily engaged in industrial activities, which became the only way for governments to respond to their needs and frustrations. During this time, the students stay at home, roam the streets, and collect and record animal behavior. Such students cannot read, write, or show evidence of learning. Many of the students have failed the Common Test for University Admissions and have very low discipline and morale. In fact, many primary school teachers even send their children to private schools rather than the public schools they teach because of poor public school products. The lack of interest in the work of teachers leads to reduced productivity and



failure to achieve the praiseworthy goals of primary education. Teacher productivity can be measured by student quality. Student quality is indicated by how much they have learned to be useful citizens and their grades on external exams. Due to lack of motivation, elementary school teachers have high turnover rates and very low productivity.

Statement of 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 an environment that attracts teachers, develops the workforce, and functions effectively. In addition, a supportive work environment provides conditions for teachers to work effectively and to maximize their knowledge, skills, abilities, and available resources to provide quality services. Actions to maintain favorable temperatures without inadequate lighting and extreme cold and heat, despite efforts by the government and the management of the State Universal Board of Education (SUBEB) to increase the efficiency of primary school teachers. There is still the challenge of not being able to take. Overcrowding of education and learning, where there is not enough space for dedicated learning activities, affects the ability of teachers to do their jobs effectively. Therefore, this informs researchers to study the work environment and productivity of teachers at public elementary schools in the Delta North Senatorial district 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 Delta North Senatorial District of Delta State. 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

The following research questions guided the study:

1. How does the provision of adequate light within the learning environment affect productivity of public primary school teachers?
2. How does the availability of space for learning affect the productivity of public primary school teachers?



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 affects the productivity of public primary school teachers in Delta North Senatorial District of Delta State.
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 Delta North Senatorial District of Delta State.

Methodology

In this study, we used the survey method. Attempts were made to seek the views of principals and teachers on the impact of the work environment on the productivity of primary school teachers in public elementary schools in the Delta North Senate area. The subjects of this survey consisted of all principals and teachers of 409 public primary schools in the Northern Senatorial district of Delta. The Senate district consisted of nine municipalities. Of the nine municipalities, five were selected by simple random selection. Again, four public elementary schools were selected from each of the selected local governments, and a total of 20 elementary schools participated. Ten teachers from each of the 20 participating elementary schools were also selected by simple random sampling. All 20 principals of 20 public schools have been established. In total, the sample consisted of 20 principals and 200 teachers. A device called the Working Environment and Teacher Productivity Questionnaire (WETPQ) was designed by researchers. The survey consists of two parts. Section "A" contains questions about demographic information, and section "B" contains questions that are organized around survey questions. Likert scale is used and respondents choose one of four options (very agree (SA), agree (A), disagree (D), very disagree (SD)).

To verify the device, the validity of the context and face was determined by the judgment of two experts in this field. Proposals for scope, comprehensive face, and logical validity were used to depict the last resort. Test and retest methods were used for equipment reliability. The device was administered to 20 respondents outside the study area. The first and second scores were analyzed using the person's product moment correlation coefficient. The overall reliability estimate obtained was 0.78. The researchers worked with two research assistants to manage the tools to the teacher and the school principal. This is for quick delivery and collection of equipment. Respondent data collected while managing the tool was analyzed using a frequency table. We analyzed the survey



questions using the mean and standard deviation. The acceptable level benchmark was 2.50, and averages below this benchmark were rejected, but the z-test was used to analyze the hypothesis at a significance level of 0.05.

Presentation of Result

Research question 1: How does the provision of adequate light within the learning environment affect the productivity of teachers?

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

S/N	Items	Teachers N = 200		Headmasters N= 20		Grand mean	Remark
		X	Std	X	Std		
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 concentration and task performance.	3.08	0.22	3.1	0.69	3.09	Agreed
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.	3.22	0.72	3.15	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 principals 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 primary school teachers?

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

S/N	Items	Teachers N = 200		Headmasters N= 20		Grand mean	Remark
		X	Std	X	Std		
1	Adequate ventilation and indoor air facility and lighting for effective teaching and learning.	3.22	0.23	3.05	0.68	3.19	Agreed
2	Protect teachers from injury due to bad posture.	3.22	0.22	3.2	0.72	3.21	Agreed
3	Reduces the risk of distraction or fidgeting due to discomfort.	2.98	0.21	2.95	0.66	2.97	Agreed
4	Allows learning task to be carried out efficiently without fatigue	3.23	0.23	3.1	0.69	3.17	Agreed
5	Creates space for special learning activities in the classroom.	3.14	0.22	3.15	0.70	3.15	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 affects the productivity of public primary school teachers.

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 was accepted.

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.

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

Discussion of Findings

The study findings under hypothesis one revealed that no significant difference exists in the perception of teachers and headmasters on how lighting within the learning environment affect the productivity of teachers. The respondents understood the implication of making light available in the environment of teaching and learning. Actually, it was revealed from the study that the brightness of office and classroom light influences concentration and task performance; teachers' physical and psychological health is affected when the light is blurred; inadequate lighting is a source of distress to teaching and learning; and offices and classrooms with adequate lighting enhances concentration and relaxation leading to increase in productivity. This is in line with the assertion of Humphries (2005) who stated that lighting, coloring, security, ventilation rates and access to the natural environment affect the productivity of teachers.

Again, hypothesis two indicated no significant difference in the perception of teachers and headmasters on how the availability of space for learning affects teachers`



productivity. In fact, the availability of space allows teaching and learning to be carried out efficiently and effectively without fatigue; and adequate ventilation and in-door facility and lighting for effective teaching and learning are assured. It also protects teachers from injury due to bad posture as well as reducing the risk of distraction or fidgeting due to discomfort. The arrangement of space has immediate and far reaching consequences for teachers' ability to effectively and efficiently accomplish daily activities even in the formation of social and professional relationships and the sharing of knowledge and information. Consideration of the spaces where teachers meet and collaborate is just as important as the design of the classroom. This is in agreement with McGregor (2004) who posited that desirable designs that reflect on friendly and agreeable entrance area, private places for students as well as public space foster a sense of community, with particular attention to the colour used, are seen as most viable for teachers and students. According to Sehgal (2012), office furniture like desks, chairs, the filing system, shelves, drawers etc. have a specified part to play hence it has to be placed or design in such a way that will not impinge on work activities either in the office or classroom.

Conclusion

It is a known fact that the quality of a teacher and his level of commitment affect the standard of his work. The standard of his work determine the quality of the performance of the children that, he teaches. If the good standard of education of children must be maintained, teachers' quality must be improved by improving not only his academic and professional competence but also his work environment. Improving the work environment of primary school teachers will improve their productivity. In fact, adequate lighting in the learning environment and spacious offices and classrooms create opportunity for special learning activities hence reducing the risk of distraction. Therefore, the productivity of teachers is attributed to the work environment.

Recommendations

Based on the findings, the following recommendations are made.

1. The conditions of service of the primary school teachers should be the same as that of workers in other government ministries and agencies.
2. Adequate lighting in the offices and classrooms should be provided for the comfort of teaching and learning.
3. The temperature of the working environment should be made moderate through the use of air-conditioner that can be controlled based on the capacity needed by the individuals.



4. The classroom and offices should be spacious enough to encourage adequate teaching and learning.