PHYSICAL WORK ENVIRONMENT AND ACADEMIC STAFF PRODUCTIVITY IN UNIVERSITIES IN ENUGU STATE, NIGERIA

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Abstract

This study was designed to ascertain the relationship between physical work environment and academic staff productivity in universities in Enugu state. Two research questions and two hypotheses were formulated to guide the study and survey design was adopted for the study. Stratified random sampling technique was adopted to select 400 out of 2002 academic staff of the various faculties, institutions and centres in University of Nigeria Nsukka and Enugu State University of Science and Technology. A researcher's designed instrument on a four-point rating scale titled "physical work environment and academic staff productivity questionnaire" (PWEASPQ) was adopted to elicit responses from the respondents and to collect data. Data analysis was done using person product moment correlation analysis (P) at 0.5 level of significant. The results showed a significant relationship between physical work environment in terms of library facilities and classroom space and academic staff productivity. Based on this result, it was recommended that Government, private bodies and other stakeholders in education should provide more funds to universities through allocations and donations in order to help universities meet their needs in the provision of physical facilities.

Key words: Physical work environment, academic staff, productivity, Universities

1.   Introduction

It is indisputable that education occupies the most strategic position in Nigeria's struggle for national development and self reliance. University education plays a major role in this regard. Moses (2003) agreed that the primary role of the University is the provision of professional training and knowledge for the development of the individual and the society at large. However, the extent to which these objectives could be achieved depends greatly on the level of productivity of the academic staff.

Productivity is a term that has to do with effectiveness, efficiency and quality of goods and services turned out of a production process (Odunaga & Agila 2000). Effectiveness is the extent to which application of input brings the desired result in output and Quality. It is a function of method, technique, personnel skills, knowledge, attitude and aptitude. The input factors in educational institutions include the teachers, technology, finance, time, equipments, facilities, energy and materials, while students are the output of the system as well as raw materials with which institutions are characterized as educational. From the point of view of efficiency, Odunaga and Agila (2000) defined teacher productivity as a measure of the efficiency with which the overall process of teaching and learning utilizes its labour force towards the achievement of educational goals and objectives. In other words, it is the measure of how much the goals of the university as an organization is achieved through their commitment and performance on the job. However, in recent times, there has been growing criticism of academic staff of Nigerian universities about their job performance. It appears that the academic staff of Nigerian universities are no longer dedicated and committed to their jobs. Nwokolo (2011) made it known that stakeholders in education have lamented that students of Nigerian Universities learn very little as a result of disruptions in their academic calendar which is caused by frequent strike actions embarked upon by their lecturers.

According to Udoh (2000), Productivity of academic staff could be measured in terms of effectiveness of teaching techniques and methods, mastery of subject matter, classroom management, record keeping, student's evaluation, and participation in committees, publications and community development. Udoh (2000) further stated that the level of productivity of a teacher at any educational level is determined not only by his/her professional abilities but by other crucial factors such as their physical work environment.

School physical work environment in the context of this study generally refers to school plant.

From the stand point of Akpan (2011), school plant constitutes educational buildings and other tangible facilities in the school. This includes school buildings, classrooms, furniture, equipments, instructional materials, laboratories, libraries, playground, blackboards, staples, pins, machinery (workshop machines and tools), and electrical equipments. Lowe (1988) in a study interviewed State Teachers of the Year in Texas, United States of America, to determine which aspects of the physical environment affected their teaching the most, and these teachers pointed to the availability and quality of classroom equipment and furnishings, as well as ambient features such as climate control and acoustics as the most important environmental factors. In particular, the teachers emphasized that the ability to control classroom temperature is crucial to the effective performance of both students and teachers. Lowe (1988) concluded that physical conditions have direct positive and negative effects on teacher morale, sense of personal safety, feelings of effectiveness in the classroom, and on the general learning environment.

Corcoran & Lisa (1988). (1988) in another study in Washington D.C discovered that building renovations in one district led teachers to feel a renewed sense of hope, of commitment, a belief that the district cared about what went on that building while In dilapidated buildings in another district, the atmosphere was punctuated more by despair and frustration, with teachers reporting that leaking roofs, burned out lights, and broken toilets were the typical backdrop for teaching and learning. Where the problems with working conditions are serious enough to impinge on the work of teachers, they result in higher absenteeism, reduced levels of effort, lower effectiveness in the classroom, low morale, and reduced job satisfaction and where working conditions are good, they result in enthusiasm,

high morale, cooperation, and acceptance of responsibility. Owuamanam (2005) pointed out that inadequacy of necessary infrastructure has been a major problem facing Nigerian educational system in past decades.

Ozongwu (2013) revealed that observation of the physical work environment of most government owned Universities in Nigeria leaves much to be desired as their work environment is arguably poor. Chobelueh (2012) confirmed that despite several fiscal intervention programmes announced by the federal government to boost tertiary institutions, the impact is yet to be felt as all resources required for educational production process appear to be dismally in short supply in Nigerian universities.

Owuamanam (2005) pointed out that the inadequacy of necessary infrastructure has been a major problem facing Nigerian educational system in the past two decades. Ayeni, Jayebo and Atanda (2008) revealed that there was gross inadequacy of teaching materials, office and lecture spaces, and lack of current books, journals, periodicals, Ict facilities in the libraries while libraries and workshops are poorly equipped in most tertiary institutions in Nigeria. Ogusheye(2003) observed that some university libraries in Nigeria are storehouses of outdated books. Ozongwu (2013) further reported that lecturers in some Nigerian universities have to devise means of making available reading materials and literature in their subject area to their students as a result of lack of current books in their libraries. The availability of current books, journals and the provision of internet facilities in university libraries in Nigeria will in no small measure boost the research capability, productivity and promotion of academic staff in Nigerian universities. Chobelueh (2012).

Solomon (2014) laments that lecturers are still held under trees in some universities in Nigeria because of inadequacy of classroom blocks and lecture halls. The few available classrooms in some universities are in a very poor condition to allow for proper teaching and learning to take place. Speaking on the relevance of physical facilities for teaching and

learning, Edeh (2008) stated that good condition of classrooms could enhance lesson delivery and enforcement of discipline among the students by the teacher.

Akinditure (2011) acknowledges that the quality and quantity of the school physical work environment may have serious effects on the health and productivity of academic staff. Ozongwu(2013) further pointed out that the state of physical facilities has the tendency of influencing staff behaviour positively or negatively. Availability of these facilities will enhance integrity of academic activities and productivity level the academic staff. Owuamanam (2005). This study is based on Fredrick Herzberg's two factor theory that was propounded in 1959. The theory is on the relationship between employees' job satisfaction and performance. The two factor theory significantly relates with this study because it centers on the two main variables of the study, the work environment and academic staff productivity. When both the hygiene and motivational factors are present in the university work environment, academic staff who are human elements with need dispositions will surely experience feeling of satisfaction and thus be motivated to put in their best on the job which will enhance performance. Tafida (2000) argued that the lack of enthusiasm and professional commitment of academic staff in Universities in traceable to the poor state of the school physical work environment. This implies that the state of physical facilities in schools can be a great source of motivation to academic staff while its inadequacy could be a source of frustration and disenchantment on the part of the academic staff. Physical facilities are essential materials that have to be provided and properly managed for the successful execution of the school curriculum Akpan (2011). Academic staff of Nigeria Universities need to be provided with robust and conducive physical work environment to keep them motivated and their productivity enhanced.

2.   The Problem

Achievement of University goals and objectives require a robust and conducive physical work environment with a ready work force of academic staff who bears the direct responsibility of achieving the objectives of universities.

Unfortunately, the issue of poor and inadequate physical facility in Nigeria Universities has become a great impediment to the job of academic staff. Academic staff of Nigeria Universities especially those of Enugu states have in recent times embarked on incessant strike actions which they attributed to the poor state of physical facilities in their schools. This seems to have become the only way of getting government to react to their needs and frustrations in the process of carrying out their duties. It is in the light of the above that the present study was carried out to ascertain how the physical work environment of universities in Enugu states impact on the productivity of academic staff working there.

3.   Hypotheses

 1.   There is no significant relationship between library facilities and productivity of academic staff of Universities in Enugu State.

 2. There is no significant relationship between classroom space and productivity of academic staff of Universities in Enugu State.

4.   Methodology

The study adopted the survey research design. The study area was Enugu State. Enugu State is in the southeast geopolitical zone of Nigeria. Enugu State has 17 Local Government Areas with Enugu as the capital city.

Educationally speaking Enugu State has two government owned universities namely: University of Nigeria Nsukka (UNN) which is a federal university and the Enugu State University of Science and Technology (ESUT) a state University. The population of the study comprised all 2002 academic staff in the various faculties, institutions and centres in

University of Nigeria Nsukka and Enugu State University and technology as obtained from the Registry Divisions of the two universities.

Stratified random sampling technique was adopted to select 400 out of the entire population which formed the sample of this study. Researches- designed instrument with our-point rating scale titled "physical work environment and academic staff productivity questionnaire" (PWEASPQ) was adopted to elicit responses from the respondents and to collect data. The instrument was face-validated by two experts in the Department of Test and Measurement in the Faculty of Education University of Calabar. The reliability of the instrument was established using test retest that yielded 0.68 and 0.76 respectively. The analysis was done using Pearson product moment correlation analysis (r) at 0.5 level of significance.

5. Results

5.1 Hypothesis One:

There is no significant relationship between library facilities and productivity of academic staff of Universities in Enugu State. Using the One way analysis of variance, the relationship between the two variables, library facilities and academic staff productivity were determined. Summary of the result is presented in the table 1 below:

TABLE 1

Pearson product moment correlation coefficient analysis of the relationship between library facilities and academic staff productivity

(N=400)

Variables	Σx	Σx^2		
	Σy	Σy^2	Σxy	r_{xy}

	ΣxΣx²			
Library facilities(X)	7,609	14,4941		
			14,4736	0.575*
Academic staff productivity(Y)	7,603	14,4691		

* p< .05, df = 398, critical r =0.098.

From Table 1, the results show that calculated r-value of 0.575 is greater than the critical r-value of 0.098 at .05 level of significance with 398 degrees of freedom. With this result the null hypothesis was rejected and the alternate hypothesis accepted.   This finding implies that there is a significant relationship between library facilities and academic staff productivity.

5.2   Hypothesis two:

There is no significant relationship between classroom space and productivity of academic staff of Universities in Enugu State.

TABLE 2

Pearson product moment correlation coefficient analysis of the relationship between classroom space and academic staff productivity

(N=400)

Variables	Σx Σy	Σx² Σy²	Σxy	r_{xy}
Classroom space(X)	7,601	144,629		
			144,5883	0.582*
Academic staff productivity(Y)	7,603	144,691		

* p < 0.05, df = 398, critical r =0.098.

From Table 2, results show that calculated r-value   of 0.582 is greater than the critical r-value of 0.098 at .05 level of significance with 398 degrees of freedom. With this result the null hypothesis was rejected and the alternate hypothesis accepted.   This finding implies that there is a significant relationship between classroom space and academic staff productivity.

6.   Discussion of Findings

The findings of the study which revealed a significant relationship between physical facilities and academic productivity implies that priority should be given to the provision of physical facilities for quality academic activities and enhanced productivity of academic staff in Nigerian universities which could be manifested in lecturers mastery of subject matter, improved lesson presentation, research, evaluation of students in projects and examinations and effective classroom management. Physical facilities are essential in every educational level especially in the university. This is because the needed transformation in the educational sector most especially at the tertiary level cannot be attained without requisite physical facilities needed in the acquisition and dispensation of knowledge.

The result of hypothesis one reveled that there is a significant relationship between library facilities and academic staff productivity in terms of mastery of subject matter, research and lesson presentation. The null hypothesis was rejected and the alternate hypothesis retained. This implies that when library facilities are adequate in the university, the productivity of academic staff is enhanced. This finding is in line with chobelueh (2012) who asserted that availability of current books, journals and the provision of internet facilities in university libraries in Nigeria will in no small measure boost the Research capability, productivity and promotion of academic staff in Nigerian universities. This finding is equally in agreement with Ozongwu (2013) who pointed out that the state of physical facilities has

the tendency of influencing staff behaviour positively or negatively. When library facilities are provided in schools, lecturers are motivated to put in their best on the job.

The result of hypothesis two revealed that there is a significant relationship between classroom space and academic staff productivity in terms of classroom management, students' evaluation and lesson presentation.   The null hypothesis was rejected while the alternate hypothesis accepted. This finding agrees with Edeh (2008) who stated that good condition of classrooms could enhance lesson delivery and enforcement of discipline among the students by the teacher. Similarly, Igbo (2002) noted that overcrowding and poor ventilation of classrooms is a source of irritation and noise which makes it difficult for the teacher to hold the attention of students during classes. The finding also corroborates that of Lowe (1988) who concluded that physical conditions have direct positive and negative effects on teacher morale, sense of personal safety, feelings of effectiveness in the classroom, and on the general learning environment.

7.   Conclusion

Based on the result of the study, it was concluded that physical work environment have significant relationship with academic staff productivity in universities in universities in Enugu state. Therefore all efforts should be on deck by all stakeholders in education to ensure cordial social work environment in universities in other enhance academic staff productivity.

8.   Recommendations

Based on the findings of this study the following recommendations were made:

1.   More spacious classroom blocks should be provided in universities. These classrooms should be made comfortable in order to enhance academic staff productivity.

2.   Libraries in universities should be well stocked with current text books, journals, periodicals as well as internet facilities fully installed and made to be functional.

3.   Governments and private bodies and other stakeholders in education should provide more funds to universities through allocations and donations in order to help universities meet their needs in the provision of physical facilities.

References

Akinditure, I. O. (2004). *Administration of higher education.* Lagos: Sunray Educational Services.

Akpan,C.P. (2011). *Fundamentals of school Business management.* Calabar: Primechoice Konsult

Ayeni, A.O,Jaiyeoba, A.O & Atanda, A.I(2008), Infrastructural Facilities and Productivity of Academic Staff Of University of Ibadan,Ibadan. *Nigerian journal of Education Administration and Planning* (NAEAP).10 (1)197-213.

Chobelueh, A. A. (2013). State of Emergency in the Nigeria Education Sector. The Punch Newspaper, p. 25.

Corcoran, T B., Lisa J. W, & J. L. W (1988). *Working in Urban Schools*. Washington, DC: Institute for Educational Leadership.

Edeh B.O. (2008). *A Handbook on Educational Management and Policy.* Port-Harcourt: Whitz Consult.

Herzberg, F. M., & Synderman, B. (1959). *The motivation to work (2nd ed.).* New York: John Wiley and Sons.

Lowe, J. M. (1990). *The Interface between Educational Facilities and Learning Climate*. Unpublished doctoral dissertation. College Station, TX: Texas A&M University.

Moses, J. O. (2003). Indiscipline in tertiary institutions in Nigeria. *Journal of Research In Science Teaching,* 24(5), 100-104.

Nwokolo,E.(2011,Feburuary 15). *Academic Staff Union of Universities Strike: The insincerity of South East Governors.* Vanguard, 20.

Odunaga, J. B. & Ajila P. K. (2000). *Measuring teacher performance and primary school quality: An evaluation of concepts and issues.* ILorin: Haytee Press & Publishing Company Limited.

Odunaga, T. B. & Ajila, P. K. (2000). *Measuring Teacher Productivity and primary school quality*: *An evaluation of concepts and issues*: Ilorin: Haytee Press & Publishing.

Ogunshey,F.A.(2003).prospects for knowledge and information transfer managers in Nigeria in the Millennium. In A. B. Oluremi, I. A. Nwazuoke, & A. Okediran, (Eds.) *Education this Millennium-Innovations in Theory and practice*, Ibadan: Macmillan Nigeria Publishers Limited.

Owuamanam, D. O. (2005). Threats to academic integrity in Nigerian universities. Lead paper presented at the conference of the national Association of Educational Research and Evaluators, University of Ado-Ekiti, June 13-17.

Ozongwu, O. O. (2013), school facilities and academic staff work performance in Polytechnics in Imo State. Unpublished Ph.D. Thesis, Faculty of Education, Imo State University.

Tafida, T. I. (2008). *Essentials of school management.* Kaduna: Utoo Press.

Ubani, M. O. (2001). *Guide to effective school management.* Onitsha: Jumo Publishers.

Udoh, B. (2000). Challenges of Nigeria Universities. *Journal of Social Science,* 9(3), 135-140.