

LECTURERS' WORKLOAD AND PRODUCTIVITY IN UNIVERSITIES IN DELTA STATE

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ABSTRACT: *This study investigated lecturers' workload and productivity in Universities in Delta State. Six research questions were answered and six corresponding null hypotheses were tested at 0.05 level of significance. The study adopted the correlational research design. The population of the study comprised 164 Heads of Department (HODs) in six public and private universities in Delta State. A sample of 115 HODs were drawn through stratified random sampling technique and used for the study. Two instruments titled 'Lecturers Workload Scale' (LWS) and 'Lecturers' Productivity Scale' (LPS) were used for data collection. Face and content validities of the instruments were ensured by experts. The reliability coefficients of the instruments (LWS and LPS) were determined using Cronbach Alpha reliability estimate and the reliability coefficient of the LWS was 0.72 while that for LPS was 0.74. Pearson Product Moment Correlation was used to answer research questions 1,2,3,4 and 5. The corresponding hypotheses were subjected to 0.05 alpha level of significance. Research question 6 was answered using Multiple Regression while ANOVA associated with multiple regressions were used to test hypothesis 6. It was found that, there is significant high negative relationship between lecturers teaching workload, marking workload, supervision of students' project workload, research workload and participation in community service workload and productivity in Universities in Delta State independently and jointly taken. It was recommended among others that lecturers should always ensure that their teaching activities are well prioritized so as to give adequate attention to the learning needs of students.*

KEYWORDS: lecturer, workload, productivity, universities.

INTRODUCTION

A lecturer is an academic rank given to an academic expert that works in a university or tertiary institution. Lecturers are also people that teach, train students within a professional discipline and

prepare them to receive the qualification in their chosen profession. In addition to providing students with learning opportunities to meet curriculum outcomes, a lecturer must be skilled in verbal and written communication, creativity, confidence, patience, control as well as commitment to the job. Lecturers employ practices which include delivering lectures, seminars and practical demonstrations, preparing for classes and creating activities, implementing new ways of teaching; setting, preparing and marking examinations, to mention but a few.

The certified lecturer is one that possesses a bachelor's degree, masters and most importantly Ph.D. This is paramount because a lecturer has professional knowledge that is gained through formal preparation and experience. The process of lecturing includes teaching, examining student's performance, laboratory supervision of experiments carried out by students, and supervision of student's research. Participating in continuing education courses is also included when these are organized as part of the activities of the University. They are also required to be involved in lectures, research and community service. These processes must be free of discriminatory practices and should contribute to the holistic development of students.

This is why lecturers are the foundation of quality; hence they hold trust for the implemented curriculum of formal education and therefore are at the centre of the educative process. Thus, no education system can go higher than the quality of its lecturers (Nigeria Education Research Development Council, NERDC, 2004). This is even all the more important with the institutions of higher learning whose mission includes researching and increasing the frontiers of knowledge, lecturing and community services.

To be useful to one's self, it is inevitable not to work, but being conscious of the work load is paramount because there is need to work and live to work another day. Workload can be defined as the amount of work assigned to an individual for completion within a certain time. Relating it to the lecturers, workload is professional and non-professional job carried out by the lecturers as they carry out their duties in the instruction of students. Often, the cumbersome work load of these lecturers tend to be accompanied with stress as their job description entails working long hours and this could lead to stress if not properly handled.

Lecturers' productivity can be said to be useful results obtained from efforts made by the lecturers to attain educational goals in the university setting. Thus, there is need for motivation because despite the cumbersome workload of lecturers, productivity needs to be attained but how can this be when there is little or no support from government and university management in career development through conference, seminars and constant promotion. Constant promotion as at when due could also be a factor that can boost or cushion lecturers' workload thereby yielding desired productivity. One important factor that can lead to lecturers' productivity in universities in

Delta State despite their workload is improving the self-esteem of the lecturers to meet the level of their counterparts abroad, because when a lecturer is well paid, he can pay for frequent check up to maintain a healthy lifestyle to continue with the job. He/she can also be comfortable enough to be productive and work effectively, because you don't expect a stressed or sick lecturer to stand in front of a large class and lecture effectively.

Various challenges faced by universities include; increased number of students, use of technology, diverse background of students, globalization – learning corporate style, management etc. All these put extra pressure and responsibility on the shoulders of the lecturer. There is no employee that spends approximately eighteen hours a day (at home and at work) on a particular job that would be effective on a daily basis if the requirements needed are not available. Thus, despite the broad adaptability attribute of lecturers to manage excess work pressure, for there to be high productivity, lecturers ought to be adequately supported by the department they belong to or teach for and the entire institution in areas where they need help.

Also, since lecturers spend fifty percent of their lives within indoor environments which greatly influence their mental status, actions, abilities and performance, it is important that the work environment is enabling. This is because, increase in productivity is assumed to be the result of better workplace environment and better physical environment of office boosts the employees and ultimately improve their productivity.

The need for full deregulation of education in Nigeria is also to be considered because it seems that the government alone cannot provide all it takes to have a productive educational system which includes allocating reasonable amount for the payment of lecturers' salary. Deregulation or privatization of university education in Nigeria has led to the birth of private universities. It is of an advantage for the creation of public-private partnership. Ehiamentor (2005) aptly stated that public-private partnership in education increases the chances of people getting quality education. Also Akinwumi, Isuku and Nze (2005) upheld that deregulation gives room to competition which eventually leads to quality productivity.

The reason for establishing universities is to help transform the mind and skills of willing youths in order to make them useful to themselves and society at large. Lecturers stand as the driving force in which this goal can be achieved. This is because unfolding events in the lecturing profession prove that lecturing as a profession in the modern day goes beyond talk and chalk. It involves molding young lives, guiding youths, motivating students, educating the elderly and general character training.

Singer in Aminigo (2008) declares that “a lecturer without hope is indeed one of the heaviest burdens to bear”. This is why lecturers in Delta State universities should earn wages that are commensurate with the service they render and they should also be motivated to do more rather than being threatened to lose their pay or job whenever an industrial action or strike is planned with respect to benefits accruing to them. It is on record that lecturer’s contribution to the development of Delta State and Nigeria as a whole cannot actually be quantified in terms of naira and kobo in view of their pivotal role in molding practically all professionals. That is why rather than defining productivity as the time spent on the workload, Middaugh, (2005) defined productivity as the results obtained from pass rates in certification exams and job placement of students after school.

Lecturers’ productivity is seen in the morality of the students’ performance in internal and external examinations. Students who graduated under a productive lecturer are known by the way they comport themselves, speak and write. They have the ability to make meaningful contribution in the school, family and society at large. Performance should not be likened to lecturers’ productivity because it has to do with the quality of preparation, delivery and evaluation. Education has been adjudged as an instrument par excellence. The excellence that emanates from education is supposed to be visible in speaking, writing, reading, behaviour and in thoughts. An educated man is a man that has assumed all round development, ranging from the cognitive, affective and psychomotor domains. In the western system of education, tertiary education takes place in a university. Organization of education in the university system is done according to course choice or discipline the students have interest in. This is achieved by streaming individuals with common course choice that enrolled for western education into departments for easy identification, classification and attention. This is because education without policy thrust is baseless.

The extent of lecturers’ efficiency and effectiveness in their primary responsibility most often may not be guaranteed in the face of excess workloads that are accompanied with stress. Ordinarily, when there is a normal workload, there is a tendency that a worker would achieve, but when the workload is much or excess in quantity and quality there is the tendency that the worker may not perform well. Workload can be seen as heavy when the workload exceeds the capacity to manage thereby making productivity to be negatively affected. Given the dynamism of knowledge, and knowledge needs, current knowledge becomes obsolete. There is constant need to update existing knowledge and also to acquire new ones. Consequently, new courses are constantly floated in universities being the principal institutions in the area of information and knowledge acquisition. Besides, Nigeria, a nation of over 160 million has a large youth population who view education in tertiary institutions generally and in universities in particular as the ticket to a good job and bright future (Kardzodze, 2013). Unfortunately, the rate at which teaching staff are recruited by universities does not appear to measure up with the workload created by this voracious search for

knowledge via university education. The implication has been that of inadequate manpower and excess workload for those available therefore it is important to know the real situation dominating in universities with regard to the distribution of lecturing workload and to give them recommendations that will be helpful for more productivity. It is also noteworthy that a major function of the university council is to rationally analyze what constitutes lecturers' workload and decide how best to optimally utilize lecturers to achieve result.

In planning lecturers' workload, the following questions should be addressed. Do the schools have the required number of lecturers needed in the various courses to achieve the overall objectives of education? Does the educational system meet up with lecturers demand in order to avoid a major setback in the system? These questions need to be answered to avoid low output in productivity. Gwambombo (2013) conducted a study that looked into the effect of teachers' workload on students' academic performance. The study revealed that teacher's workload was heavy and has negative effect on students academic performance. The study recommended that this could be prevented if the government employed competent teachers in order to increase the teaching work force. However, he forgot to note that, it is not all about getting people to do the job but what is paramount is utilizing the adept qualities buried in the already employed teacher which is achieved when proper motivation is present. Also, Nzoka (2015) carried out a study aimed at establishing the institutional factors influencing lecturers' productivity in Kenya Methodist University (KeMU). The study revealed that top management provided most of the physical facilities for lecturers which aid their productivity. However, this is not the case in most universities in Delta State as most of the universities in the state have dilapidated classrooms, lack of recreational facilities that are meant to ease stress, little or no technological facilities, to mention but a few. This has made lecturing unproductive.

However, as important as lecturing work is, if it is overloaded, it can also lead to development of deviant behaviours such as lateness, absenteeism, poor decision making, sleeping on duty and burnout. This is the reason, the researcher decided to look into the relationship between lecturers' workload and productivity in Universities in Delta State.

LITERATURE REVIEW

Concept of workload

Hart (2006) refers to workload as the cost of having to accomplish numerous tasks. Since most institutions struggle to reduce cost while remaining competitive, understanding how to manage workload is important for lecturers. Hendy, East & Farrell (2005) stated that a high workload task would require more resources, than what is available and this is one factor that can affect productivity adversely. The traditional concept of workload has to do with both physical and

mental activities and institutions presently are pursuing objectives that are complex and competitive with the aim of being more productive and more profitable. To achieve this objective, they must constantly change how they organize production and work, introduce technological innovations, new human resource management policies and innovate forms of work organization, etc(De Connick & Gollac, 2006). Due to the speed at which changes are taking place in universities, this leads to work intensification. For lecturers, the increased workload has adverse effects on their health and safety at work such as fatigue and psychological distress. (Du Tertre, 2006). For some institutions, this might lead to increased absenteeism, poor staff turnover and poorer production. (Rocheport, 2008).

Mbunda (2006), refers to workload as the amount of work that has to be done by a particular person or organization. Lecturers are required to be more versatile, available and flexible. They are also expected to juggle these various workloads and remain productive. Their actual work is not limited solely to the completion of curriculum, the interactive dimension must also be considered when identifying the characteristics of their work load.

Formular for Normal Workload and Excess Workload

Workload can be said to be normal if there is a regular balance in the time used to carry out numerous organizational goals and duties in such a way that the mental and physical state of the person doing the work is not affected. When calculating normal workload, three important variables should be considered. These are Task, Time and Frequency of labour. Task refers to the job to be done. Tasks can be broken down into daily, detail and project. Daily tasks are those routine jobs that need to be carried out on a daily basis, an example of such tasks for a lecturer is teaching. Detail tasks can be performed on a set-schedule basis and is more involved than daily work. Examples of detail tasks are supervision of student projects, marking and grading of scripts and research and publications. Project tasks are performed less frequently: anywhere from weekly to annually. Examples of these are community service and attending meetings that are school related.

Time is the amount of hours allocated for each tasks. Time here can be divided into teaching contact hours, attributed hours for teaching preparation, attributed hours for evaluation and attributed hours for functions. Teaching contact hours represents hours spent in the classroom instructing students. This is a scheduled teaching hour assigned to the teacher by the university. Attributed hours of preparation represent the number of hours spent preparing for classroom activities. This is based on how a lecturer prepares his lecture notes, how many levels the lecturer is teaching at once and how many times the lecturer has taught the course in the past because the more experienced a lecturer is at delivering a specific course, the fewer hours he will spend on preparation. Attributed hours of evaluation have to do with the number of hours spent evaluating

and grading student's assignments, projects, teaching practice, examinations etc. Attributed hours for complimentary functions represent the number of hours assigned for routine out of class assistance to students, community service, research and publication and normal administrative duties.

Frequency of Labour is how often different work or jobs associated with the lecturing profession is carried out. Most of these jobs that lecturers perform are carried out daily, some weekly, while others are done once or twice in a semester or at the end of the first or second semester. Caithness (2018), reported that:

The formula for normal workload = task x time (to perform task) x frequency = 44 hours per week. Caithness went further to state that considering an 8:00am to 4:00pm daily 5 days working schedule of a lecturer, and additional four hours should be stretched within the week to balance lecturing duties. Anything within the 44 hours working weekly schedule can be termed normal workload duties.

Excess Workload is workload over and above the normal workload (credit hours) determined by the universities in accordance with the Full Time Equivalent (FTE). However, Dogara (2008) reported that the approved guidelines by NUC for Nigerian University System is

- A full-time staff should have a minimum teaching load of 8 credit units per semester including post-graduate teaching. According to him The NUC (1989), further clarified the minimum teaching load as follows:
- For science based disciplines, this should mean a minimum of 6 lecture hours and two 3-hours laboratory work per week. This means a total of 12 contact hours (6 + 6) per week.
- For arts-based disciplines, this should mean a minimum of 6 lectures and two 1-hour tutorials per week. This means a total of 8 contact hours (6 + 2) per week.

Thus, the Full Time Equivalent (FTE) =

$$\sum \frac{\text{Credit units of courses taught by the lecturer} \times \text{number of students taught by the lecturer} \times \text{number of hours per credit unit per week of a course}}{\text{hours per credit unit per week of a course}}$$

Student – teacher ratio for the discipline

Whatever you get will be divided by 2 (for each semester). Also, if a university decides to use the minimum workload as the normal workload for its teaching staff, then NTL (normal teaching load for lecturers will be 12 hours/week/semester for science-based disciplines and 8 hours/week/semester for art-based disciplines).

Therefore, excess workload (EWL) = FTE – NTL

Table 1: Example of Excess Workload calculation: A lecturer in the department of soil science taught the following course in a session and the departmental STR (student-teacher ratio) is 9:1. Excess workload is as follows;

Course	Credits (C)	Enrolment (N)	Credit hours ($C_1 H_1$)	$C_1 \times N_1 \times H_1$
201	3	65	5	325
202	2	72	4	288
303	2	60	4	240
401	2	47	6	282
403	2	45	6	270
504	2	28	4	112
Total	13	317	29	1517

Where C_1 = Credit unit

N_1 = Number of Students

H_1 = Credit hours per credit unit per week of course taught.

FTE = $1517/9 = 168.6$ hrs/weeks/semester = $\frac{168.6}{2} = 84.3$ hrs/wks/semester.

∴ EWL (Excess Workload) = $(84.3 - 12) \text{ hrs/wk/sem} \times 15 \text{ weeks/semester} = 1,084.5$ hours.

Note: 15 weeks is the number of weeks in a semester.

Concept of Productivity

The job descriptions of lecturers are paramount in line with the achievement of the objectives of the University. This is evident in Oguntoye (2002) when he stressed that the success of the school system in achieving its goals and objectives depends on the efficiency and effectiveness of its lecturers. The National Productivity Centre (2011) defines productivity as doing the right things the right way, getting more output with less input, punctuality and promptness, elimination of wastes, justifying your pay, improvement in all aspects of life and yielding better quality. Productivity is the efficiency with which lecturers perform their multiple responsibilities of learning (product of teaching), knowledge (product of research), Institutional community and professional activities (the product of shared governance, community service and professional activities). In education, one preoccupation with productivity is to look at the main causes of low productivity with a view to promoting higher production. Nwachukwu (2012) stated that the major causes of low productivity in education are economical and sociological. Economic factors has to

do with the correlation between effort expended by an employee and the reward that he receives in the organization, when an employee believes that equity does not prevail, he is bound to withhold a measure of his productivity. Because of inadequate compensation to employees, there appears to be no commitment. Sociological factors have to do with the employees treasuring a sense of belonging to their organization and would resent any effort on the part of management to perceive and treat them only as agents of production. Productivity can be said to be the use of available resources to create values and the absence of productivity tends to create problems in universities as this could result to half-baked graduates.

Uyeri (2016), states that productivity is a measure derived by input/output analysis. Since staff personnel are the essential commodity in all organizations, especially the educational sector, the effective management of lecturers' workload has a great influence on productivity. Productivity can be said to be a move to best practices in the area of school activities. It can be said to be increased output and a decrease in scrap and costs of production. It is a reflection of the relationship between total output of goods and services and the total input (Ebong, 2006). Lambert (2005) states that "labour productivity is rarely measured directly but inferred from changes in employees" attitude and behavior such as organizational commitment, organizational citizenship behavior and job satisfaction.

The joy a lecturer gets from knowing that students look forward to coming to class is indescribable. Achieving high level productivity means making sure students are interested and invested in tasks that develop higher order thinking and problem-solving abilities. Not only are they involved in constructive pursuits and being given mindful assessments, they are learning independence and accountability and they enjoy doing it because that's learning with a purpose. Productivity is not just getting things done but it is getting things done with purpose. Encouraging reflection and self-assessment adds a powerful dimension to learning. This reduces a lecturer's workload and lets students effectively demonstrate understanding. This also helps the lecturer consider and plan for future processes and actions.

There are several factors that can lead to improved productivity. These factors are environment (the state of where one works, whether it is conducive or not seems to have an effect on productivity). Another is mind-set (what a lecturer believes in relation to how he/she approaches work is of importance as well). There is also the need to develop a growth mind-set rather than a fixed mind-set. A growth mind-set person describes anyone who believes their results and talents can be developed through hard work, discipline, asking for help from others and so on. The key to a growth mind-set is a positive approach to experimentation and flexibility in thinking while a fixed mind-set person is someone who believes that talents are something you are born with and unable to improve upon. They can often get stuck because they are not open to new ideas or

feedbacks. Giving you that time to be in a teaching mode before the actual rush of students into the class will set an intention that can make the lecturer to be better prepared to face obstacles and new challenges throughout the day. Leaving at closing time may also seem counter intuitive to being productive but staying in school late is a recipe for an early burnout which is definitely not healthy, let alone productive. This is because, leaving early actually helps in prioritizing time because having an allotted time to get school work done before one leaves for the day, will be done before the end of the day more often than not, knowing fully well that work expands so as to fill the time available for its completion. For example, if a lecturer gives himself all evening to grade exam papers, he will inevitably take all evening in doing so but if he only has an hour and a half, he will take that hour and a half or closer to it than if he were to give himself more time. To be more productive, it is important to strike a balance between stress and res because in resting, you come back to your work more focused and more skilled than the last time you were on it. At rest, the brain has taken time to digest and process the new skills learnt and practiced. Rest is just as important as healthy stress. Everyone needs a good balance of both. Having access to the right teaching materials is also to be considered if productivity is to be made key.

Barett & Barett (2008) carried out a study on the management of academic workload in Universities in the UK. They found that most of the Universities Studies have policy guidelines on workload allocation practices, but these are often rather limited and not well known by head of departments/school or other staff.

Opemi (2013) investigated workload in teaching, assessment of students, attendance to conference and seminars as predictors of job performance of secondary school teachers in Ebonyi State, Nigeria. It was found that workload in teaching, assessment of students, attendance of conferences and seminar jointly predict job performance of secondary school teachers.

Kordzadze (2013) conducted a study on solving problems of inequality in academic staff workload distribution. The findings showed that the distribution of time amongst the components of the faculty work, teaching#, research and community service vary much from one institution to another.

Gwambombo (2013) conducted a study that aimed at ascertaining the effect of teacher's workload on students academic performance in community secondary school in Mbaya city. The study revealed effect on student's academic performance.

Mustapha & Ghee (2013) contributed a study on workload as an antecedent of job satisfaction among academic staff of public Universities in Kelantan Malaysia. The

study found that there was negative significant relationship between daily faculty workload and job satisfaction.

Sajjad (2016) conducted a study to ascertain the relationship between workload and performance for Bangladesh University teachers. The study revealed that there was too much workload on teaching and duties which was not conducive for teaching performance.

Usoro & Etuk (2016) carried out a study to determine the extent to which workload related stress influences job effectiveness among universities lecturers in Akwa-Ibom and Cross river State. They found that workload related stress significantly influence the job effectiveness of lecturers in terms of publications, community service and teaching effectiveness

Osaat & Ekechukwu (2017) investigated strategies for, managing workload among lecturers in Nigerian Universities. The study revealed the coping strategies in managing workload related stress among lecturers. An overview of the reviewed studies shows that most of the studies on workload are foreign. A few related load studies were found to focus on workload related stress, student's academic performance and teachers' performance and using teachers at the secondary school level. It became necessary therefore to fill the missing link by studying relationship between lecturers workload components, teaching, marking of scripts, supervision of students projects, research, participation in community service and productivity in Universities in Delta State because to the best knowledge of the researchers no such study has been carried out in Delta State.

Statement of the Problem

Lecturers are a very busy group of professionals because of the number and type of responsibilities they carry out on a daily basis. They prepare their lesson notes, teach many students at the same time due to large class size, grade assignments, mark examination scripts, supervise graduate and undergraduate students, carryout research, write articles for publication, attend statutory meetings, participate in community service and other social obligations. A visit to the office of a lecturer reveals the enormous responsibility that they are called to fulfill everyday and they are expected to perform these responsibilities to the best of their abilities. Research has shown that lecturers work under serious mental and physical pressure due to excess workload. In some cases, the excess workload has had serious consequences on their productivity. Some lecturers have developed stress related illness as a result of the pressure they go through while some have died untimely

death, while some others have recorded low teaching and research output/performance because of so many responsibilities they undertake simultaneously. This worrisome state of affairs cannot lead to productivity in the universities. This excess workload seems to contribute to quality issues that are observed in universities today. Although the lecturers are trying their best to ensure that they remain productive, the problem of this study is: what is the relationship between lecturers' workload and productivity in universities in Delta State?

Purpose of the Study

The purpose of this study was to investigate the relationship between lecturers' workload and productivity in universities in Delta State. Specifically, the objectives of the study were:

- i. Find out the relationship between lecturers' teaching workload and productivity.
- ii. Establish the relationship between lecturers' marking workload and productivity.
- iii. Find out the relationship between lecturers' supervision of students' project workload and productivity.
- iv. Determine the relationship between lecturers' research workload and productivity.
- v. Ascertain the relationship between lecturers' participation in community service workload and productivity.
- vi. Determine the joint relationship between lecturers' teaching workloads, marking of scripts workload, supervision of students' project workload, research workload, participation in community service workload and productivity in universities in Delta State.

Research Questions

The following research questions guided the study.

1. What is the relationship between lecturers' teaching workload and productivity in universities in Delta State?
2. What is the relationship between lecturers' marking workload and productivity in universities in Delta State?
3. What is the relationship between lecturers' supervision of students' project workload and productivity in universities in Delta State?
4. What is the relationship between lecturers' research workload and productivity in universities in Delta State?
5. What is the relationship between lecturers' participation in community service workload and productivity in universities in Delta State.
6. What is the joint relationship between lecturers' teaching workloads, marking of scripts, supervision of students' project, research workload, participation in community service and productivity in universities in Delta State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant relationship between lecturers' teaching workload and productivity in universities in Delta State.
2. There is no significant relationship between lecturers' marking workload and productivity in universities in Delta State.
3. There is no significant relationship between lecturers' supervision of projects workload and productivity in universities in Delta State.
4. There is no significant relationship between lecturers' research workload and productivity in universities in Delta State.
5. There is no significant relationship between lecturers' participation in community service workload and productivity in universities in Delta State.
6. There is no significant joint relationship between lecturers' teaching workload, marking workload, supervision of students' project, research workload and productivity in universities in Delta State.

METHODOLOGY

The design of the study was correlational with the population as the 164 Heads of Department from the 6 public and private Universities in Delta State. From this, 115 were selected as sample, using the stratified random sampling technique. The subjects of the study responded to two validated instruments, titled 'Lecturers' Workload Scale' (LWS) which was divided into 5 clusters: 'Lecturers' Teaching Workload (LTN); 'Lecturers' Marking Workload' (LMW). 'Lecturers' Supervision of Students' Project Workload' (LSSPW); 'Lecturers' Research Workload' (LRW) and 'Lecturers' Participation in Community Service Workload' (LPCSW) which had a total of 24 items.

The second instrument titled 'Lecturers' Productivity Scale (LPS) had 20 – items. The two instruments had a reliability index of 0.72 and 0.74 respectively, obtained using the Cronbach Alpha Statistics. Pearson Product Moment Correlation was used to answer Research Question 1,2,3,4 and 5; and their corresponding hypothesis was subjected to an alpha significant level of 0.05. Research Question 6 was answered using Multiple Regression and its corresponding hypothesis was tested using ANOVA associated with Multiple Regression.

RESULTS

Research question 1: What is the relationship between lecturers' teaching workload and productivity in universities in Delta State?

Table 2: Pearson Product Moment Correlation on the relationship between lecturers' teaching workload and productivity in universities in Delta State.

Category	n	R	Remarks
Lecturers' Teaching Workload and Productivity	115	-0.896	Negative high relationship

Table 2 reveals that the r value is -0.896 which depicts a negative high relationship between lecturers' teaching workload and productivity in universities in Delta State, Nigeria. By implication, an increase in lecturers' teaching workload leads to decrease in productivity.

Research question 2: What is the relationship between lecturers' marking workload and productivity in universities in Delta State?

Table 3: Pearson Product Moment Correlation on the relationship between lecturers' marking workload and productivity in universities in Delta State

Category	n	r	Remarks
Lecturers' Marking Workload and Productivity	115	-0.88	Negative high relationship

Table 3 revealed that the r value is -0.88 which depicts a high negative relationship between lecturers' scripts marking workload and productivity in universities in Delta State. By implication, an increase in lecturers' scripts marking workload leads to decrease in productivity.

Research Question 3: What is the relationship between Lecturers' supervision of students' project workload and productivity in universities in Delta State?

Table 4: Pearson Product Moment Correlation on the relationship between Lecturers' supervision of students' project workload and productivity in universities in Delta State.

Category	n	r	Remarks
Lecturers' supervision of students' project workload and Productivity	115	-0.65	Negative high relationship

Table 4 revealed that the r value is -0.65 which depicts a high negative relationship between Lecturers' supervision of students' project workload and productivity in universities in Delta State. By implication, an increase in supervision of students' project workload leads to decrease in productivity.

Research Question 4: What is the relationship between lecturers' research workload and productivity in universities in Delta State?

Table 5: Pearson Product Moment Correlation on the relationship between lecturers' research workload and productivity in universities in Delta State.

Category	n	r	Remarks
Lecturers' research Workload and Productivity	115	-0.78	Negative high relationship

Table 5 revealed that the r value is -0.78 which depicts a high negative relationship between lecturers' research workload and productivity in universities in Delta State. By implication, an increase in research workload leads to decrease in productivity.

Research question 5: What is the relationship between lecturers' participation in community service workload and productivity in universities in Delta State?

Table 6: Pearson Product Moment Correlation on the relationship between lecturers' participation in community service workload and productivity in universities in Delta State.

Category	n	R	Remarks
Lecturers' participation in community service workload and Productivity	115	-0.78	Negative high relationship

Table 6 revealed that the r value is -0.78 which depicts a high negative relationship between lecturers' participation in community service workload and productivity in universities in Delta State. By implication an increase in lecturers' participation in community service workload leads to decrease in productivity.

Research Question 6: what is the joint relationship between lecturers' teaching workload, marking workload, supervision of students' projects workload, research workload, participation in community service workload and productivity in universities in Delta State?

Table 7: Multiple regression on the joint relationship between lecturers' teaching workload, marking workload, supervision of students' projects workload, research workload, participation in community service workload and productivity in universities in Delta State

Model	R	R Square	Adjusted R Square
1	-0.627	.091	.083

Table 7 indicates that the R value is -0.627, (R^2) is 0.091 while the adjusted R is .083. The result means that there is a high negative relationship between lecturers' teaching workload, marking workload, supervision of students' projects, research workload and participation in community service workload and productivity in Universities in Delta State. The coefficient of determinism of 9.1% (100×0.091) showed the joint contributions of the independent variables (lecturers' teaching workload, marking workload, supervision of students' projects workload, research workload, participation in community service workload) to the dependent variable of productivity. This means that, lecturers' teaching workload, marking workload, supervision of students' projects, research workload, participation in community service jointly contributed 9.1% to productivity while the remaining 90.9% was accounted for by other variables not considered in the study.

Test of Hypotheses

Hypothesis 1: There is no significant relationship between lecturers' teaching workload and productivity in universities in Delta State.

Table 8: Pearson Product Moment Correlation on the relationship between lecturers' teaching workload and productivity in universities in Delta State.

Category	n	r	z-ratio	z-crit.	p-value	Alpha level	Remarks
Lecturers' Teaching Workload and Productivity	115	-0.896	9.89	1.96	0.005	0.05	Significant

Table 8 reveals that the r value is -0.896. The calculated significant probability value of (p-value) 0.005 was subjected to the alpha value of 0.05. Since the significant probability (p-value) of 0.005 is less than the alpha value of 0.05, the null hypothesis is rejected. By implication; there is a significant high negative relationship between lecturers' teaching workload and productivity in universities in Delta State.

Hypothesis 2: There is no significant relationship between lecturers' marking workload and productivity in universities in Delta State

Table 9: Pearson Product Moment Correlation on the relationship between lecturers' marking workload and productivity in universities in Delta State

Category	N	r	z-ratio	z-crit.	P-value	Alpha level	Remarks
Lecturers' Marking Workload and Productivity	115	-0.88	9.78	1.96	0.013	0.05	Significant

Table 9 revealed that the r value is -0.88. The calculated significant probability value (p-value) of 0.013 was subjected to the alpha value of 0.05. Since the significant probability value (p-value) of 0.013 is less than the alpha value of 0.05, the null hypothesis is therefore rejected. By implication, there is a significant high negative relationship between lecturers' marking workload and productivity in universities in Delta State.

Hypothesis 3: There is no significant relationship between Lecturers' supervision of students' project workload and productivity in universities in Delta State.

Table 10: Pearson Product Moment Correlation on the relationship between Lecturers' supervision of students' project workload and productivity in universities in Delta State.

Category	N	r	z-ratio	z-crit.	P-value	Alpha level	Remarks
Lecturers' supervision of students' Workload and Productivity	115	-0.65	7.22	1.96	0.000	0.05	Significant

Table 10 revealed that the r value is -0.65. The calculated significant probability value (p-value) of 0.000 was subjected to the alpha value 0.05. Since the significant probability value (p-value) of 0.000 is less than the alpha value of 0.05, the null hypothesis is therefore rejected. By implication, there is significant high negative relationship between Lecturers' supervision of students' project workload and productivity in universities in Delta State.

Hypothesis 4: There is no significant relationship between lecturers' research workload and their productivity in universities in Delta State.

Table 11: Pearson Product Moment Correlation on the relationship between lecturers' research workload and productivity in universities in Delta State.

Category	N	R	z-ratio	z-crit.	P-value	Alpha level	Remarks
Lecturers' research Workload and Productivity	115	-0.78	8.67	1.96	0.012	0.05	Significant

Table 11 revealed that the r value is -0.78. The calculated significant probability value (p-value) of 0.012 was subjected to the alpha value 0.05. Since the significant probability value (p-value) of 0.012 is less than the alpha value of 0.05, the null hypothesis is rejected. By implication, there is significant high negative relationship between lecturers' research workload and productivity in universities in Delta State.

Hypothesis 5: There is no significant relationship between lecturers' participation in community service workload and productivity in universities in Delta State.

Table 12: Pearson Product Moment Correlation on the relationship between lecturers' participation in community service workload and productivity in universities in Delta State.

Category	N	R	z-ratio	z-crit.	P-value	Alpha level	Remarks
Lecturers' participation in community service workload and Productivity	115	-0.78	8.67	1.96	0.006	0.05	Significant

Table 12 revealed that the r value is -0.78. The calculated significant probability value (p-value) of 0.006 was subjected to the alpha value 0.05. Since the significant probability value (p-value) of 0.006 is less than the alpha value of 0.05, the null hypothesis is therefore rejected. By implication, there is a significant high negative relationship between lecturers' participation in community service workload and productivity in universities in Delta State.

Hypothesis 6: There is no significant joint relationship between lecturers' teaching workload, marking workload, supervision of students' project workload, research workload, participation in community service workload and productivity in universities in Delta State.

Table 13: ANOVA associated with multiple regression on the joint relationship between lecturers' teaching workload, marking workload, supervision of students' project workload, research workload, participation in community service workload and productivity in universities in Delta State.

Model	Sum of Square	Df	Mean Square	F	Sig
1 Regression	8778.297	5	1254.042	11.015	.000 ^a
Residual	87436.174	100	113.849		
Total	96214.471	114			

- Predictors (Constant) teaching workload, marking workload, supervision of students' project workload, research workload, participation in community service workload
- Dependent Variables: Productivity

Table 13 revealed that the sum of squares 8778.297 and 87436.174 and mean squares are 1254.042 and 113.849 respectively. With degree of freedom of 5 and 100, the calculated F ratio of 11.015 is

significant at 0.000 when subjected to an alpha level of 0.05. Therefore, the null hypothesis is rejected. By implication, there is joint significant high negative relationship between lecturers' teaching workload, marking workload, supervision of students' project workload, research workload, and participation in community service workload and productivity in universities in Delta State.

DISCUSSION OF FINDINGS

Based on the summary of findings of the study, the following deductions were made:

Lecturers' teaching workload and productivity

The finding shows that there is significant high negative relationship between lecturers' teaching workload and their productivity. As the scores of lecturers' teaching workload was increasing, the scores of productivity was decreasing. This result is not surprising, the implication is that, much involvement of lecturers in instructional delivery affects their daily performance negatively and as such there is need for allocation of assistant lecturers to lecturers in teaching in order to reduce their workload and enhance instructional delivery. This finding is in agreement with that of Osaat & Ekechukwu (2017) who found that there was too much workload on teaching and administrative duties which is not conducive for teaching performance. However, the finding is not in agreement with that of Mebele (2008) who found that, there is no significant relationship between work activity and job performance. The difference in these findings could be due to the different sample size and areas the two studies were carried out. While the present study was carried out in Delta State with 115 HODs, Mebele's (2008) study was carried out in Lagos State with a sample of 240 teachers.

Lecturers' marking workload and productivity

This finding indicates that, there is significant high negative relationship between lecturers' scripts marking workload and their productivity. This means that, as the scores of lecturers' marking workload was increasing the scores of productivity was decreasing. This result is not surprising, this is because, lecturers' involvement in much marking workload yield low performance in their job. This finding is in agreement with that of Mustapha and Ghee (2013) who found that, there is negative significant relationship between faculty workload and job satisfaction. However, the finding is not in agreement with that of Barrett & Barrett (2008) who found that most universities have policy guidelines on workload allocation practices that are rather limited and not well known to head of departments and other staff. This difference in the findings of this present study and that of Barrett & Barrett (2008) could be due to sample size and areas the studies were carried out. While this present study was carried out in Delta State, using a sample of 115 HODs. That of Barrett & Barrett (2008) was carried out in the UK using a sample of 59 lecturers.

Lecturers' supervision of students' projects workload and productivity

The finding shows that, there is significant high negative relationship between lecturers' supervision of students' project workload and their productivity. This implies that, as the scores of lecturers' supervision of students' project workload was increasing the scores of productivity were decreasing. The result of this study is not surprising. It implies that, lecturers' supervision of students' project decreases their performance in their daily service. The finding is also in agreement with that of Gwambombo (2013) who found that, teachers workload is heavy and has negative effect on students' academic performance in secondary schools. The finding is not in agreement with that of Barrett & Barrett (2008) who found that most universities have policy guidelines on workload allocation practices that are rather limited and not well known to Head of Department or other Staff. The disparity in these two findings could be due to the different sample size and areas used. While this study used 115 Head of Departments, and was carried out in Delta State, that of Barrett & Barrett (2008) was carried out in the UK with a sample of 59 lecturers. It is believed that those who oversee the activities of lecturers or teachers would be in a better position to state how lecturers or teachers perform in their activities and areas that enhance productivity. This the HODs can do without bias and eye service and also show expertise and fair judgment due to experience.

Research workload and productivity

The finding shows that, there is significant high negative relationship between lecturers' research workload and their productivity. This means that, as the scores of lecturers' research workload was increasing the scores of productivity was decreasing. The finding also implies that, when lecturers engage in much research, it affects their job performance negatively. This finding is in agreement with that of Kordzadze (2013) who found that faculty work, teaching, research and community service has influence on lecturer job and varies from lecturer to lecturer. However, this study was at variance with Eto (2014) who found that administrators' human resources management effectiveness has significant influence on lecturers job satisfaction with respect to workload, professional status, opportunity for academic publication and administrators. The difference could be the sample size and areas the studies were carried out. While this present study was carried out in Delta State uses a sample of 115 HODs, that of Eto (2014) was carried out in Cross River and Akwa Ibom States using a sample of 600 lecturers.

Lecturers' participation in community service workload and productivity

The finding indicates that, there is significant high negative relationship between lecturers' participation in community service workload and their productivity in universities in Delta State. This implies that, as the scores of lecturers' participation in community service workload was increasing, scores of productivity was decreasing. This also means that, participation in community service negatively affects job performance of lecturers. This finding is in agreement with that of

Usono and Etuk (2006) who also found that, workload related stress significantly influences the job effectiveness of lecturers in terms of publication, community services and teaching effectiveness. However, this finding is not in agreement with that of Naikote (2011) who found that, work environment do not significantly relate to productivity of lecturers. This difference in the findings of these studies could be due to different respondents used. While this study used Head of Departments, Naikote (2011) used lecturers. It is believed that those who oversee the activities of lecturers or teachers would be in a better position to state how lecturers or teachers perform in their activities and areas that affects their job either positively or negatively.

Joint relationship between lecturers' teaching workload, marking workload, supervision of students' projects workload, research workload, participation in community service workload and productivity

The findings of the study indicate that, there is joint significant high negative relationship between lecturers' teaching workload, marking workload, supervision of students' projects workload, research workload, participation in community service workload and productivity in Universities in Delta State. The R-value = .627, $R^2 = .091$, $P = .000 < 0.05$. This means that, as the scores of the joint variables, lecturers' teaching workload, marking workload, supervision of students' projects, research workload, participation in community service increased, the scores of productivity decreased. However, this result is not surprising; this is because much workload on the lecturers affects level of productivity in their daily activities in the universities negatively. Implying that, much workload leads to low productivity amongst lecturers, because much involvement in teaching activities could affect their health negatively. This finding is in agreement with that of Oguamaka (2011) who found that, there is no joint significant relationship between teachers' attendance to conferences, workshops, supervision of students and instructional delivery in secondary school. However, this finding is at variance with that of Openi (2013) who found that teachers' teaching workload, assessment of students, attendance to conferences and seminars jointly predict their job performance in school. The difference in these findings of Openi (2013) and the present study could be due to the respondents used. While this study used Head of Departments, Openi (2013) used secondary school teachers. It is believed that those who oversee the activities of lecturers or teachers; would be in a better position to state the extent lecturers in universities perform in their activities.

Implications of the findings.

The findings of the study are that: there is significant negative relationship between lecturers teaching, marking supervision of students project, research, participation in community service workload and productivity. There is the implication that lecturers are overworked and therefore working under severe/serious physical and mental pressure in universities in Delta state. There is

also the implication that instructional delivery in the universities is not effective and this brings about a decline in students achievement and in turn lecturers productivity.

CONCLUSION

Based on the findings of this study, lecturers' workload components have independent and joint significant negative relationship with lecturers' productivity. It was concluded that workload of lecturers affect their level of productivity in their daily activities in Universities in Delta State negatively.

Recommendations

The following recommendations were made based on the findings of the study;

1. Lecturers should always ensure that their teaching activities are well prioritized so as to give adequate attention to learning need of students.
2. University Councils should ensure that a comfortable student-lecturer ratio policy is well implemented. Additionally, there should be a limit to the number of universities a lecturer can act as adjunct/part time lecturer so as to reduce teaching and research workload.
3. Universities Management should device a method of obtaining feedback from their workers regarding the work situation so as to be able to redesign job to enhance productivity.
4. There should be a revamp of the motivational factors available in the Universities especially in supervision of students' project and research. This can be done through ensuring progressive periodic salary increment, staff development programmes as well as lecturers involvement in decision making.
5. Periodic mandatory medical check-up should be initiated by the University Councils. Health talks and relevant on-the-spot check-ups will also help in reducing stress.
6. Universities management should also provide recreational facilities in their staff quarters and not just open fields that have no recreation equipment. Corporate bodies can be approached to finance such projects and these projects named after them.

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