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EFFECT OF ACADEMICS WORKLOAD ON ACADEMICS PRODUCTIVITY IN NIGERIA

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ABSTRACT: *This study examined the effect of academics workload on academics productivity in Nigeria. Data were collected through questionnaire that was admitted 257 academics in faculties of Education, Sciences and Social and Management Sciences in Adekunle Ajasin University, Akungba-Akoko. Academics Productivity was measured by total number of research publication and conferences attended in the last 3years, Academic Workload was measured by academics service either professional or non-professional in last 3years and Family Responsibility was measured by number of dependent children and age of last child. The study adopted both descriptive and logistic regression analysis. The findings showed that academic workload and family responsibility affect academic productivity. It was recommended among others that government and policy makers should reduce academics workloads and academics with dependent relatives should be considered when allocating academic workload.*

KEYWORD: academics, productivity, workload, university

INTRODUCTION

Academics are the greatest assets and a major stakeholder in the university communities all over the world. We cannot overstate their roles and importance in knowledge delivery all over the world. They ensure students were prepared for the daunting challenges ahead through effective information dissemination via teaching, create new knowledge, and discover solutions for real issues of nations. However, academics face several facets of demands such as excess workload, publish or perish dictum and family lifework conflicts seems to threaten the role of effective knowledge delivery and ability to involve in quality research keeps fading away amongst academics in developing countries such as Nigeria.

The roles of academics in institutions of higher education are becoming more heightened because of several responsibilities embedded in teaching, research, and service han ever before (Krause, 2009). These roles also served as important benchmarks for international ranking and university reputation. These roles are influenced by many factors relating to the individual organization, departments within the institution, family ties, government, and the environment. All these factors may affect academics in achieving a better result on the assigned academic workload, which may also have a direct or indirect effect on academic research publications.

Workloads are the duties of all the tasks carried out by workers in the course of their activities in their workplace. Relating it to academics, workloads are professional and non-professional duties carried out by academics in the course of their activities, while productivity in academics is measured by research publications. However, the major work of academics is to teach and bring up the young generation of students to gain skills and knowledge for growth and development. These duties complemented by research activity and service to the entire university community.
In tertiary institutions in Nigeria, apart from competence in professional duties, research publications are compulsory indices or indicators of assessment of academic productivity of academics and promotion. However, both the quantity and quality of research output from these institutions in Nigeria are unduly insignificant to make the desired impact on national development (Yusuf, 2012). Most of these researches are self-sponsored because of a lack of research funds. Other issues confronting academics are inadequate infrastructural facilities, unpaid salaries, and arrears, lack of research funding, lack of payment of earned allowances, and excess workload. In order to address some of these anomalies, Academic Staff Unions of University embark on strikes to improve the university system.

In Adekunle Ajasin University, academics are exposed to varieties of diverse non-teaching activities despite the enormous task of teaching large classes and long teaching hours which may be detrimental to their research output. These activities are complex and occasionally conflict with their primary roles as academics. Some of these activities include examination invigilation, examination officers, time table coordinators, members of several committees, directors of institutes, heads of departments, deans of faculties, project supervision, teaching very large classes as against NUC recommendation of 12 students to 1 academic (ASUU, 2010). The institution is likewise faced with infrastructural inadequacy owing to lack of funding by the state government and this makes excess workload unachievable.

This study examined the effect of academics workload on academics productivity at Adekunle Ajasin University. The university is currently the best state university in Nigeria and the 11th best out of 160 Universities in Nigeria according to the 2020 Nigerian University Ranking. This implies that the university is better off than several other universities locally but maybe worst off internationally due to lack of campus accommodation for academics, lack of consistent internet facility, the problem of office space, inadequate research grants, rationalization of electrification supply from 9 am to 2 pm on working days to mention but a few. Most of these academics families do not reside in the university town; hence, they traveled far distance from home to work on either daily or weekly bases depending on the location.

Statement of the Problem

The question to ask is how does workload affects productivity amongst academics in Adekunle Ajasin University based on several activities they indulge in? Although several studies have been carried out in relation to the question asked and much of the research to date has focused on institutional context. Within some of these studies, authors often address the challenges that academics face when conducting research and the barriers that may prevent them from being productive researchers. Commonly noted challenges and barriers include time constraints, lack of support, and lack of research training or experience. However, the issue of demographic

characteristics such as gender and age was not fully harmonized into these studies. Family life variables such as marriage, occupation of spouses, no of dependent children, and age of the last child were not also incorporated as a factor that may hinder academic productivity.

Less attention has been focused on the nexus between academics workload and academics productivity in Nigeria. However, some of these studies incorporated variables such as work stress into their study. For instance, Denga and Ekpo (1999) incorporated work stress into a study and concluded that work overload and work underload led to stress which equally leads to gross ineffectiveness. The study of Amalu (2014) after incorporating work-related stress variables could not find any significant relationship between workload and professional effectiveness in Nigeria. Other studies such as; Amini-Philips and Okonmah (2020), Osaat and Ekechukwu (2017) Adegbaye, Okorie, Wagwu and Ajiboye (2019) to mention but a few seem to be plagued with some weakness. This are because some of these studies were limited to secondary schools, hence, the workload used in these studies will differ. Secondly, these studies used smaller scope in terms of sample size; hence, this may affect the robustness of their findings. Thirdly, some of these studies were cross-sectional in nature, the harm of sectional study is that it does not incorporate the heterogeneous features of other group peculiarities. Hence, the findings of such a study cannot be used to generalize.

This study is thus initiated to accommodate some of these shortcomings and equally shed more light on the relationship between academic workload and academic productivity. The remaining part of this paper consists of theoretical and literature review, the methodology, data analysis, and presentation, while the final part presents the conclusion and recommendations.

Brief Summary of Theory and Related Empirical Literature

This study is anchored on the Equity theory by Adams (1963). The theory explains how employees seek to maintain equity between the inputs that they bring to a job and the outcomes that they receive from it against the perceived inputs and outcomes of others. The theory calls for a fair balance to be struck between an employee's inputs such as skill level, hard work, tolerance, enthusiasm to mention but a few, and his/her outputs such as salary, benefits to mention but a few. According to the theory, finding this balance serves to ensure a strong and productive relationship is achieved with the employee, with the overall result being contented, motivated employees. The theory is built on the belief that employees become de-motivated, both in relation to their job and their employer, if they feel as though their inputs are greater than the outputs (Guerrero, Andersen & Afifi, 2007).

Empirical literature academic on workload and academic productivity has grown over the last two decades all over the world. Most of these studies concluded that workload had a significant influence on productivity. The review of these studies is hereby presented. Hadjinicola and Soteriou (2006) studied factors that promote research productivity of production and operations management (POM) groups of researchers in US business schools. The study equally investigated factors that affect research quality, as measured by the number of articles published per POM professor in journals. The results revealed that three factors increase both the research productivity and the quality of the articles published by professors of a POM group. These factors are (a) the

presence of a POM research center, (b) funding received from external sources for research purposes, and (c) better library facilities.

A study by Wills, Ridley and Mitev (2013) to investigate factors considered to impact the research productivity of accounting academics, and identify how the factors were related. The study aims to set itself within an international context of increased workloads, and revenue-driven research and teaching. A meta-analysis was conducted of international studies from accounting and related business fields, published between 1988 and 2008, that examined factors influencing the research productivity of academics. The study found hierarchical clusters of factors operating at government, institution, and individual levels appeared to influence the research output of accounting academics.

Callaghan (2016) investigated the associations between family life variables such as marriage and dependent children against measures of the following specific types of research publication: (1) South African Department of Higher Education and Training–accredited journal publications; (2) Thompson Reuters Institute for Scientific Information (ISI) and ProQuest's International Bibliography of the Social Sciences (IBSS)–indexed journal article publications; (3) conference proceedings publications; (4) conference paper presentations; (5) book chapter publications; (6) book publications; and (7) gross research productivity, reflecting a volume or quantity measure of research publication. The findings of this study suggest that male academics with more dependent children publish significantly fewer ISI and/or IBSS journal articles. Little evidence was found to refute predictions in the literature that ever-increasing pressures to publish will be associated with WLB consequences for academic staff and in this instance, it was argued that academics publishing higher numbers of ISI and/or IBSS journal articles might face a higher chance of family–work role conflict.

Rahim, Saat, Siti Aishah, Arshad, Aziz, Zakaria, Kaur, Kamaruddin, and Suhaimi (2016) carried out a cross-sectional study to determine the relationship between academic workloads (credit hours, assignments, and study hours) and stress level among biomedical science undergraduates according to gender and year of study. The study found that the mean stress level for male was 15.86±6.138 while, for female was 15.70±6.504. Stress level between the year of study, study hour by year of study, credit hour by year of study, and assignments by year of study were compared. The result indicated that there was a significant difference ($p<0.05$) for study hour by year of study and credit hour by year of study. The results showed that there was a weak correlation between stress and credit hour ($r = 0.165$), study hours ($r = 0.062$), number of assignments ($r = 0.158$).

Bartholomew (2017) developed a unified methodology inclusive of the 3 primary areas of faculty responsibility (teaching, research, and service) to calculate departmental productivity in 5 departments (English, Biology, Mathematics, Sociology, and Computer Science) in 2 universities. The study found bias inherent in relying solely on research as a proxy for overall productivity in institutions that have a different mission.

Ogoti (2018) examined the constraints of research productivity in universities in Tanzania. The study employed concurrent parallel mixed methods research design. Data was collected through

question and the study concluded that resource constraints, institutional constraints, and cultural constraints have a considerable effect on productivity.

Tentana, Missasi, and Nasywa (2019) examined the effect of workload and stress on work productivity of lecturers at the University of X Yogyakarta, Indonesia. The sample size was 85 academics and data was analyzed through the use of multiple linear regression techniques. The result showed that workload and work stress affects lecturers' productivity a research productivity index to measure the research productivity of the agricultural scientists. The study among other things revealed that there is ample scope for enhancing research productivity among the scientists as the majority (63.5%) had low to the very low levels of productivity.

Studies in Nigeria followed a similar trend to those from other countries. For instance, Denga and Ekpo (1999) found that overload whether quantitative or qualitative may lead to stress and concomitant gross ineffectiveness. Ojiji (2000) identified work overload and underload of the job as factors that can generate a feeling of hopelessness and also may contribute towards lack of motivation, depression, and inefficiency

Okafor and Dike (2010) analyzed the research output of academics in the Science and Engineering faculties of Federal Government-owned universities in Nigeria. It was found out that 30.6% of the academics published between 0-4 journal articles, that only 2-7% of them published 30 or more articles during the period, and 42.1% did not have any article in overseas journals. Amalu (2014) investigated the impact of workload induced stress on the professional effectiveness of secondary school teachers in Cross River, Nigeria. The ex-post factor design was used in a survey of 600 public secondary school teachers. The result showed that stress from workload had no significant influence on professional effectiveness.

Osaat and Ekechukwu (2017) investigated strategies for managing workload among lecturers in Nigerian universities. The design of the study was a descriptive survey. The population consisted of all the university lecturers in the south-south zone of Nigeria but was limited to the university of Port Harcourt with a population of 400 lecturers. The stratified random sampling technique was used in selecting the study sample of 80 lecturers of different departments. The findings showed that Lecturers perform so many tasks that are heavily loaded and the extent of influence of the workload as perceived by lecturers on their performance is high. Adegbaye, Okorie, Wagwu, and Ajiboye (2019) investigated workload as correlates of publication output of academic librarians in universities. They adopted a descriptive research design. They concluded that research publications were relevant to the career progress of respondents

Finally, Amini-Philips and Okonmah (2020) investigated lecturers' workload and productivity in Universities in Delta State. 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 was drawn through the stratified random sampling technique and used for the study. It was found that there is a 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.

METHODOLOGY AND MODEL SPECIFICATION

The study was carried out at Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria. The study used primary data in which questionnaires was administered to 257 academics in 3 faculties which comprise of Faculty of Education, Faculty of Social and Management Sciences, and Faculty of Sciences. The techniques of data analysis were both descriptive statistics and logistic regression analysis. The Logistic function, which is a random variable Zi can thus be specified as:

$$\Pr(zi = 1) = \frac{\exp(\beta' Wi)}{1 + \exp(\beta' Wi)} \quad 1$$

If we write the model in terms of the odds, the logit model is as specified:

$$log\left\{\frac{Pro(AP)}{Pro(none-AP)}\right\} = \text{ao} + \beta_1 df + \beta_2 wl + \beta_3 fr + u \quad 2$$

Where
AP is Academic Productivity
DF is Demographic Factor
WL is Workload
FT is Family Responsibility
Equation 1 is express in econometric model. Hence,

$$AP = \beta_0 + \beta_1 df + \beta_2 wl + \beta_3 ft + u \quad 3$$

U in Equation 3 above is the stochastic variable.

Measurement of Variables

The dependent variable is Academic Productivity which is measured by the number of papers written by academics. The variable is assessed with the following information; the number of total single-authored papers (this information is very vital because the single-authored paper carried the highest score/rating in terms of academic productivity. Other requested information were total paper co-authored and the total number of papers in which the academic was first-authored, the total number of conferences attended so far, the total number of conferences in which papers were presented. All the above information was used to measured academic productivity in this study. For the purpose of logistic regression analysis, the respondents were asked to indicate the number of papers published in the last 3 years. If the publication is more than or equal to 3, it is coded 1 otherwise 0. The purpose of this question is that when academics are not facing excess workload, they should be able to publish at least 1 research paper per year.

For explanatory variables, Demographic factors are measure by respondents' age, gender, marital status, tribe, religion, education, and qualifications. All these variables are grouped and coded 1 and 0 for the purpose of logistic regression analysis.

The workload was measured by asking the respondents that in the last 3years (the reason for 3years is because those academics are promoted every 3years) they should indicate any of these jobs

commitment they have engaged in; Level Adviser, Staff Adviser, Departmental Committee, Faculty Committee, Community Service, Religious Society, Head of Department, Dean or Sub-Dean of Faculty, Committee of Senate, Director of Programmes, other committees aside listed ones. Respondents were also asked to indicate their domestic responsibilities. If academics indicated they have served in more than 3 of these listed capacities, it is coded 1 otherwise 0. This information is incorporated into the logistic regression analysis. While Allocative Responsibilities measured by asking the respondents to indicate courses taught in each semester, the number of students under first degree and postgraduates programs. Finally, family responsibility is measured by the number of dependent children and the age of the last child.

RESULT AND ANALYSIS

(a) Demographic Characteristics of Respondents

S/N	Variable		Freq.	%	S/N	Variable		Freq.	%
1	Gender	Male	182	71	5	Occupation of Spouse	Academics	26	10
		Female	75	29			Non-Academic	231	90
2	Age	Age 1(<30yrs)	8	3.2	6	Marital Status	Single	18	7
		Age 2(31-40yrs)	105	40.9			Married	208	81
		Age 3(41-50yrs)	86	33.3			Divorce(e)	0	0
		Age 4(50yrs>)	58	22.6			Widow(er)	0	0
3	Religion	Islam	50	19	7	Academic Qualification	First Degree	5	2
		Christianity	198	77			MPhil/Msc/M.edu	95	37.1
		Others	9	4			PhD.	154	59.8
4	Tribe	Hausa	1	0	8	Faculty	Education	113	43.9
		Igbo	8	3			Social & Mgt Sciences	78	30.5
		Yoruba	245	95			Sciences	66	25.6
		Others	3	1					

Out of the 257 respondents, 71% of them were male while 29% were female. 3.2% falls below 30years, 40.9% falls between ages 31 to 40 years, 33.3% falls between ages 41 to 50 years while 22.6% were above 50years of age. 19% practice Islam, 77% were Christians while 4% practice other religions.3% were Igbos, 95% were Yoruba, 1% were from other tribes while no respondents were recorded for Hausa. In terms of respondents' marital status, 7% were single while 81% were married. 2% of the respondents had first degrees, 37.1 had MPhil/MSc/ MEdu while 59.8% had Ph.D. 43.9% of the respondents were from the Faculty of Education, 30.5% were from Social and Management Sciences while 26.5% were from Sciences.

Distribution of Respondents' by Status

Information on the respondents' initial status when the employed and current status was presented in the table below

S/N	Academic Status	Initial Status		Current Status	
		Frequency	%	Frequency	%
1	Graduate Assistant	50	19.4	5	2
2	Assistant Lecturer	152	59.2	21	8
3	Lecturer II	55	21.4	98	38
4	Lecturer I	0	0	36	14
5	Senior Lecturer	0	0	72	28
6	Reader/Associate Professor	0	0	18	7
7	Professor	0	0	8	3
	Total	257	100	257	100

In terms of initial status respondents were once employed, out of the 257 respondents, 19.4% were appointed as Graduate Assistants, 59.2% were Assistant Lecturer while 21.4% were Lecturer II. In terms of the current status of respondents, 2% are now in the Graduate Assistant cadre, 8% were Assistant Lecturer, 38% were Lecturer II, 14 % were Lecturer I, 28% were Senior Lecturer, 7% were Reader while 3% were now Professor.

Distribution of Academics by Single Authored Paper

Information on Academics' Total Single Authored Paper (TSA) by faculty is presented below

S/N	Faculty	TSA 1(<6)		TSA2 (6-10)		TSA3(11-15)		TSA4(16>)	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Sciences n=66	5	8	3	4	5	8	5	5
2	Social & Mgt Sciences n=78	16	20	11	14	5	6	5	1
3	Education n=133	11	10	7	6	7	6	7	8

From the above table, in faculty of Sciences, out of 66 respondents 8% (5) indicated they have less than 6 total single authored papers, 4%(3) indicated that their total single authored paper falls between 6 and 10, 8% (5) indicated that their single authored paper falls between 11-15 while 5% (5) indicated that they have published 16 and above single authored papers.

Result for the faculty of Social and Management Sciences showed that out of 78 respondents, 20% (16) had less than 6 single authored papers, 14% (11) indicated they have 6-10 single authored papers, 6% indicated they have 11-15 single authored papers while 1% indicated they have published 16 and above single authored papers.

Finally, result for the faculty of Education showed that out of 133 respondents, 10%(11) indicated had less than 6 single authored papers, 6%(7) indicated they have authored 6-10 single authored papers, another 6%(7) indicated they have authored 11-15 single authored papers while 8%(7) indicated they have published 16 and above single authored papers.

Distribution of Academics by Co-Authored Paper

Information on Academics' Total Co-Authored Paper (TCA) by faculty is presented below

S/N	Faculty	TCA 1(<6)		TCA2 (6-10)		TCA3(11-15)		TCA4(16>)	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Sciences n=66	3	4	1	2	1	2	9	14
2	Social & Mgt Sciences n=78	16	21	7	9	5	6	5	1
3	Education n=133	15	13	7	6	6	5	9	7

From the above table, in faculty of Sciences, out of 66 respondents 4% (3) respondents indicated they are the first author of the less than 6 co-authored papers, 2%(1) indicated that they first-authored 6-10 co-authored papers, another 2% (1) indicated that they first-authored 11-15 co-authored paper, while 14% (9) indicated that they first-authored 16 and above co-authored papers. Result for the faculty of Social and Management Sciences showed that out of 78 respondents, 21% (16) indicated that they first-authored less than 6 co-authored papers, 9% (7) indicated that they first-authored 6-10 co-authored papers, 6% (5) indicated they first-authored 11-15 co-authored papers while 1% (5) indicated they first-authored 16 and above co-authored papers.

Finally, the result for the faculty of Education showed that out of 133 respondents, 13%(15) indicated that they first-authored less than 6 co-authored papers, 6%(7) indicated they first-authored 6-10 co-authored papers, 5%(6) indicated they first-authored 11-15 co-authored papers while 7%(9) indicated they first-authored 16 and above co-authored paper.

Distribution of Academics by First Author of Co-Authored Paper

Information on Academics' by First author of Co-Authored Paper (TCA) by faculty is presented below

S/N	Faculty	TCA 1(<6)		TCA2 (6-10)		TCA3(11-15)		TCA4(16>)	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Sciences n=66	3	4	1	2	1	2	9	14
2	Social & Mgt Sciences n=78	16	21	7	9	5	6	5	1
3	Education n=133	15	13	7	6	6	5	9	7

From the above table, in faculty of Sciences, out of 66 respondents 4% (3) respondents indicated they are the first author of the less than 6 co-authored papers, 2%(1) indicated that they first authored 6-10 co- authored papers, another 2% (1) indicated that they first authored 11-15 co-authored paper, and 14% (9) indicated that they first authored 16 and above co-authored papers.

Result for the faculty of Social and Management Sciences showed that out of 78 respondents, 21% (16) indicated that they first authored less than 6 co-authored papers, 9% (7) indicated that they first authored 6-10 co-authored papers, 6% (5) indicated they first authored 11-15 co-authored papers and 1% (5) indicated they first authored 16 and above co-authored papers.

Finally, result for the faculty of Education showed that out of 133 respondents, 13%(15) indicated that they first authored less than 6 co-authored papers, 6%(7) indicated they first authored 6-10 co-authored papers, 5%(6) indicated they first authored 11-15 co-authored papers and 7%(9) indicated they first authored 16 and above co-authored paper.

Distribution of Academics' Workload by Faculty

Information on academics' workload by faculty is presented in the table below. The workload is divided into two, namely professional workload and non-professional workload.

1. Workloads	**Faculty**		
	Science n=66	Social & Mgt Sci. n=78	Education n=133
Professional			
Level Adviser	16	36	33
Staff Adviser	1	29	19
Department Committee	22	37	31
Faculty Committee	18	31	
Head of Department	9	9	6
Dean of Faculty	1	-	-
Sub-dean	4	4	1
Non-Professional			
School Committee	12	11	17
Community Service	9	23	2
Religious Society	13	20	17
Director and others related activities	1	8	4

From the table above in terms of Professional workload, Faculty of Social and Management Sciences had the highest level advisers of 36, followed by Education with 33 while Sciences had 16. For Department Staff Advisers, Social and Management Sciences had 29, followed by Education with 19 while Sciences with 1. Information on academics in Departmental Committees showed that Social and Management Sciences has 37, followed by Education with 31 while Sciences had 22. Information of academics in Faculty committee showed that Social Sciences had 31 while Sciences had 18. For academics that had or still occupied the position of Head of Departments showed that 9 academics were once or still occupying the position in both Social and Management and Sciences while 6 academics was recorded for Education. In terms of Sub-Dean, 4 academics were once or still occupying the position in both Social and Management Sciences and Sciences while 1 was recorded for Education. Finally, only 1 academic was has occupied the Deanship position.

Information on Non-Professional workload showed that 17 academics were in School Committee from the Faculty of Education, followed by Sciences with 12 while Social Sciences and Management Sciences had 11 academics. For academics involving in Community Services, 23 wherefrom Social Sciences, followed by 9 from Sciences while 2 were from Education. For

academics involving in Religious Society, 20 were from Social and Management Sciences, followed by 17 from Education while 13 were from Sciences. Finally, information on academics that had occupied or occupying Directorship position showed that 8 were from Social and Management Sciences, followed by 4 from Education while 1 was from Science.

Distribution of Academics' Allocative Responsibility by Faculty

Information on academics' allocative responsibility is presented in the table below.

2. Allocative Responsibility

2. Allocative Responsibility			
	Science	SMS	Edu.
Undergraduates supervised in the last 3years	222	373	621
Postgraduates supervised in the last 3years	38	53	89
Taught courses in 1st semester in the last 3years	94	177	157
Taught courses in 2nd semester in the last 3years	65	152	143

In terms of undergraduates' supervision in the last 3years, respondents in the faculty of Education had the highest with 621undergraduates, followed by Social and Management Sciences with 373 while Faculty of Sciences had 222. For Postgraduates supervision in the last 3years Faculty of Education had the highest with 89, followed by Social and Management Sciences with 53 while Sciences had 38.

In terms of courses taught in the first semester in the last 3years, respondents in Social and Management Sciences had taught 177 courses, followed by Education with 152 while Sciences had 94. For the second semester, Social and Management Sciences had taught 154 courses, followed by Education with 143 while Sciences had 65.

3.**Family Responsibility**		Science	SMS	Education	Total
No of children	Less than 2	18	37	46	57
	2-4	29	33	37	198
	5 and above	0	0	100	2
Age of last child	Less than 10yrs	22	30	47	188
	10-15 years	24	34	41	41
	16years & above	21	32	46	28

Out of 57 respondents, 45% in Faculty of Education had less than 2 children, followed by 37% in Social and Management Sciences, while Sciences had 18%. Out of 198 respondents, 37% in the Faculty of Education had children between 2 to 4, followed by 33% in Social and Management Sciences, while Sciences had 29%. Finally, respondents in the Faculty of Education seem to be one with the number of children above 5.

Out of 188 respondents, 47% in the Faculty of Education had the age of the last child to be less than 10 years of age, followed by 30% in Social and Management Sciences, while Sciences had 22%. Out of 41 respondents, 41% in the Faculty of Education had the age of the last child to fall between 10 to 15 years, followed by 34% in Social and Management Sciences, while Sciences had 24%. Finally out of 28 respondents, 46% in Faculty of Education had the age of the last child to be above 15years, followed by Social and Management Sciences 32% while Sciences had 21%

Distribution of Respondents by Faculty

	Sciences	Social & Mgt Sciences	Education	Total
Graduate Ass.	1	2	2	5
Assistant Lect.	9	9	3	21
Lecturer II	31	27	39	97
Lecturer I	5	10	21	36
Senior Lecturer	16	21	35	72
Associate Prof.	2	7	9	18
Professor	2	2	4	8
Total	66	78	113	257

Out of 257 respondents in terms of Graduate Assistant, 2 were from both Social and Management Science and Education while 1 was from Sciences. For Assistant Lecturer, 9 were from both Sciences and Social and Management Sciences while 3 were from Education. For Lecturer II, 39 were from Education, followed by 31 from Sciences while 27 were from Social and Management Sciences. For Lecturer I, 21 were from Education, followed by 10 from Social and Management Sciences while 5 were from Sciences. For Senior Lecturer, 35 were from Education, followed by 21 from Social and Management Sciences while 16 were from Sciences. For Associate Professor, 9 were from Education, followed by 7 from Social and Management Sciences while 2 were from Sciences. For Professor, 4 were from Education while 2 were from both Sciences and Social and Management Sciences.

Logistic Regression Result

S/N	Variable		Model 1	$\frac{dy}{dx}$	Model 2	$\frac{dy}{dx}$	Model 3	$\frac{dy}{dx}$
	Constant		-0.2841 (0.4870)		0.8782 (0.7751)		2.1066 (1.1386)*	
1	Gender	Female=1	-0.1337* (0.2368)	-0.0333 (0.0589)	-0.1600* (0.2404)	-0.0396 (0.0598)	-0.2940* (0.2694)	-0.0695 (0.0669)
2	Age	Age 1 (<30yrs)	0.4415 (0.7643)	0.1098 (0.1873)	0.3708 (0.7752)	0.0924 (0.1916)	0.8383** (0.8504)	0.2035 (0.1912)
		Age 2 (31-40yrs)	-0.4431 (0.7643)	-0.1125 (0.2114)	-0.4106 (0.4423)	-0.1021 (0,1109)	-0.5364* (0.5494)	-0.3175 (0.2161)
		Age 3 (41-50yrs)	-0.8292** (0.4414)	-0.1120 (0.0189)	-0.2109** (0.2494)	-0.0116 (0.0104)	-0.0356** (0.6432)	-0.0670 (0.1104)
3	Religion	Islam =1	-0.2377 (0.4330)	-0.8040 (0.0181)	-0.9232 (0.4323)	-0.7081 (0.8040)	-0.2690 (0.7366)	-0.4198 (0.8045)
4	Tribe	Yoruba =1	-0.2846** (0.2306)	-0.7090 (0.7099)	-0.1364* (0.2394)	-0.7048 (0.0890)	-0.6172* (0.6382)	-0.4050 (0.9073)
5	Marital Status	Single =1	0.5412** (0.1311)	0.3152 (0.7044)	0.5564** (0.1326)**	0.3175 (0.7085)	0.3877*** (0.5315)	0.0220 (0.8051)
6	Academic Qualification	Ph.D.=1	0.2642* (0.6200)	0.4107 (0.7283)	0.9409* (1.8298)	0.1169 (0.9271)	0.4747* (1.3368)	0.7143 (0.7296)
7	Spouse Occupation	Non-Academics=1	-0.2020 (0.0815)	-0.8377 (0.3551)	-0.3144 (0.2047)	-0.3034 (0.0615)	-0.2119* (0.2272)	-0.0364 (0.0553)
8	Faculty	Sciences	0.4415* (0.4367)	0.8109 (0.1873)	0.3708* (0.7752)	0.0924 (0.1916)	0.3883** (0.4058)	0.5420 (0.2191)
		Education	0..6224** (1.2603)	0.2236 (0.2007)	0.1760** (0.1950)	0.2421 (0.1950)	0.2257** (0.9720)	0.0563 (0.2426)
9	Workload	Professional =1			0.4062 (0.3290)	0.0106 (0.8017)	0.4609 (0.3272)	0.1142 (0.0937)
10	Allocative Responsibility	Postgraduates=1			0.0022* (0.1995)	0.0006 (0.0496)	0.0699* (0.2094)	0.0174 (0.0541)
11	Domestic Responsibility	No of child less than 2=1					1.0403** (0.3473)	0.2541 (0.0813)
		Age of last child above 16yrs=1					1.1000*** (0.3400)	0.2664 (0.0762)

The Logistic econometric result is presented in the appendix in which three different models are estimated. Model 1 presents the effect of demographic characteristics on academic productivity, while model 2 has the influence of workload added to it, and model 3 has some variables capturing the domestic responsibility of the respondents added to it. These include No of children and Age of the last Child.

The results of the demographic characteristics of the respondents show that male academics had higher productivity when compared to their female counterparts and this was confirmed in all models and the result was significant. The finding supports Callaghan (2016) that male academics published more than female academics.

Likewise, the impact of age differences on academic productivity shows that academics that fall in age bracket 1 (<30yrs) had higher productivity when compared to those of age bracket 4 (50yrs>) and it was statistically significant only in model 3 while those that fall in age bracket 2 (31-40yrs) had less productivity when compared with age bracket 4 and it was statistically significant in model 3. However, those that fall in age bracket 3(41-50yrs) had less productivity in all the 3 models and it was significant. This finding indicated as academics age the propensity to publish research activities increases and more so they have a less dependent family members.

The role of Tribe of academics shows that academics from Yoruba speaking areas had less academic productivity when compared to their Igbo counterparts and it was significant in all the 3 models. Similarly, the Marital status of was respondents seems to be a factor stimulating academic productivity this is because Single academics had higher productivity when compared to their Married counterparts and it was statistically significant in all the models. The finding supports Callaghan (2016). The reason for this finding may because single academics have less responsibility than their married counterparts and responsibility may serve as a hindrance to one's ability to conduct research.

The influence of Academic Qualification on academic productivity shows that academics with Ph.D. had higher productivity when compared to those with a first degree and it was statistically significant. This result supports the findings of Bellas and Toutkoushian (1999) and Harter, Becker, and Watts (2011) they concluded that academics with higher rank are more productive. The implication of this finding is that academics with higher qualifications tend to demonstrate higher scholarly and research ability than those with lesser qualifications. Spouse Occupation seems to influence academic productivity, the result shows that academics whose spouses are non-academic had less productivity when compared to those whose spouses were academics and it was statistically significant in model 3 only. The finding implies couples that are both academics tend to assist one another in research publication.

The role of faculty of academics shows that academics from Sciences and Education had higher productivity than their counterparts from Social and Management Sciences and it was statistically significant in all the 3 models.

In model 2, we examined the role of workload on academic productivity. The workload was classified into professional, non-profession, and allocative responsibility. The professional workload had higher productivity when compared with non-professional workload; however, it was not statistically significant. The result for allocative responsibility indicates that academics with postgraduates teaching and supervising experience had higher productivity when compared with those with first-degree teaching and supervising experience and it was statistically significant. This implies academics exposure to postgraduate teaching and supervisor tends to be more research-oriented than those who are not. Hence, they tend to be more productive in spite of the increase in workload. This finding did not find support in Aminu-Philip and Okonmah (2020). However, in their study, they did not split the workload into professional, non-profession, and allocative. This may be one of the reasons for a different results.

In model 3 we added the domestic responsibility of academics. First academics with no of children less than 2 had higher productivity when compared to those with no of children higher than 2 children and it was statistically significant. Finally, academics with the age of last child greater than 16years had higher productivity than those with less than 16years of age, and it was statistically significant. This result supports the findings of Callaghan (2016). This is because academics with dependent family members may lead to work-family conflicts and this may reduce productivity.

CONCLUSIONS AND RECOMMENDATIONS

This study had sought to examine the effect of academics workload on academics productivity at Adekunle Ajasin University. This study was motivated by consistent Academics strikes due to issues relating to university funding and several unpaid earn allowances and the low ranking of Nigerian university by international university ranking bodies. Findings from this study indicated that workload affects academic productivity in Nigeria. However, government and policymakers should reduce academic workload especially those not related to individual professions, and encouraging productivity by giving out research grants. Gender issues and academics with dependent relatives should be considered when allocating academic workload.

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