

OPPORTUNITIES, CHALLENGES, AND STRESS, AS SEEN BY STAFF OF IN A NEW PRIVATE MEDICAL UNIVERSITY

Mato CN¹, *Ijah RF², Onodingene NM³, Ogamba MI⁴, Aaron FE⁵, Eleki BE⁶, Athanasius B⁷, Bob-Manuel M⁸, Aguwa EN⁹

¹Departments of Anaesthesia, Faculty of Clinical Sciences, PAMO University of Medical Sciences (PUMS), Rivers State, Nigeria. ²Department of Surgery, Faculty of Clinical Sciences, PUMS, Rivers State, Nigeria.

³Department of Hematology, Faculty of Basic Clinical Sciences, PUMS, Rivers State, Nigeria.

⁴Department of Chemical Pathology, Faculty of Clinical Sciences, PUMS, Rivers State, Nigeria.

⁵Department of Surgery, Faculty of Clinical Sciences, PUMS, Rivers State, Nigeria.

⁶Department of Internal Medicine, Faculty of Clinical Sciences, PUMS, Rivers State, Nigeria.

⁷Department of Anatomic Pathology, Faculty of Clinical Sciences, PUMS, Rivers State, Nigeria.

⁸Department of Medical Microbiology and Parasitology, Faculty of Basic Clinical Sciences, PUMS, Rivers State, Nigeria.

⁹Department of Community Medicine, Faculty of Clinical Sciences, PUMS, Rivers State, Nigeria.

*Corresponding Author: Rex Friday Ogoronte Alderton Ijah; Email:rexijah@gmail.com

Abstract

Background: The setting up of a new institution is often associated with some difficulties amidst achievements, which have been reported in studies across the globe in medical and non-medical related institutions. The aim of this study was to highlight the multidimensional opportunities, challenges, and job-related stress as experienced by staff in a new Medical University in the year 2020/2021.

Materials and Methods: Using a predesigned questionnaire, this cross-sectional analytical study was carried out among members of staff of a Private University licensed by the Federal Government of Nigeria.

Results: The total number of staff studied was 128. For opportunities available, respondents had a mean score of 11.43 (minimum of 5 and maximum of 25), implying a moderate impact. The mean stress score at work (for academic workload, research and career development, and work environment) was 10.84 implying high stress. A positive correlation was observed between post-qualification experience score on challenges and impact on departmental work, and this relationship was statistically significant p = 0.000.

Conclusion: The establishment of clinical departments in the new medical university has created room for opportunities, however challenges were numerous with its associated stress. Effort should be directed at enhancing the opportunities and addressing the expressed challenges that reduce job satisfaction.

Keywords: Challenges, Opportunities, Stress, Private University, Nigeria

Cite as: Mato CN, Ijah RFOA, Onodingene NM, Ogamba MI, Aaron FE, Eleki BJ, et al. Opportunities, challenges, and stress, as seen by staff of in a new private medical university. AJRMHS. 2023; 1(1):17 – 25.



INTRODUCTION

The setting up of a new institution is often associated with difficulties, but there are also significant achievements; these have been reported in various studies in medical and non-medical institutions.^{1,2,3,4,5} This is similar to the first time use of a new medical equipment in new settings.6 The dynamic nature of knowledge also requires redesigning of teaching models to accommodate the new demands.^{7,8,9,10} The challenges associated with the setting up of paediatric and neonatal intensive care units in low-income Nepal was reported to include budgetary challenges, lack of expert support, diagnostic facilities, and appropriate medications and equipment.¹¹ There have however been very few reports in Africa, of pioneering the establishment of departments, units / and quality improvement efforts.^{12,13} In the Nigerian setting, issues of growth, justification and challenges of private universities has been well documented.¹⁴ Also, establishment of a new palliative care services with its associated challenges was reported in Enugu, Nigeria.¹⁵ Peculiar challenges encountered on the first anaesthetic weekend call after relocation to a new hospital was reported in Port Harcourt.¹⁶ These experiences and challenges apply to both public and private funded institutions.

All over the world, private universities exist alongside public/government funded universities, especially with the success of private universities in the United States.^{17,18} The last two decades have been reported to be associated with growth and development of private universities, impacting significantly on African higher education.^{19,20} There appears to be a trend towards establishment of private medical universities for diverse reasons, including more responsiveness to market demands.^{21,22} A study compared job satisfaction of administrators in private and public universities with inconclusive results,²³ however, job satisfaction was rather linked to work environments (teamwork and low levels of interpersonal conflict).²³ In private universities also, quality of work life has been linked to job satisfaction.²⁴

The beginning is often laced with challenges, and concerns for successes. Challenges associated with private universities have been severally expressed.^{14,20} However, as new medical institutions are being established, awareness of the multidimensional challenges of the new clinical departments which seek to ensure functionality amidst maintenance of required standards, and availability of information on the experience of other pioneers will greatly reduce the burden of stress. In a sense, gained experiences are the building blocks upon which future progress can be made, hence the importance of documentation of the experiences in our University to ensure sustenance of the vision of its establishment for administrative, staff welfare, and research purposes. The PAMO University of Medical Sciences was established in the year 2017, this documentation enables awareness on the subject matter on where we are and where we could be in the future. The experiences of pioneer clinical lecturers in clinical and basic clinical departments along with other university staff is presented here as opportunities and challenges encountered in the course of establishing new Clinical Departments in the private Medical University. This study therefore aims to highlight the multidimensional opportunities and challenges encountered from the experiences of pioneer lecturers and other members of staff in a Medical University in the year 2020/2021.

MATERIALS AND METHODS

The study was carried out in Port Harcourt the capital city of Rivers State, in the Southern part of the Federal Republic of Nigeria. It has a total land mass of 11,077km; a population of 5,185,400; and a population density of 468/km² (1,210/sq. mi). It is sandwiched among the southern states of Imo and Anambra states in the north-eastern border; Abia and Akwa Ibom states on its eastern border; Delta state on its north-western border; Bayelsa state on its western border; and the Atlantic Ocean on its coastal southern border. The study site was the Departments at the PAMO University of Medical Sciences, a private Medical University in Port Harcourt Nigeria licensed by the Federal Government of Nigeria in 2017, and committed to quality and excellence in Medical Education, Research and Health Services.

The approval of the Research Ethics Committee of the PAMO University of Medical Sciences was obtained, and confidentiality of information was maintained in the process of data collection. This cross-sectional analytical study was carried out among all consenting staff of the university who were available and willing to participate in the study. Data was obtained using a pre-designed and pretested questionnaire (developed, scrutinized by all the authors, and validated). The Cronbach alpha test (in SPSS) was used for the validity of the study instrument and yielded a score of 0.830. Contained in the questionnaire were the location of the institution; traffic and transportation to and from the institution; staff strength (full-time and part-time); development of curriculum, students' logbook, and laboratory manuals; preaccreditation Medical and Dental Council of Nigeria (MDCN) requirements and preparations; accreditation (MDCN) proper; teaching hospital issues such as staff integration and clinical allowances, future and staff retention, students hostels and proximity to the hospital; allocation of lectures; commencement of clinical postings and issues, and the opportunities available for the academia. Work stress was evaluated using four categories with varied number of items: academic workload (5), work environment (2), student-related issue (3), and research and career development (9). Out of the 19-item variables in 4 groups, a scale of 1-3 was used. Average minimum score was 4 and maximum was 20. A score of <2 = No Stress; 2 to ≤ 5 = Low Stress; > 5 = High Stress (Minimum = 2; Maximum = 10). Additionally, stress at work for grouped variables on interpersonal relationship and



administrative-related issues were evaluated differently using a scale of 1 - 3 (no stress, low stress, and high stress. An average total score of <2 = No Stress; 2 to \leq 5 = Low Stress; > 5 = High Stress (Minimum = 2; Maximum = 10).

The impact of available opportunities was scored using a scale of 1 to 3 based on how positively the parameter impacted on the pioneer staff in the course of duty in the University [Mildly Positive Impact) = 1; Moderately Positive Impact = 2; Overwhelmingly Positive Impact = 3]. Out of the items for opportunities (minimum of 5 and maximum of 25), a score of <6 = low impact; 6-12 = moderate impact; 13-19 = high impact; ≥ 19 = very high impact. In a similar manner, the impact of the challenges was scored using a scale of 1 to 3 based on how negligibly positive / negatively impact, negatively the parameter impacted on the pioneer in the course of duty in the University [Mild Effect (Negligibly Positive / Negatively Impacted) = 2; Moderate Effect (Mild to Moderately Positive Impact) = 4; Severe Effect (Markedly / Overwhelmingly Positive Impacted) = 6. Out of the 25-item (minimum of 5 and maximum of 25), a score of <6 = low impact; 6-12 = moderate impact; 13-19 = high impact; ≥ 19 = very high impact.

RESULTS

A 96.0% questionnaire retrieval was achieved and a total of one hundred and twenty-eight (128) respondents were involved in the study.

Table I shows the various Faculties and Departments of respondents. Almost half (48.4%) of the research participants were from the Faculty of Basic Medical Sciences. Some (16.4%) of them were biochemist or work in biochemistry department, 10.9% and 10.2% in physiology and pharmacology respectively. Others were from Faculty of Allied Health Sciences, Faculty of Basic Clinical Sciences and Faculty of Clinical Sciences.

Table II shows opportunities and degree of impact on pioneering departmental work score. The score was evenly distributed across the items or variables. On a scale of 1-3 (for the five items), mean score was 11.43; minimum score was 5 and maximum score was 25. Twenty (15.6%) and 90 (70.3%) respondents felt that there was mildly positive impact and moderately positive impact

respectively in terms of opportunity for conference attendance. While in terms of opportunity for administration experience, 52 (40.7%) and 27 (21.1%) opined that there was markedly positive impact and overwhelmingly positive impact respectively.

The experience of the respondents on challenges/issues and impact on pioneering departmental work is indicated in Table III. Apart from Accreditation (MDCN) proper where 35 (27.3%) respondents were markedly positively impacted, the responses have been suggestively distributed across negligibly positive / negatively impact, and mild to moderate positive impact. Thirty-four (26.6%) respondents were negligibly positive / negatively impacted by the location of the institution, 11 (8.6%) negligibly positive / negatively impacted by the road traffic and transportation to and from the institution, 59 (46.1%) negligibly positive / negatively impacted by clinical allowances, and 73 (57.1%) for future staff retention. Majority of respondents (951) had mild to moderately positive impact and 618 were had no impact or were negatively impacted by the challenges / issues on pioneering departmental work.

Table V shows the evaluation for stress at work for interpersonal relationship and administrative-related issues. There was an average low level of stress recorded (value of 2) among the respondents on interpersonal relationship and administrative-related issues.

The relationship between post-qualification experience in years was correlated with challenges / issues and impact on pioneering departmental work as well as opportunity and degree of impact score and presented in Table VI. A moderate positive correlation (r = 0.352) which shows that as number of years in post-qualification experience increases, the respondents' score on challenges /issues and impact on departmental work increases and this relationship was statistically significant p = 0.000. A weak positive correlation (r = 0.076) was observed between post-qualification experience in years and opportunity and impact of departmental work, although, this was not statistically significant as *P*>0.05 (P=0.448).



Table I: Faculties and Departments of respondents

Variables	Number	Percentage
	(n = 128)	(%)
Faculty of Basic Medical Sciences		
Anatomy	14	10.9
Physiology	14	10.9
Biochemistry	21	16.4
Pharmacology	13	10.2
Faculty of Allied Health Sciences		
Medical Laboratory Sciences	16	12.5
Nursing	12	9.4
Radiography and Radiation Sciences	3	2.3
Faculty of Basic Clinical Sciences		
Anatomical Pathology	3	2.3
Clinical Pharmacology	6	4.7
Hematology, Blood transfusion and Immunology	3	2.3
Chemical Pathology	5	3.9
Faculty of Clinical Sciences		
Surgery	4	3.1
Internal Medicine	5	3.9
Community medicine	4	3.1
Pediatrics and child health	2	1.6
Obstetrics and Gynecology	3	2.3

Table II: Perceived degree of impact of available opportunities on departmental work (n = 128)

	Degree of positive impact on departmental work			
Variables	Mild 1 n (%)	Moderate 2 n (%)	Marked 3 n (%)	Average Total (÷ 128)
Opportunity for Administrative experience	49 (38.2)	52 (40.7)	27 (21.1)	
Cumulative Average	47	128	118	2.29
Opportunity for conference attendance Cumulative Average	20 (15.6) 16	90 (70.4) 219	18 (14.0) 76	2.43
Opportunity for career progression	38 (29.7)	78 (61.0)	12 (9.3)	2.18
Cumulative Average	34	194	51	
Opportunity for improved financial earning	39 (30.5)	62 (48.4)	27 (21.1)	2.28
Cumulative Average	34	145	113	
Quality of equipment and environment Cumulative Average	42 (32.9) 40	54 (42.1) 115	32 (25.0) 113	2.25
Total Cumulative Average Score	171	801	491	11.43



Table III: Impact Score for Challenges on Pioneering Departmental Work (n = 128)

Challenges		Impact on departmental work	
	Negligibly Positive / Negative Impact n (%)	Mild to Moderately Positive Impact n (%)	Markedly Positive Impact n (%)
Location of the institution	34 (26.6)	84 (65.6)	10 (7.8)
Traffic and transportation to and from the institution	11 (8.6)	92 (71.8)	25 (19.5)
Staff strength	18 (14.1)	85 (66.5)	25 (19.5)
Allocation of lectures	34 (26.5)	85 (66.5)	9 (7)
Development of Curriculum	60 (46.8)	53 (41.4)	15 (11.7)
Development of student's logbook	45 (35.1)	70 (54.7)	13 (10.1)
Development of Laboratory manuals	49 (38.3)	69 (53.9)	10 (7.8)
Pre-accreditation (MDCN) Requirements and preparations	20 (15.7)	87 (67.9)	21 (16.4)
Accreditation (MDCN) proper	31 (24.3)	62 (48.4)	35 (27.3)
Staff integration	81 (63.3)	41 (32.0)	6 (4.7)
Clinical allowances	59 (46.1)	53 (41.4)	16 (12.5)
Future and staff retention	73 (57.1)	72 (34.3)	11 (8.6)
Students Hostels and proximity to the hospital	64 (50.0)	58 (45.3)	6 (4.6)
Commencement of clinical postings and issues	39 (30.5)	68 (53.1)	21 (16.4)
Total Responses	618	951	223

Table IV: Work Stress Evaluation

Variable	Work stress level			
	No stress (1)	Low stress (2)	High stress (3)	Average Total
	n (%)	n (%)	n (%)	(÷128)
Academic Workload				2.9
Work Demand	9 (7.0)	84 (65.6)	35 (27.4)	
Delivery of Lecture	10 (7.8)	92 (71.9)	26 (20.3)	
Invigilation of examination	8 (6.3)	106 (82.9)	14 (10.8)	
Setting of examination questions	9 (7.1)	88 (68.6)	31 (24.3)	
Preparation of examination results	8 (16.8)	84 (55.5)	36 (28.0)	
Average Sub-Total	7.4	240.6	122.6	
Work Environment				
State of lecturer's office	19 (14.8)	96 (75.0)	13 (10.1)	
Accommodation/facilities	14 (11.1)	86 (67.3)	28 (21.6)	
Average Sub-Total	13	216	87.5	2.47
Student-related Issue				
Students' population /Density	9 (8.1)	101 (77.9)	18 (14.0)	
Students' project/thesis supervision	13 (10.2)	95 (74.2)	20 (15.6)	
Students' classroom behaviour	10 (7.8)	96 (75.0)	22 (17.2)	
Average Sub-Total	8	263	84	2.77
Research and Career development				
Advancement/Promotion criteria	10 (7.7)	89 (69.6)	29 (22.7)	
Linkage to avenue of professional development	11 (8.6)	92 (71.9)	25 (19.5)	
Sourcing of funds for career development	12 (9.4)	93 (72.6)	23 (18.0)	
Having the required publication for promotion	13 (10.1)	87 (67.9)	28 (22.0)	
Obtaining research /conference incentives	9 (7.0)	86 (67.2)	33 (25.8)	
Sourcing for research funds/grants	12 (9.4)	89 (69.5)	27 (21.1)	
Access to relevant literature	26 (20.3)	94 (73.4)	8 (6.3)	
Publication of finished articles	15 (11.7)	96 (75.0)	17 (13.3)	
Linkage to other professionals in same research field	12 (9.4)	98 (76.3)	18 (14.3)	
	9.33	240.67	95.55	
Average Sub-Total				2.7
Average Total (÷ 128)	37.73	960.27	397.71	10.90



Variables	Work stress level			
	No Stress (1) n (%)	Low Stress (2) n (%)	High Stress (3) n (%)	Average Total Score (÷ 128)
Interpersonal Relationship				
Relationship with colleagues	19 (15.8)	92 (72.9)	14 (11.3)	1
Relationship with non-teaching staff	25 (19.5)	95 (74.2)	8 (6.3)	
Relationship with students	32 (25.0)	87 (68.0)	9 (7.0)	
Relationship with Head of Department	20 (15.6)	98 (76.6)	10 (7.8)	
Relationship with University Management	16 (12.5)	100 (78.1)	12 (9.4)	
Average Subtotal Score	22	94.4	10.6	
Administrative-Related Issues				
Leadership behaviour of university executives	13 (10.3)	89 (69.3)	26 (20.4)	1
Administrative behaviour of Departmental Heads	14 (11.8)	97 (75.8)	17 (13.3)	
Participation in institutional administration	14 (11.0)	99 (77.4)	15 (11.6)	
Average Subtotal Score	13.33	95	19.33	
Average Total Score (÷ 128)	35.33	189.4	29.93	2

Table V: Interpersonal Relationship/Administrative related issues and Work Stress Level

A score of <2 = No Stress; 2 to \le 5 = Low Stress; > 5 = High Stress (Minimum = 2; Maximum = 10)

Table VI: Relationship between post-qualification experience and challenges/issues and impact on pioneering departmental work

Independent Variables	Dependent Variables	<i>R</i> -value	<i>p</i> -value
Post-qualification experience	Challenges/Issues and impact on departmental work	0.352	0.000
	Opportunity and impact on department work	0.076	0.448



DISCUSSION

Work stress, opportunities available at work and ultimate job satisfaction are critical issues that shape public perceptions of organisations.^{25,26,27} The blend of these three therefore partially affect the output of an organization, and also the traffic or dynamics of workers who seek for employment / stay on the job, especially ambitious hard-working persons in their prime. This is because relationship is known to exist between work environment and job satisfaction.^{28,29,30} There were more staff in the Faculty of Basic Medical Sciences and the Faculty of Allied Health Sciences. This was because these two Faculties were established three years before the Faculty of Clinical Sciences whose staff were still being recruited as the need arose. There was a statistically significant positive correlation between years of experience post-qualification and impact on pioneering departmental work.

The mean impact score of 11.43 (for available opportunities) means that the members of staff were moderately positively impacted by the available opportunities in pioneering departmental work. This is a strong point, a favourable one for the university, and an advantageous finding for the staff as opportunity development in administrative issues were available in the young university and utilized by the staff to their advantage (some of the staff were heading their departments and managing other staff, equipment, etc, an opportunity that may have taken several years in an older, more established institution). Similar finding of new opportunities has been reported where new institutions were established.^{31,32,33} However, in another study on private universities in Nigeria it was reported that there was predominant reliance on sabbatical or part-time appointment for academic staff.¹⁴ A significant number of staff (618) were negligibly positive and negatively impacted by the challenges at work, and a mean impact score for these challenges was 29.22 ± 7.13 . This finding is not unusual as challenges are known to be associated with establishment of world-class universities, the status of which is not achieved overnight.³⁴ The Russian higher education and its academic staff faced numerous challenges before its evolution to the present-day status.³⁵ Vietnam had her own share of challenges associated with private higher education especially financial support.³⁶ Also world-class universities in China,³⁷ Singapore,³⁸ and some developing countries,³⁹ also experienced challenges in their evolution to their desired goal.

On the average, a high stress level (a score of 10.84) was reported in the evaluation of stress at work based on academic workload, work environment, student-related issues, and research & career development. This finding may be expected as workers had to put in above average performance in the new university to meet targets for accreditations, academic workload, research, etc., coupled with limited number of staff to meet set targets under a culture of strict discipline. This thought is partly strengthened by the findings in another study with data drawn from selected Nigerian universities where the teaching and supervision load of the academic staff was reported to be quite heavy.⁴⁰ The negative impact of occupational stress on the academic staff of Covenant University, a private University in Nigeria, was reported in 2014.⁴¹ Stress among academicians is inevitable when remuneration, compensation, job security and working conditions are suboptimal as reported in a study on determinants of job satisfaction among academics in Bangladesh.⁴²

We observed a statistically significant positive correlation between years of experience post-qualification and impact on pioneering departmental work. The setting of this study was that of a blend of experienced lecturers who had worked in other universities at administrative capacities, and younger less experienced staff who were very ambitious about their future. This may explain the differences in the positive correlation in the years of experience and the impact. Hence, while the younger less experienced staff were more interested in how much impact value they could get from the system, the older more experienced staff may have focused on how much they could impact on the system, drawing from their wealth of experience. Additionally, the older staff may have been firmly rooted in the society through family, previous full-time engagements, and social responsibilities, and therefore were able to have their attention on the job comparatively. The opposite may have been the case with the younger less-experienced staff who may have seen the private university teaching job as temporary, with their eyes and attention on other possible opportunities.

Study Limitation: Some members of staff (cleaners, laborers, security staff, and cooks) of the university who were not usually found in offices were not captured in this study. Additionally, the staff of the RSUTH, some of whom were full time staff of the RSU, have experiences that may impart some bias in the study different from the staff of the private-based PUMS, hence their none-inclusion.

Conclusion: Although the establishment of new clinical departments in the new medical university among others, has created opportunities for administrative experience and career progression for the clinical staff, challenges were numerous and marked.

Recommendations: Prospective private university executive and administrators could learn from the lessons from the experiences so expressed to plan for their dream project. Effort should be directed at enhancing the opportunities and addressing job stress.

Acknowledgement: The field officers that we recruited for the collection of data and the data analyst – Mr. Zacchaeus O. Adeyanju contributed immensely to the success of this work for which we are very grateful.

Funding: The study was self-funded by the authors

Conflict of Interest: None declared

REFERENCES

- 1. Busuttil J. Setting up an occupational therapy school and a problem-based learning occupational therapy course. British Journal of Occupational Therapy. 1986;49(10):324-326.
- 2. Armitage GC. A brief history of periodontics in the United States of America: Pioneers and thought leaders of the past, and current challenges. Periodontology 2000. 2020;82(1):12-25.
- 3. Otoru OO, Abioye-Kuteyi EA, Awokola BI. Practical challenges of setting up an electronic medical record system in a Nigerian tertiary hospital: The Wesley Guild Hospital experience. World Family Medicine Journal: Incorporating the Middle East Journal of Family Medicine. 2012; 99(308):1-5.
- Datli A, Karasoy I, Genc Y, Pilanci O. Challenges of Setting up a Lower Extremity Reconstruction Practice in a Constrained Environment. Journal of reconstructive microsurgery. 2020; 37(01): 067-074
- Grönqvist H, Olsson EMG, Johansson B, Held C, Sjöström J, Norberg AL, et al. Fifteen challenges in establishing a multidisciplinary research program on ehealth research in a university setting: a case study. Journal of medical internet research. 2017;19(5):e173.
- 6. Cleary K, Nguyen C. State of the art in surgical robotics: clinical applications and technology challenges. Computer Aided Surgery. 2001; 6(6):312-328.
- Hammerness K, Darling-Hammond L. Meeting Old Challenges and New Demands: The Redesign of the Stanford Teacher Education Program. Issues in Teacher Education. 2002;11(1):17-30.
- Thomas H, Lorange P, Sheth J. The business school in the twenty-first century: Emergent challenges and new business models. 1st Ed. New York: Cambridge University Press; 2013.
- Sadler I. The challenges for new academics in adopting studentcentred approaches to teaching. Studies in Higher Education. 2012; 37(6): 731-745.
- Salmi J. Tertiary education in the 21st century: challenges and opportunities. Higher education management. 2001; 13(2): 105-128.
- 11. Basnet S, Adhikari N, Koirala J. Challenges in setting up pediatric and neonatal intensive care units in a resource-limited country. Pediatrics. 2011; 128(4):e986-e992.
- 12. Agyeman-Duah JNA, Theurer A, Munthali C, Alide N, Neuhann F. Understanding the barriers to setting up a healthcare quality improvement process in resource-limited settings: a situational analysis at the Medical Department of Kamuzu Central Hospital in Lilongwe, Malawi. BMC Health Services Research. 2014;14(1):1-10.
- 13. Kengne AP, Sobngwi E, Fezeu L, Awah P, Dongmo S, Mbanya J-C. Setting-up nurse-led pilot clinics for the management of non-communicable diseases at primary health care level in resource-limited settings of Africa. Pan African Medical Journal. 2009;3(1): 1-10.
- 14. Ajadi TO. Private Universities in Nigeria-the Challenges Ahead. Private Universities in Nigeria-the Challenges Ahead. 2010;1(7):1-10.

- 15. Onyeka TC. Palliative care in Enugu, Nigeria: Challenges to a new practice. Indian journal of palliative care. 2011;17(2):131-136.
- 16. Onajin-Obembe B, Otokwala G. The effects of relocation to a new hospital on the first anaesthetic weekend call. Port Harcourt Medical Journal. 2008;2(2):140-144.
- 17. Aithal P, Revathi R. Comparison of Private Universities in India based on NIRF Ranking and Fee Charging Strategies. International Journal of Case Studies in Business, IT and Education (IJCSBE). 2017;1(2):72-85.
- Nazir T, Khan S, Shah S, Zaman K. Impact of rewards and compensation on job satisfaction: Public and private universities of UK. Middle-East Journal of Scientific Research. 2013;14(3):394-403.
- 19. Munene II. Anticipated developments: East Africa's private universities and privatisation of public universities in the global context. Africa Education Review. 2009;6(2):254-268.
- 20. Iruonagbe C, Imhonopi D, Egharevba ME. Higher education in Nigeria and the emergence of private universities. International journal of Education and Research. 2015;3(2):49-64.
- Halai N. Quality of private universities in Pakistan: An analysis of higher education commission rankings 2012. International Journal of Educational Management. 2013 Sep 13;27(7):775-786.
- Baharun R, Awang Z, Padlee SF. International students choice criteria for selection of higher learning in Malaysian private universities. African journal of Business management. 2011; 5(12):4704-4714.
- 23. Volkwein JF, Parmley K. Comparing administrative satisfaction in public and private universities. Research in Higher Education. 2000; 41(1):95-116.
- 24. Tabassum A. Interrelations between quality of work life dimensions and faculty member job satisfaction in the Private Universities of Bangladesh. European Journal of Business and Management. 2012; 4(2):78-89.
- 25. Lia F, Bambang H. Effect of job satisfaction and perception of work opportunities to turnover intention with organization commitment as intervening variables: the case of hotels in East Java, Indonesia. Russian Journal of Agricultural and Socio-Economic Sciences. 2017; 68(8):167-178.
- 26. Piatak JS, Holt SB. Public service motivation and public opinion: Examining antecedents and attitudes. England: Cambridge University Press; 2021.
- 27. Hanegraaff M, Poletti A. Public opinion and interest groups' concerns for organizational survival. European Political Science Review. 2019;11(2):125-243.
- Raziq A, Maulabakhsh R. Impact of working environment on job satisfaction. Procedia Economics and Finance. 2015; 23:717-725.
- 29. Agbozo GK, Owusu IS, Hoedoafia MA, Atakorah YB. The effect of work environment on job satisfaction: Evidence from the banking sector in Ghana. Journal of human resource management. 2017;5(1):12-18.

[©] Mato et al; This is an open access article distributed under the Creative Commons Attribution License [http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium provided the original work is properly cited 24



- 30. Taheri RH, Miah MS, Kamaruzzaman M. Impact of working environment on job satisfaction. European Journal of Business and Management Research. 2020; 5(6): 1-5.
- Feder T. Opening a new university offers opportunities to try new approaches and reach new populations. Physics Today. 2020; 73(4):22-26.
- 32. Aithal PS, Kumar PM. Opportunities and challenges for private universities in India. International Journal of Management, IT and Engineering. 2016; 6(1):88-113.
- Fapohunda TM. Pay disparity and pay satisfaction in public and private universities in Nigeria. European Scientific Journal. 2012; 8(28): 120-135.
- 34. Salmi J. The challenge of establishing world-class universities. Washington DC. World Bank Publications; 2009.
- 35. Smolentseva A. Challenges to the Russian academic profession. Higher education. 2003; 45:391-424.
- 36. Hayden M, Van Khanh D. Private higher education in Vietnam. In: Harman G et al. (eds.), Reforming higher education in Vietnam: Challenges and priorities. Australia. Springer Dordrecht; 2010:215-225.
- 37. Wang QH, Wang Q, Liu NC. Building world-class universities in China: Shanghai Jiao Tong university. In: Altbach and Salmi, Eds. The road to academic excellence: The making of world-

class research universities. Washington DC. World Bank Publications; 2011.

- 38. Ginsburg A, Leinwand S, Anstrom T, Pollock E. What the United States Can Learn From Singapore's World-Class Mathematics System (and What Singapore Can Learn from the United States): An Exploratory Study. Washington DC. American Institutes for Research; 2005.
- Salmi J. The challenge of establishing world-class research universities in developing countries. In: Weber and Duderstadt, Eds. University Research for Innovation. London. Routledge; 2011.
- 40. Oladejo SY. Appraisal of Teaching and Supervision Load of Academic Staff in Selected Universities in Nigeria. European Review of Applied Sociology. 2022;15 (25): 1-12.
- 41. Akinyele ST, Epetimehin S, Ogbari M, Adesola AO, Akinyele FE. Occupational stress among academic staff in private university: Empirical evidence from Covenant University, Nigeria. Journal of Contemporary Management Research. 2014; 8(1):1-23.
- Masum AK, Azad MA, Beh LS. Determinants of academics' job satisfaction: Empirical evidence from private universities in Bangladesh. PloS one. 2015; 10(2): 1-15.