



MAPPING THE POSTGRADUATE THESES AND DISSERTATIONS OF MODIBBOADAMA UNIVERSITY, YOLA, NIGERIA, 1999-2021: A BIBLIOMETRIC STUDY

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ABSTRACT:

The study focuses on the mapping of postgraduate research output (theses and dissertations) of ModibboAdama University, Yola during the period of 23 years of running its postgraduate programme (1999-2021). The theses and dissertations were obtained from the postgraduate faculty of the university. Every graduated postgraduate degree has a copy of its theses/dissertation deposited and they were used to retrieve bibliographic data for the study. The study covers 1881 theses and dissertation produced in the University within the period of the study. The study examined and analyzed the types of postgraduate research output produced, the growth of postgraduate research output, Annual Growth Rate (AGR) of the research output, Compound Annual Growth Rate (CAGR) of the postgraduate research output and most prolific academics in terms of postgraduate supervision and graduation.



KEYWORDS: ModibboAdama University, Bibliometric, Postgraduate research Output, Annual Growth Rate (AGR), Compound Growth Rate (CAGR), Most Prolific Academic.

1.INTRODUCTION

Bibliometric involves studying and analyzing publications using mathematical manipulations. It is one of the few subfields concerned with measuring the output side of science. According to most "histories", bibliometrics owes its systematic development mainly to D.J.D. Price and Eugene Garfield, as founders. The few works conducted before the 1950s are usually relegated to prehistory, (Godin, 2006).

1.1 ModibboAdama University: In its 27 years of establishment, the university under study transformed from ModibboAdama College of University of Maiduguri (MACUM), to Federal University of Technology, Yola (FUTY), to ModibboAdama University of Technology, Yola (MAUTech), and presently ModibboAdama University, Yola (MAU). The University was established in 1981 by the Federal Government of Nigeria to provide the much needed technologically skilled manpower for the nation. It is one of the Federal Universities recognized by National Universities Commission (NUC) to offer Bachelor's, Master's and Doctorate degrees in different fields. The University's first set of 108 students graduated in the 1988/89 academics session. The University was merged to University of

Maiduguri in the 1984, when it became the ModibboAdama Campus (MACUM), of University of Maiduguri. However, in 1988, it was de-merged and granted full autonomy with the name reverted to Federal University of Technology, Yola. In 2011, the then President and Commander in-Chief, Dr. GoodluckEbele Jonathan, GCFR approved the change of the University's name to ModibboAdama University of Technology, (MAUTECH) Yola, effective from 1st October 2011. With students' population of over twenty thousand, the University runs undergraduate and postgraduate programs in seven schools namely:

Faculty of Agriculture; Faculty of Environmental Science; Faculty of Social and Management Sciences; Faculty of Physical Sciences; Faculty of Life Sciences; Faculty of Engineering; and Faculty of Education.

Teaching and Research in Science and Technology have been the main thrust of the University. These have been attracting to the University series of collaboration and partnership with foreign Universities, Corporate bodies, Government and non-Governmental Organizations. Six distinguished professors have successfully steered the affairs of the University as Vice Chancellors from its inception.

2. LITERATURE REVIEW

Nagarka et al (2015) conducted a study on Bibliometric analysis of papers published by faculty of Life Science Departments of SavitribaiPhule Pune University during 1999 – 2013. The study found that the research productivity of faculty members were increasing, their publications were getting good citations and their journals have better impact factors. The study also found that the faculty member have collaborated with prominent international researchers and have extended interdisciplinary research.

Prabhoi (2019) also conducted a study on Scholarly Publications of Academic Librarians in India from 1989 – 2018. The Study analyzed a total of 683 publications. Findings of the study show that 458 publications had no citations and the growth of the publications was stable. The study equally find out that majority of the publications are journal articles and conference papers.

Prabhoi et al (2019) studied library and Information Science research in East and North East India. They found that 32 LIS faculty and Authors contributed 967 papers from 1980 – 2017. 452 publications are journal articles. The study also found that most of the papers were published in conference in PLANNER 54 publications, CALIBER 44 publications and IASLIC conference 17 publications. The Study also found that very few faculties used Google Scholar IDs.

Shukla et al (2019) in their study of mapping the research publications pattern of faculties of library and Information Science department, Mizoram University, Aizawl from 2008 – 2017: A Bibliometric study, analyzed 279 publications of which 119 of the publications were journal articles. The study found out that the maximum number 61 (21.86%) of research papers were published in 2017. The study also found that there is no constant growth of publications every year during the period of the study and the highest growth rate was 366.67 in the year 2010. The study also found that the yearly output is increasing annually, but the compound annual growth rate is in fluctuation trend. On most prolific author, the study found that Dr. Manoj Kumar Verma is the most productive author and ranked first with 90 (32.26%) publications.

3. OBJECTIVES OF THE STUDY:

The objectives of the study are:

1. Find out the type of postgraduate research output produced in the university
2. Determine the growth of postgraduate research output of the university
3. Find out the annual growth rate of the postgraduate research output of the university
4. Determine the compound annual growth rate of the postgraduate research output of the university
5. Determine the most prolific postgraduate supervisor in the university.

4. SCOPE OF THE STUDY

The scope of the study is restricted to only postgraduate theses and dissertations produced in the university since 1999-2021.

5. METHODOLOGY

This is a Bibliometric analysis of postgraduate research output of MAU, Yola. Survey and observation method were used. The data were retrieved from 1,881 theses and dissertations available at the postgraduate faculty of the university. This is because the theses and dissertations of the University are not available online. The data collected were manually analyzed and presented in form of tables. Annual Growth Rate and Compound Growth Rate were analyzed using the formulae;

$$R = \frac{\text{Ending Value}}{\text{Begining Value}} - 1 \times 100, CAGR = \left(\frac{\text{Ending Value}}{\text{Begining Value}} \right)^{1/n} - 1 \times 100$$

Weighting system (PhD = 5 points, MSc/MTech = 3 points, MBA/MPA = 2 points and PGD/PGDE = 1 point) was used to determine the ranking of the academic staff.

1. DATA ANALYSIS

6.1 Types of Postgraduate research output.

The type of postgraduate research output of the University is presented in table 1 and figure 1 below.

Table 1: Types of Postgraduate research output

Year	PhD	MSc/ MTech	MBA/MPA	PGD/PGDE	Total
1999		1			1
2000		1			1
2001	0	1		5	6
2002	0	1		6	7
2003	0	1		10	11
2004	1	2		7	10
2005	2	2		5	9
2006	3	10	1	14	28
2007	10	25		22	57
2008	4	15	1	8	28
2009	2	33	1	4	40
2010	8	31	1	25	65
2011	15	55	2	24	96
2012	17	29	3	34	83
2013	8	62	5	10	85
2014	19	24	7	18	68
2015	23	46	8	16	93
2016	17	141	19	16	193
2017	22	156	8	18	204
2018	8	222	12	4	246
2019	43	49	15	20	127
2020	14	201	4	3	222
2021	53	119	19	10	201
Total	269	1227	106	279	1881

Figure 1. Types of Postgraduate research output



As depicted in table 1 and figure 1 above, a total of 1881 theses and dissertations were produced in the university since the inception of its postgraduate programmes. Master Degree (MSc/MTech) has a total of 1227 (65.2%), followed by Postgraduate Diploma with 279 (14.8%), Doctor of Philosophy has 269 (14.3%) and Master in Business Administration and Public Administration has 106 (5.6%).

6.2 Growth of Postgraduate research output.

The growth of postgraduate research output of the University is presented in table 2 and figure 2 below.

Table 2: Growth of Postgraduate research output

Year	Number of Postgraduate Research Output	Percentage
1999	1	0.05
2000	1	0.05
2001	6	0.32
2002	7	0.37
2003	11	0.58
2004	10	0.53
2005	9	0.48
2006	28	1.48
2007	57	3.03
2008	28	1.49
2009	40	2.13
2010	65	3.46
2011	96	5.10
2012	83	4.41
2013	85	4.52
2014	68	3.61
2015	93	4.94

2016	193	10.26
2017	204	10.85
2018	246	13.08
2019	127	6.75
2020	222	11.80
2021	201	10.69
Total	1881	

Figure 2. Growth of Postgraduate research output

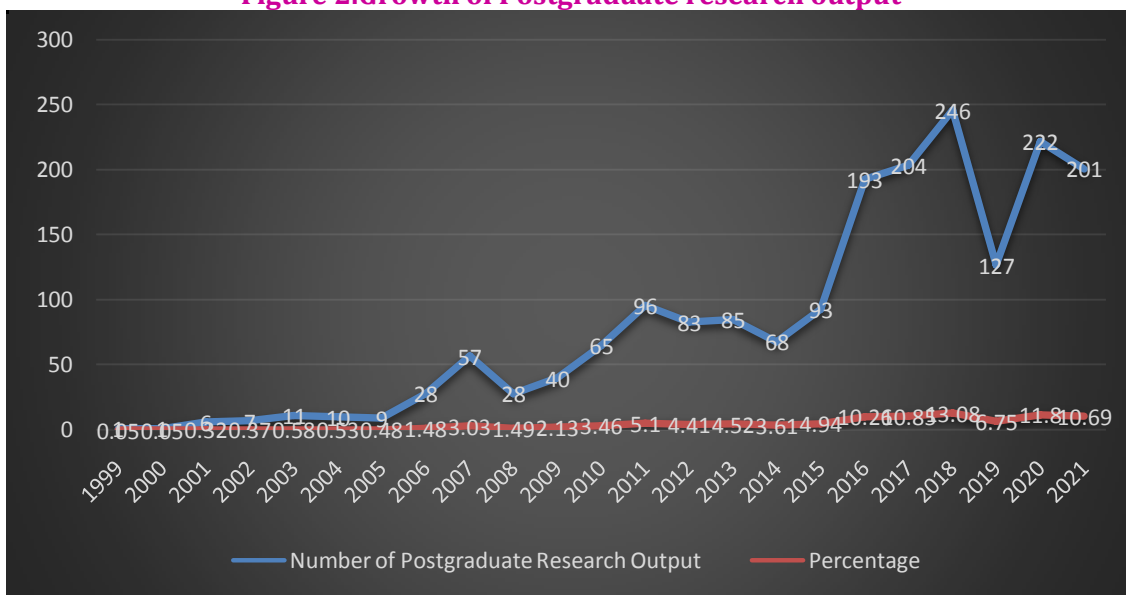


Table 2 and figure 2 above show the growth of the postgraduate research output of the University for the 23 years of its postgraduate program. The year with highest number of theses and Dissertations is 2018 with 13.08%. This is followed by 2020 (11.8%), 2017 (10.85%), 2021 (10.69%) and 2016 (10.26%).

6.3 Annual Growth Rate (AGR) of the postgraduate research output of the University.

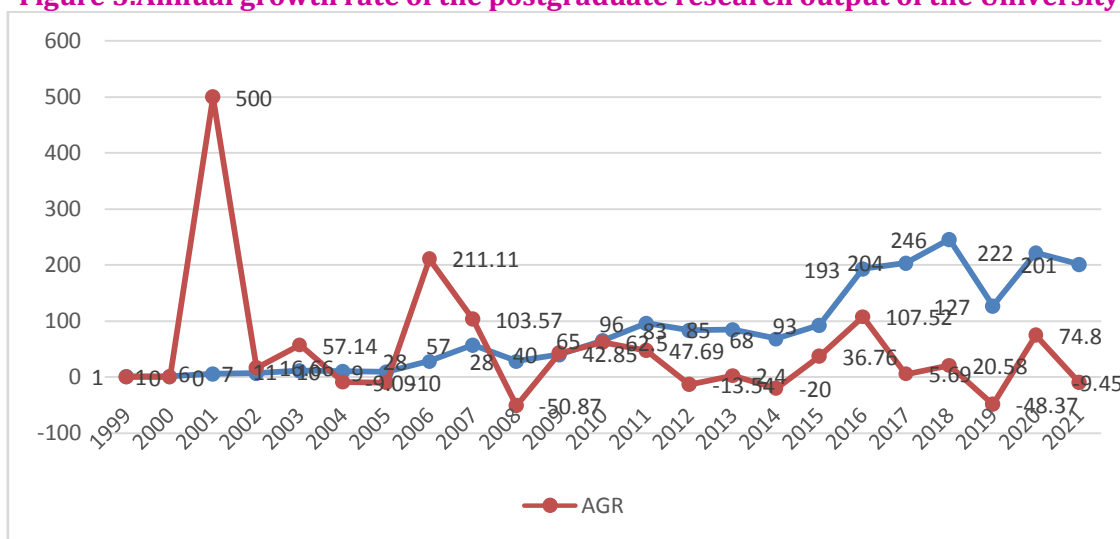
The Annual Growth Rate of the postgraduate research output of the University is presented in table 3 and figure 3 below.

Table 3: Annual growth rate of the postgraduate research output of the University

Year	Number of Postgraduate research output	AGR
1999	1	0
2000	1	0
2001	6	500
2002	7	16.66
2003	11	57.14
2004	10	-9.09
2005	9	-10
2006	28	211.11
2007	57	103.57
2008	28	-50.87

2009	40	42.85
2010	65	62.5
2011	96	47.69
2012	83	-13.54
2013	85	2.40
2014	68	-20
2015	93	36.76
2016	193	107.52
2017	204	5.69
2018	246	20.58
2019	127	-48.37
2020	222	74.80
2021	201	-9.45

Figure 3. Annual growth rate of the postgraduate research output of the University



From table 3 and figure 3 above, it can be deduced that the Annual Growth Rate is fluctuating. The growth is not normal. Year 2001 recorded the highest annual growth rate of 500, followed by 2006 with 211.11, then 2016 with 107.52 and 2007 with 103.57.

6.4 Compound Annual Growth Rate (CAGR) of the postgraduate research output of the University.

The Compound Annual Growth Rate of the postgraduate research output of the University is presented in table 4 and figure 4 below.

Table 4: Compound Annual Growth Rate of the Postgraduate Research Output of the University

Year	Number of Postgraduate research output	Cumulative Frequency	CAGR
1999	1	1	0
2000	1	2	0
2001	6	8	81.71
2002	7	15	3.93
2003	11	26	9.46
2004	10	36	-1.56
2005	9	45	-1.49

2006	28	73	15.24
2007	57	130	8.23
2008	28	158	-6.86
2009	40	198	3.96
2010	65	263	4.13
2011	96	359	3.05
2012	83	442	-1.03
2013	85	527	0.16
2014	68	595	-1.38
2015	93	688	1.86
2016	193	881	4.14
2017	204	1085	0.29
2018	246	1331	0.94
2019	127	1458	-3.10
2020	222	1680	2.57
2021	201	1881	-0.43

Figure 4. Compound Annual Growth Rate of the Postgraduate Research Output of the University

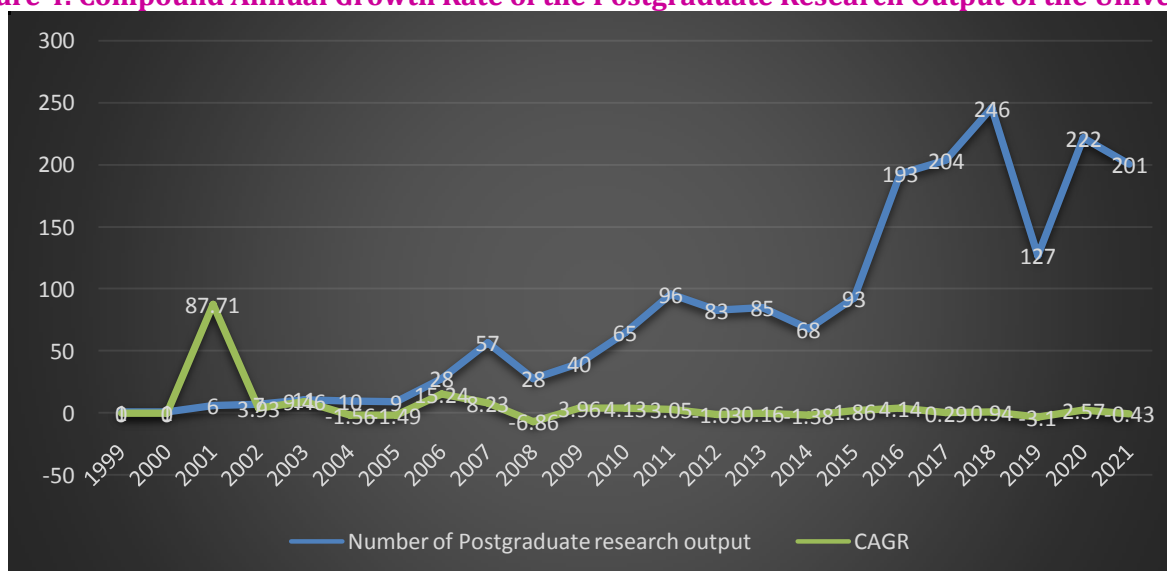


Table 4 and figure 4 above reveal that the Compound Annual Growth Rate is also fluctuating just as the Annual Growth Rate. Year 2001 has 87.71, followed by 2006 with 15.24 Compound Annual Growth Rate.

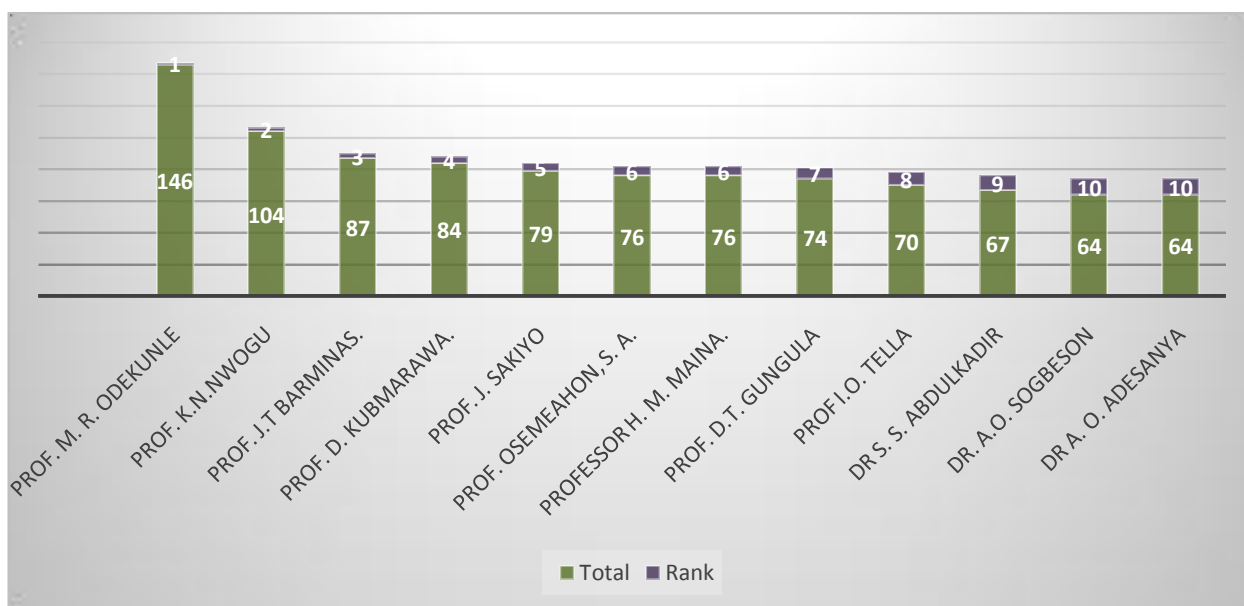
6.5 Most Prolific Academic Staff in Postgraduate Supervision and Graduation

The most prolific academic staff in postgraduate supervision in the University is presented in table 5 and figure 5 below.

Table 5: The most prolific academic staff in postgraduate supervision in the University

NAME	PhD		MSc		MBA/MPA		PGD/PGDE		Total	Rank
	F	Score(5)	F	Score(3)	F	Score (2)	F	Score(1)		
Prof. M. R. Odekunle	16	80	22	66	-	-	-	-	146	1
Prof. K.N.Nwogu	9	45	19	57	1	2	-	-	104	2
Prof. J.T Barminas.	1	5	27	81	-	-	1	1	87	3
Prof. D. Kubmarawa.	6	30	17	51	-	-	3	3	84	4
Prof. J. Sakiyo	5	25	12	54	-	-	-	-	79	5
Prof. Osemeahon, S. A.	3	15	20	60	-	-	1	1	76	6
Professor H. M. Maina.	6	30	15	45	-	-	1	1	76	6
Prof. D.T. Gungula	3	15	19	57	-	-	2	2	74	7
Prof I.O. Tella	11	55	5	15	-	-	-	-	70	8
Dr S. S. Abdulkadir	2	10	19	57	-	-	-	-	67	9
Dr. A.O. Sogbeson	5	25	12	36	-	-	3	3	64	10
Dr A. O. Adesanya	8	40	8	24	-	-	-	-	64	10

Figure 5: The most prolific academic staff in postgraduate supervision in the University



From table 5 and figure 5 above, it clearly shows that Professor M.R. Odekunle is the most prolific postgraduate supervisor in the university, who ranked first with 146 points, followed by Prof. K.N. Nwogu ranked second with 104 points. Prof. J.T. Barminas is ranked third with 87 points, while Prof.D. Kubmarawa is ranked fourth with 84 points. Prof. J. Sakiyo is ranked fifth with 79 points. Prof. Osemeahon S. A. and Prof H.M. Maina are ranked sixth with 76 points each. Prof D. T. Gungula is ranked seventh with 74 points while Prof I. O. Tella is ranked eight with 70 points. Dr. S. S. Abdulkadir with 67 points is ranked nine, while Dr. A. O. Sogbeson and Dr. A. O. Adesanya are ranked ten with 64 points each.

CONCLUSION

From this bibliometric study of mapping the postgraduate theses and dissertations of ModibboAdama University, Yola, Nigeria, from 1999 to 2021, 1881 total of theses and dissertations were examined and analyzed. 1227 of out of the 1881 are all master degree representing 65.2% of the total theses and dissertations. Year 2018 recorded highest number of theses and dissertations with 246 (13.08%). Although the growth of the theses and dissertations are generally increasing, the annual growth rate and compound growth rate are in fluctuating trends.

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