Assessing the research profile of highly productive authors of Pakistan

Nazia Wahid
Dr Nosheen Fatima Warraich

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Introduction

- **Research performance is outcomes of researchers' accomplishments for the attainment of understanding and knowledge.**

- **The intentions of these evaluations are;**
  - **Stimulating research productivity and impact.**
  - **Assessing the outcomes of research grants.**
  - **Planning for further improvement and policy making decisions.**

- **One of the effective approaches for the assessment of scientific research performance is *Scientometric analysis* that offers measures for investigating main aspects of scientific activities by means of quantitative and statistical techniques.**

- **Scientometric studies have been commenced predominantly towards understanding the research growth and patterns in recent years.**

ICoLIS 2021
8th International Conference on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Reimagining Libraries for a Post-Pandemic World.

Research Objectives

- To analyze the publication and citation patterns of highly productive Pakistani authors.

- To find out the patterns of collaboration among highly productive Pakistani authors.

- To examine the application of scientometric research evaluation indicators as a measure of research productivity for the most productive authors of Pakistan

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Literature Review

Databases Search →
- **Web of Science**
- **SCOPUS**
- **Google scholar**

Keywords Search →
- **Publication productivity**
- **Scientific performance**
- **Academic research performance**
- **Scientific productivity**
- **Research Performance Evaluation**

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Reimagining Libraries for a Post-Pandemic World.

Research Methodology

Data Source Selection

Sample Selection

Data Retrieval

Data Cleaning

Data Verification

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Research Methodology

Retrieval of Data:

Advanced search field= (CU) Pakistan
Document Type= (Article OR Proceedings Paper OR Review OR Corrections)
Time Span= 2007-2016

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Rank	Organization	Record Count
1	Quaid-e-Azam University, Islamabad.	7513
2	COMSATS Institute of Information Technology	6181
3	University of Agriculture, Faisalabad	5180
4	University of the Punjab, Lahore	4518
5	University of Karachi, Karachi	4064
6	Agha Khan University, Karachi	3165
7	National University of Science and Technology	2776
8	Bahauddin Zakariya University, Multan	2482
9	University of Peshawar, Peshawar	2172
10	Government College University, Lahore	2159

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

- **Scientometric measures**
- **Collaboration measures**

Demographic Information

Description	Frequency
Gender	
Male	87
Female	13
Sector	
Private	1
Public	19
Discipline	
Life Science and Biomedicine	44
Physical Science	52
Technology	4
Academic Rank	
Meritorious Professors	4
Professor	57
Associate Professor	26
Assistant Professor	13

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
▪ 18 & 19 August 2021
Kuala Lumpur, Malaysia

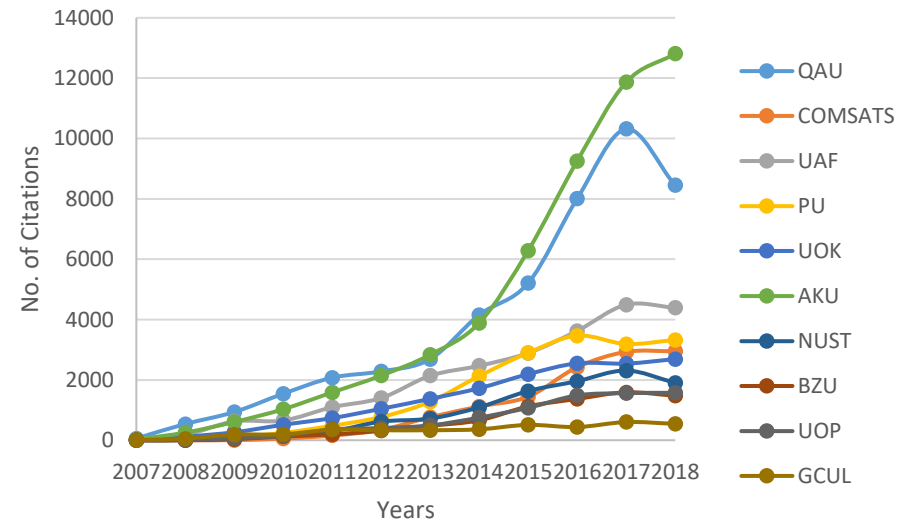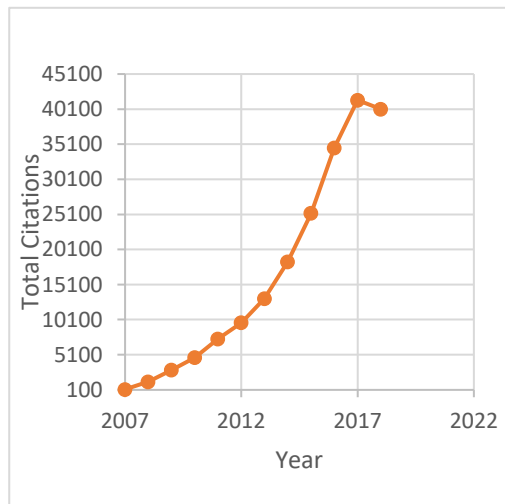Reimagining Libraries for a Post-Pandemic World.

Publications & citations growth

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

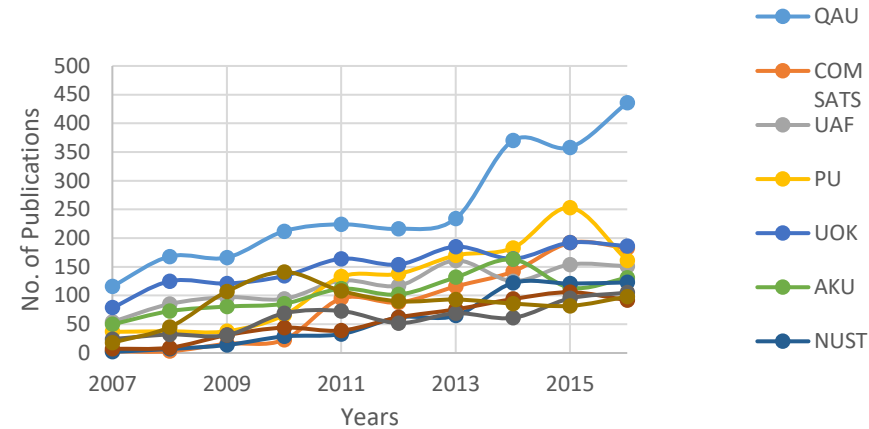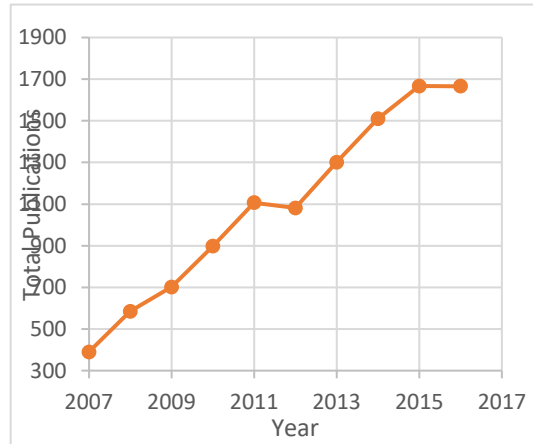Reimagining Libraries for a
Post-Pandemic World.

S/N	Document Type	Record count	Citations	Citations per publications
1	Article Type Article	10200	169916	16.66
2	Article Type Proceedings Paper	93	991	10.66
3	Article Type Review	573	27645	48.25
4	Article Type Corrections	41	84	2.05

Collaboration

S/N	Publications	Publications	Citations	Citations per publications
1	Single - Authored Publications	0.94%	0.87%	16.77
2	Double -Authored Publications	9.62%	8.97%	16.99
3	Multi - authored Publications	89.44%	90.16%	18.36
4	Institutional collaborated publications	24.19%	18.50%	13.94
5	International collaborated publications	47.17%	63.70%	24.61
6	National collaborated publications	28.65%	17.81%	11.33

Reimagining Libraries for a Post-Pandemic World

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
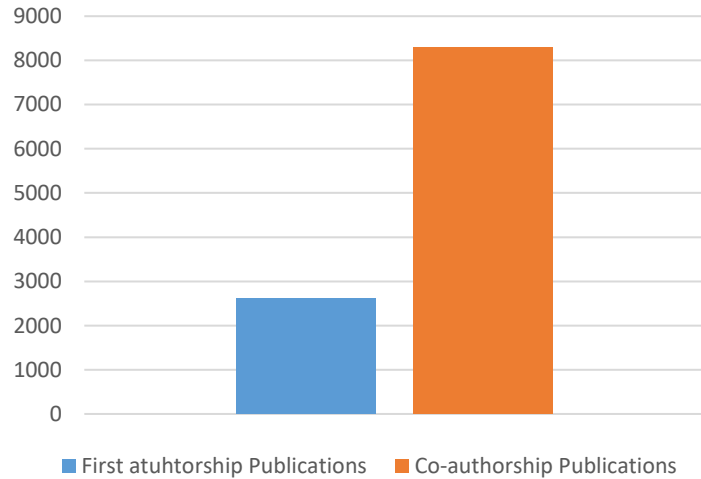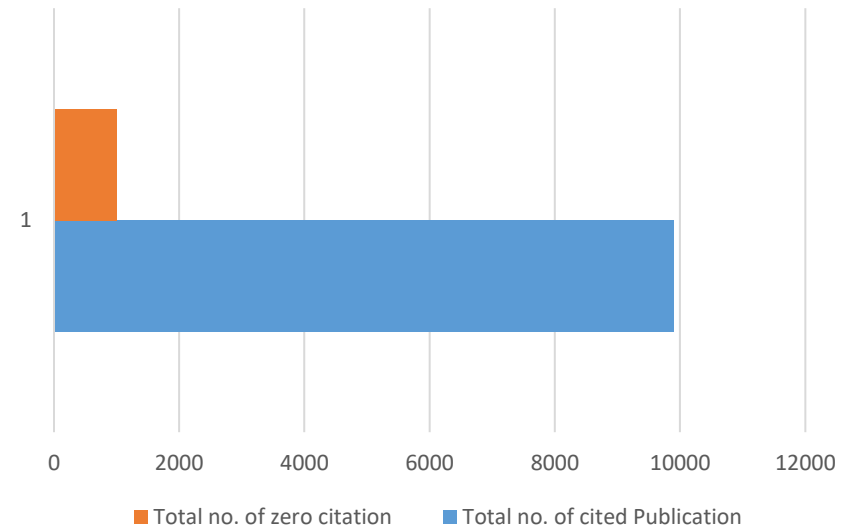18 & 19 August 2021
Kuala Lumpur, Malaysia

Collaborations

- **The propensity to collaborate increases double fold from 33% in first five year period to 66% in the next.**

- **The propensity to collaborate at national and institutional level declined**

- **This intensity is increased at international level from 37% in first five year period to 51% in the next five years.**

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

First Author Publications

Zero-cited publications

1	**Funded**	5540	103073	18.6
2	**Non-Funded**	5367	95563	17.8

Journal Impact Factor
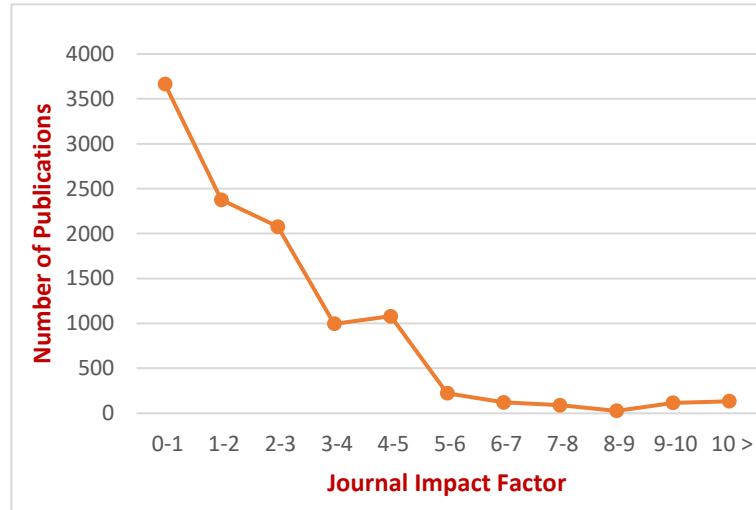
Quartile ranking
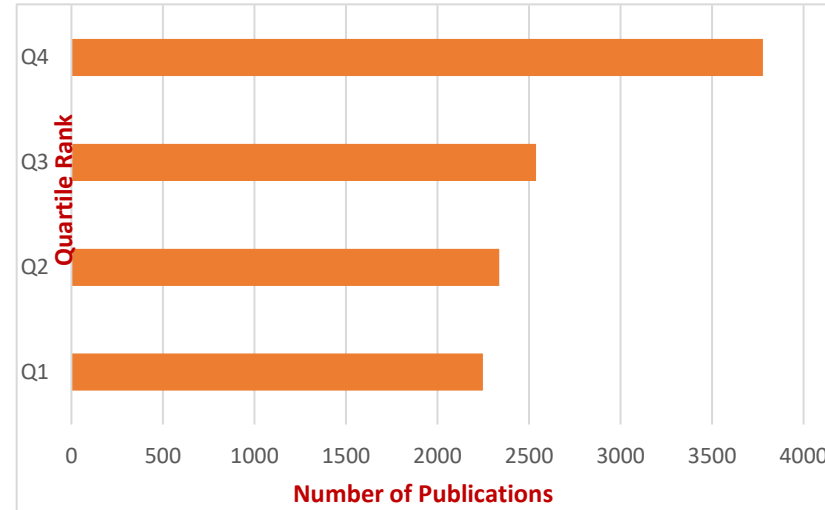
Application of scientometric research evaluation indicators

Author	h-index	g-index	r-index	m-index	p-index	hg-index	q2-index
I	81 (1)	185 (1)	173.5 (1)	132(1)	154.7(1)	122.4(1)	103.4(1)
II	70 (2)	95 (2)	86.5 (2)	91(2)	85.7 (2)	81.5(2)	79.8(2)
III	41 (3)	58(5)	52.8 (6)	61(5)	52.9 (4)	48.8(3)	50 (3)
IV	37 (4)	58(5)	52.9 (5)	57(7)	46.1(9)	46.3(5)	45.9(4)
V	36 (5)	62 (4)	57.5 (4)	58(6)	51.4(5)	47.3(4)	45.7(5)
VI	35 (6)	50 (10)	45.7(10)	53(8)	44.7(10)	41.8(7)	43.1 (7)
VII	33 (7)	-	-	-	-	-	-
VIII	33(7)	-	-	-	-	38.5(10)	38.1(10)
IX	32(8)	-	-	-	-	-	-
X	32(8)	51 (9)	46.3(9)	-	-	40.4 (8)	38.7(9)
Note: The authors rank based on the measure is given in parenthesis							

Conclusion

- **Productive authors make efforts to increase their publications. A steady increase of overall citations of all the productive authors was observed.**

- **Most of the publications of the authors are from the result of collaboration. The inclination of the authors towards collaboration is indicator to the improvement of research in country**

- **The high visibility of the research as reflected in the low proportion of uncited publications.**

- **Variation was found in the position of authors among the performance measures since only two authors retained the same position in all metrics.**

Reimagining Libraries for a Post-Pandemic World.

ICoLIS 2021
8th International Conference on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

References

- Bakri, A., Azura, N.M., Nadzar, M., Ibrahim, R., and Tahira, M. 2017. Publication Productivity Pattern of Malaysian Researchers in Scopus from 1995 to 2015. *J ScientometricRes*, Vol. 6 no.2: 1-16.

- Fu, H. Z., Chuang, K. Y., Wang, M. H. and Ho, Y. S. 2011. Characteristics of research in China assessed with Essential Science Indicators. *Scientometrics*, Vol. 88, no. 3: 841–862.

- Ibanez, A., Bielza, C., and Larrañaga, P. 2013. Relationship among research collaboration, number of documents and number of citations: a case study in Spanish computer science production in 2000–2009. *Scientometrics*, Vol.95 no.2: 689-716.

- Ivanović, D., Fu, H.-Z., and Ho, Y.-S. 2015. Publications from Serbia in the Science Citation Index Expanded: a bibliometric analysis. *Scientometrics, 105*(1), 145-160.

- Jan, S. U., and Anwar, M. A. 2013. Impact of Pakistani authors in the Google world: A study of library and information science faculty. *Library Philosophy and Practice (e-journal)*.

- Miller, J. C., Coble, K. H., and Lusk, J. L. 2013. Evaluating top faculty researchers and the incentives that motivate them. *Scientometrics*, Vol. 97 no. 3: 519-533.

- Noorhidawati, A. Aspura, M.K. Y.I, Zahila, M.N. and Abrizah, A 2017. Characteristics of Malaysian highly cited papers . *Malaysian Journal of Library & Information Science*, Vol. 22 no. 2: 85-99.

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Thank you

?

ICoLIS 2021
8th International Conference
on Libraries, Information and Society
18 & 19 August 2021
Kuala Lumpur, Malaysia

Reimagining Libraries for a
Post-Pandemic World.