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August 2015

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SETHI, BIPIN BIHARI; Maharana, Bulu; and Mohanty, Barada Kanta Management College, "Research Publication Trend of Two Periodicals, “Political Geography” and “Religion”: A Bibliometric Perception" (2015). *Library Philosophy and Practice (e-journal)*. 1277. <http://digitalcommons.unl.edu/libphilprac/1277>

Research Publication Trend of Two Periodicals, "Political Geography" and "Religion": A Bibliometric Perception

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Abstract:

Bibliometrics is a promising area of research in the field of Library and Information Science. The current study is a bibliometric analysis of two leading international referred journals. The present paper attempts to analyze publications indexed in the database of *Science Direct Top 25 hottest Papers* in the field Arts and Humanities journal literature to understand the global approach of research publication in two core journals such as: (1st) "Political Geography" (PG) and (2nd) "Religion" (RG) respectively. This is a comprehensive survey work rendering bibliographic records from Science Direct top 25 hottest papers database during 2005-2013 in the domain of Arts & Humanities and this paper strenuously tries to give a complete sketch of the evaluation of research outcomes. The key findings of the research divulge that out of total 1500 papers undertaken for the present work, 900 were taken from the journal "Political Geography" and 600 shared by the journal "Religion". It is indicated from the study that top 15 authors of 1st journal contributed 384 (42.66 %) and top 15 authors of 2nd journal bagged 239 (39.83 %) papers to their credit which counts more than one third of the whole contribution. In both the journals the greater number 72 and 85 percent papers were produced by single authors, while the collaborated papers were only 28 and 15 percent the study unmasks. Considering the authors' institutional affiliation it is ascertained that, the authors' contributed to both the journals was affiliated to 169 and 80 unique institutions encompassing intercontinental regions. Besides, the geographical analysis indicates the involvement of different regions of the globe in the research practices is well found considerably benchmarking. Moreover, the study evidently shows that the overwhelming and most productive geographical region contributors' such as: UK added 396 (44 %) and USA 231 (38.5 %) papers to the journal (1st) "Political Geography" and (2nd) "Religion", that is why both regions are considerably granted as leading productive nations and prolific in the realm of global research.

Keywords: *Bibliometrics; Scientometrics; Research output; Authors productivity; Degree of collaboration; Authorship pattern; Citation pattern; Productive countries and Institutions; Prolific*

1. Background Study

The examination of the research publication productivity and its contributions is a buzzing area of research in the field of library and information science. Bibliometrics, Scientometrics, Citation Study, and Content analysis are the concepts supplementary and complementary to each other in their respective applications in the domain of research which are most popular tools extremely and extensively used in the field. This technique has been applied in the present study to evaluate research productivity at a global context for obtaining necessary inferences.

To avoid confusion it would be worthwhile to point out here that, though the data undertaken from papers indexed in Science Direct Bibliographic Database top 25 hottest papers of the journal "*Political Geography*" under the time period 2005-2013, and the journal "*Religion*" covering time period 2005-2010, but the actual year of publication of these papers in the source journals as table no. 2 indicates the period 1992-2013 (1st journal), and 1985-2010 (2nd journal). This is because, the papers are appeared in the top 25 hottest papers site under the period 2005-2013 which were actually published in the 1st journal (PG) 1992-2013, while in case of 2nd journal (RG) the papers are appeared in the top 25 hottest papers site under the period 2005-2010 which were actually published within the period 1996-2010 in the source journals respectively.

2. Introduction:

Bibliometrics and scientometrics are the two closely related approaches for measuring scientific publications and science in general respectively. In practice, much of the work that fall under this header involves various types of citation analysis, which looks at how scholars cite one another in publications. In the context of this toolkit, bibliometrics are also one of the key ways of measuring the impact of scholarly publications. 'Scientometrics' is often done using bibliometrics which is a measurement of the impact of (scientific) publications. Modern scientometrics is mostly based on the work of Derek J. de Solla Price and Eugene Garfield. The latter founded the Institute for Scientific Information which is heavily used for scientometric analysis. Methods of research include qualitative, quantitative and computational approaches.

(<http://en.wikipedia.org/wiki/Scientometrics/> accessed on 15.12.11).

Bibliometrics is a type of research method being used in Library and Information Science (LIS). It is an emerging area of research in the LIS field. The quantitative analysis and statistics to describe patterns of publication within a given field of literature are utilized. Researchers use bibliometric methods of evaluation to determine the influence of a single author or to describe the relationship between two or more authors or works. Bibliometric studies can also be used to study the regional patterns of research, the extent of cooperation between research groups and national research profiles. The main derivatives of bibliometrics are: publication counts, citation counts, co-citation analysis, co-word analysis, scientific 'mapping' and citations in patents. The word 'bibliometric' has been derived from the Latin and Greek words 'biblio' and 'metrics' which refer to the application of mathematics to the study of bibliography (Thanuskodi, 2010, p.78).

The term bibliometrics was coined by *Alan Pritchard* in a paper published in 1969, titled *Statistical Bibliography or Bibliometrics?* He defined the term as "the application of mathematics and statistical methods to books and other media of communication".

Bibliometrics is statistical analysis of written publications, such as books or articles. Bibliometric methods are frequently used in the field of library and information science, including scientometrics. For instance, bibliometrics are used to provide quantitative analysis of academic literature. Analysis and content analysis are commonly used bibliometric methods. Many research fields use bibliometric methods to explore the impact of their field, the impact of a set of researchers, or the impact of a particular paper. Bibliometrics also has a wide range of other applications, such as in descriptive linguistics, the development of thesauri, and evaluation of reader usage.

Historically bibliometric methods have been used to trace relationships amongst academic journal citations. Citation analysis, which involves examining an item's referring documents, is used in searching for materials and analyzing their merit. Citation indices, such as Institute for Scientific Information's Web of Science, allow users to search forward in time from a known article to more recent publications which cite the known item. (Retrieved from <http://en.wikipedia.org/wiki/Bibliometrics>)

3. Scope & Objective of the Study:

The scope of the study encompasses two international journals viz., "*Political Geography (PG)*" and "*Religion (RG)*" indexed at Science Direct Database under the heading Top 25 Hottest Articles, the 1st journal covered the period 2005–2013 and the 2nd journal period 2005–2010 in the field of Arts and Humanities. The study accounts a total of 1500 articles adding 900 (Nine hundred) from Political Geography and 600 (Six hundred) from Religion categorically. For clarity it may be noted here that, data on the papers of journal "*Religion*" from the year 2011–2013 are not available under the heading top 25 hottest papers site of *Science Direct Bibliographic Database*, for which the researcher excluded the period from the study. The key objectives of the present study holds to acclaim the following issues are as follows:

- i. Nature of Authorship pattern of publication;
- ii. Single Vs Multiple authored papers;
- iii. Trace the Geographical Distribution/scattering of research publication;
- iv. Chronological Growth pattern of literature;
- v. Most productive authors of top countries;
- vi. Degree of collaboration of authors;
- vii. Degree of citation of articles;
- viii. Study of length of the papers and
- ix. Understanding the changing trends in scholarly research output

4. Methodology Employed

The study specifically concentrated on the Bibliometric analysis is one of the most widely used methods in Library and information science research. It is an examination of the frequency, patterns, and graphs of citations in articles and books. This study is aimed to discuss about the analysis of the research output of two international journal literature indexed under *Science Direct on-line Database*. The relevant sources and data are collected from top 25 hottest papers site of above mentioned database. Based on the available sources the following discussions were made.

Data on papers published in two journals such as: 1st "*Political Geography (PG)*" and 2nd "*Religion (RG)*" were collected from each downloaded articles from Science Direct on-line Bibliographic Database and each data were examined identically to find out the result. All papers included in the analyses which are indexed under the top twenty five hottest papers site under the period 2005–2013 of 1st journal accounting 900 papers, and the

period covered 2005–2010 of 2nd journal with 600 papers identically. Further, each items of information processed by developing a database of 1500 (900 of 1st and 600 of 2nd journal) down loaded records adding essential fields viz. journal title, article title, 1st author, number of authors, affiliation with institutions, country of origin (considering the 1st author), year of publication in source journal, number of citations, length of papers and ranking pattern, etc. using the MS-Excel spread sheet. It may be noticed here that, in case of 2nd journal "Religion" due to non-availability of data in top 25 hottest papers site on papers from period 2011–2015, 300 records have been excluded and caused a total 600 records considered under the gamut of the present study. Since, reference counts are not freely available with the abstract site the investigator did not able to analyze the reference pattern of the papers. Finally, all relevant data are then sorted, tabulated, and assimilated in a logical order to draw inferences for the present research.

5. Review of Literature

Lipetz (1999) studied many bibliometric aspects of papers in JASIS by examining volume of 1955, 1965, 1975, 1985 and 1995. One of his findings revealed that the number of scholarly papers published per year in JASIS has grown exponentially from 21 to 68.

Dutt, Garg & Bali (2003) analyzed 1317 papers published in the first fifty volumes of the international journal of *Scientometrics* during 1978 to 2001. They found that the U.S.A share of papers is constantly declining while that of the Netherlands, India, France and Japan is on the rise. The research output is highly scattered as indicated by the average number of papers per institution.

Mukherjee (2008) analyzed the authorship pattern of scientific productions of the four most productive Indian academic institutions for the eight-year -period from 2000 to 2007. The results show that among four universities, the authors of Delhi University contributed the highest number of articles, followed by Banaras Hindu University. There is also an increasing tendency toward collaborative research among Indian authors as well as more frequent collaboration with international authors. Biochemistry and Molecular Biology are two of the most prolific research areas in these four Indian universities. The average rate of references per item is 28 and the citations received per item are 3.56.

Tian, Wen & Hong (2008) conducted a bibliometric analysis to evaluate global scientific production of Geographic Information System (GIS) papers

from 1997 to 2006 in Science Citation Index. Results indicated that GIS research steadily increased over the period and the annual paper production in 2006 was about three times higher comparing to 1997s paper productions.

6. Need of the study

There have been incessant studies on bibliometrics, scientometrics, content analysis etc. which is most familiar among the researchers, scholars, and academicians all over the globe in the area of Library and information science (LIS). The trend has given new dimensions and understanding to the domain of LIS research. However, the very study trace this trend and aims at highlighting the aspects which would be most useful and further encourage the researchers, scholars and library practitioners in enriching their respective research activities and professional exercises with designing a nuance platform to the hub of a given research.

7. Analysis and Interpretation of Data

The present study is based on the analysis of the collected data of two international journals indexed under science direct database top 25 hottest papers link which has been represented in the tabular form for the easy understanding of the theme, finding inferences, and meeting the goal of the present research work.

Table-1: State of the Art of Study

<i>Area of Study</i>	<i>Number Of Jr.</i>	<i>Name of Journal</i>	<i>Period of Coverage</i>	<i>No. of Papers</i>	<i>Percentage</i>	<i>C. F.</i>	<i>C. P.</i>
<i>Arts & Humanities</i>	<i>1</i>	<i>Political Geography</i>	2005-13	900	60	900	60
	<i>2</i>	<i>Religion</i>	2005-10, three years data (2011,2012 & 2013) not available	600	40	1500	100
<i>Total</i>	<i>2</i>	<i>*</i>	1 st Jr. 8 Years 2nd. Jr. 5 Years (Reduced due to non-availability of data)	1500	100	1500	100

The present study is undertaken pertaining papers indexed under Science Direct Database top 25 hottest papers link during the period 2005-2013 (8 years) of two international journals namely 'Political Geography (PG)' and 'Religion (RG)' accounts a total 1500 papers, 900 from 1st journal and 600 from 2nd journal as a bibliometric sketch with an objective to measure and find a nuanced approach to the strength and weakness of scholarly research work.

Table-2: Chronological Analysis of Papers on the basis of Year of Publication in Source Journal

Political Geography (PG)							Religion (RG)								
Sl. No	Year	No. of Papers Year - wise	%	C. F.	C. P.	Mean of papers per Year	Rank	Sl. No	Year	No. Of Papers Year - wise	%	C. F.	C. P.	Mean of papers per Year	Rank
1	1992	1	0.11	1	0.11	45	17	1	1985	1	0.16	1	0.16	46.15	12
2	1995	5	0.56	6	0.67		15	2	1997	10	1.66	11	1.83		10
3	1996	8	0.89	14	1.56		13	3	1999	14	2.33	25	4.16		9
4	1997	3	0.33	17	1.89		16	4	2001	19	3.16	44	7.33		8
5	1998	5	0.56	22	2.44		15	5	2002	4	0.66	48	8		11
6	1999	8	0.89	30	3.33		13	6	2003	57	9.5	105	17.5		5
7	2000	10	1.11	40	4.44		12	7	2004	147	24.5	252	42		1
8	2001	69	7.67	109	12.11		5	8	2005	96	16	348	58		2
9	2002	33	3.67	142	15.78		7	9	2006	45	7.5	393	65.5		6
10	2003	23	2.56	165	18.33		11	10	2007	58	9.66	451	75.16		4
11	2004	91	10.11	256	28.44		4	11	2008	63	10.5	514	85.66		3
12	2005	118	13.11	374	41.56		3	12	2009	45	7.5	559	93.16		6
13	2006	131	14.56	505	56.11		2	13	2010	41	6.83	600	100		*
14	2007	254	28.22	759	84.33		1	Coverage period 13 Years	600	100	600	100	*		
15	2008	61	6.78	820	91.11		6								
16	2009	14	1.56	834	92.78		8								
17	2010	27	3	861	95.67		9								
18	2011	25	2.78	886	98.44		10								
19	2012	7	0.78	893	99.22		14								
20	2013	7	0.78	900	100		14								
Coverage period 20 Years		900	100	900	100	*									
Grand Total (20 Years)		900	100	900	100	*		Grand Total (13 Years)	600	100	600	100	*		

A total 1500 number of papers undertaken for the present research work were originally published in the source journals such as: PG and RG during the period from 1992 to 2013 & 1985 to 2010, which categorically accounts 900 papers of the 1st journal (PG) and adds 600 papers of the 2nd journal (RG). Latter on all these papers indexed under science direct database top 25 hottest papers link during the period 2005-2013 (1st journal) & 2005-2010 (2nd journal) the sources from which the researchers have downloaded the records and analyzed with utmost care to find the necessary inferences. The table shows that the number of papers differs from year to year and there is also steady increase in the number of papers from the year 1992 to 2007, while the trend found dropping from the year 2008-2013, in 1st journal (PG). As far as the 2nd journal is concerned there were also steady growth of papers up to 2004, whereas, the dropping is found from 2005 to 2010 respectively. The minimum numbers of papers were in the year 1992 & 1985 and the maximum

numbers of papers were in the year 2007 and 2004 with 254 and 147 papers, which are 28.22 %, 24.5 % identically of the total citations of both the journals as the study unearths.

Table-3: Authorship pattern & Degree of Collaboration of papers

Political Geography									Religion								
S l N o	Authorship pattern of papers	Total No. Of Authors	No of papers	Degree of Collaboration	%	C. F.	C. P.	Rank	S l N o	Authorship pattern of papers	Total No. Of Authors	No. of Papers	Degree of Collaboration	%	C. F.	C. P.	Rank
1	Single author	651	651	0.29	72.33	65	72.3	1	1	Single author	508	508	0.15	84.66	508	84.66	1
2	Two authors	366	183		20.33	83.4	92.7	2	2	Two authors	136	68		11.33	576	96	2
3	Three authors	84	28		3.11	86.2	95.8	3	3	Three authors	15	05		0.83	581	96.83	4
4	Four authors	76	19		2.11	88.1	97.9	4	4	Four authors	08	02		0.33	583	97.16	5
5	Five authors	50	10		1.11	89.1	99	5	5	Five authors	05	01		0.16	584	97.33	6
6	More than five authors	52	9		1	90	100	6	6	More than five authors	123	16		2.66	600	100	3
Grand Total		1279	900			100	900	100	*		Grand Total	795		600		100	600

Table 3 reveals that the highest proportion of papers were by single author 651 (72.33 %), followed by articles with multi authors 249 (27.67 %) in the 1st journal, while in 2nd journal the highest proportion of papers were also by single author 508 (84.66 %), followed by articles with multi authors 92 (15.34 %). As a result, the degree of collaboration in both the journals is 0.29, and 0.15, which clearly indicates the dominance upon multi author contribution by the individual contribution. The trend of authorship of the literature has shown that, single authorship was more significant than the multi-authored approach. Therefore, the literature from the perspectives of authorship pattern could be said to be positively related with single authorship other than multi authorship.

Table-4 (A): Top 15 Authors with Institutional Affiliation of Journal "Political Geography"

<i>Political Geography</i>								
<i>Sl. No.</i>	<i>Name of Author</i>	<i>Affiliation to Institution</i>	<i>No. of papers</i>	<i>%</i>	<i>C. F.</i>	<i>Rank</i>	<i>Average Papers per author</i>	<i>Average Papers per Institution</i>
1	Arturo Escobar	University of North Carolina	35	3.95	35	1	4.61	5.32
2	Michael K. Goodman	University of California	34	3.83	69	2		
3	Philippe Le Billon	School of Geography	34	3.83	103	2		
4	Harriet Bulkeley	University of Durham	32	3.69	135	3		
5	Matthew B. Sparke	University of Washington,	27	3.08	162	4		
6	Jon Barnett	University of Melbourne,	25	2.85	187	5		
7	Louise Amoore	University of Durham,	25	2.85	212	5		
8	Rafael Reuveny	Indiana University	25	2.85	237	5		
9	Clionadh Raleigh	University of Essex,	24	2.79	261	6		
10	Ragnhild Nordås	International Peace Research Institute,	24	2.79	285	6		
11	Noel Castree	Manchester University,	21	2.38	306	7		
12	Jason Ackleson	New Mexico State University	20	2.25	326	8		
13	Pádraig R. Carmody	Dublin City University,	20	2.25	346	8		
14	Lily Kong	National University of Singapore	19	2.18	365	9		
15	Maxwell T. Boykoff	University of Oxford	19	2.18	384	9		
Total	15 Authors	15 Affiliated Institutions	384	42.66	384	*		
Others	180 Authors	154 Affiliated Institutions	516	57.33	900	*		
Grand Total	195 Authors	169 Affiliated Institutions	900	100	900	*		

It was observed that there are a total of 195 contributors with institutions affiliated 169 for 900 papers. 'Arturo Escobar' contributed 35 (03.95%) papers, where as 34 (03.83%) contribution is from 'Michael K. Goodman', and 'Philippe Le Billon', 32 (03.69%) by 'Harriet Bulkeley', 27 (03.08%) of

'Matthew B. Sparke' , 25 (02.85%) by 'Jon Barnett', 'Louise Amoore', and 'Rafael Reuveny', 24 (02.79%) 'Clionadh Raleigh', and 'Ragnhild Nordås', 21 (02.38%) 'Noel Castree' and other four authors out of top fifteen authors contributed 19-20 papers individually as table 4 (A) denotes. The above cited prolific scholars in the literature were counted taking into consideration the number of their contributions during the period of the study. The Top fifteen scholars were identified as prolific authors in the literature during the period of the study with the range of their contribution falls between 19-35 papers. The top on the ranking of the authors was 'Arturo Escobar' who is affiliated to the Institution University of 'North Carolina' contributed 35 papers (03.95%) as well.

Table-4 (B): Top 15 Authors with Institutional Affiliation of Journal "Religion"

Religion								
Sl. No	Name of Author	Affiliation to Institution	No. Of papers	%	C. F.	Rank	Average Papers per author	Average Papers per Institution
1	Henry Munson	University of Maine	29	4.83	29	1	4.08	7.5
2	Philip A. Mellor	University of Leeds	25	4.16	54	2		
3	Steven Engler	Mount Royal College	24	4	78	3		
4	Terry Rey	Florida International University	22	3.66	100	4		
5	Bill Ashcroft	School of English	16	2.66	116	5		
6	Christopher Partridge	University College Chester	15	2.5	131	6		
7	Bron Taylor	University of Wisconsin	13	2.16	144	7		
8	Michael Stausberg	University of Bergen	13	2.16	157	7		
9	Susan Raine	University of Alberta	13	2.16	170	7		
10	Winnifred Fallers Sullivan	University of Chicago	13	2.16	183	7		
11	Elizabeth Mohkamsingden Boer	University of Nijmegen	12	2	195	8		
12	Ian Reader	University of Manchester	12	2	207	8		

13	Yuval Neria	Columbia University and New York State Psychiatric Institute	12	2	219	8
14	E. Tyler Graham	101 North University Avenue	10	1.66	229	9
15	Justin L. Barrett	Oxford University	10	1.66	239	9
Total	15 Authors	15 Affiliated Institutions	239	39.83	239	*
Others	132 Authors	65 Affiliated Institutions	361	60.16	600	*
Grand Total	147 Authors	80 Affiliated Institutions	600	100	600	*

It was ascertained that there are a total of 147 contributors with affiliated institutions 80 for a total 600 papers undertaken from the journal 'Religion' as table 4 (B) proclaims. 'Henry Munson' contributed 29 (04.83%) papers the top on the ranking of the authors who is affiliated to the Institution University of Maine, where as 25 (04.16%) contribution is from 'Philip A. Mellor' from University of Leeds, 24 (04%) 'Steven Engler' from Mount Royal College, 22 (03.66%) 'Terry Rey' associated to institution Florida International University, 16 (02.66%) 'Bill Ashcroft' associated to institution School of English, 15 (02.5%) 'Christopher Partridge' of University College Chester, and 13 (02.16%) contributed 'Bron Taylor', 'Michael Stausberg', 'Susan Raine', and 'Winnifred Fallers Sullivan' who are associated with the institutions University of Wisconsin, University of Bergen, University of Alberta, and University of Chicago respectively. Moreover, remaining five authors out of top fifteen authors contributed 10-12 papers individually as table 4 (B) explores. The above cited prolific contributors in the literature were counted taking into consideration the number of their contributions during the period of the study. The Top fifteen scholars were identified as prolific authors in the literature during the period of the study with the range of their contribution falls between 10-29 papers.

Table-5: Geographical analysis of Papers published in Journal "Political Geography" & "Religion"

<i>Political Geography</i>							<i>Religion</i>						
<i>Sl. No.</i>	<i>Name of Country</i>	<i>No. of papers</i>	<i>%</i>	<i>C. F.</i>	<i>C.P.</i>	<i>Rank</i>	<i>Sl. No.</i>	<i>Name of Country</i>	<i>No. of papers</i>	<i>%</i>	<i>C. F.</i>	<i>C. P.</i>	<i>Rank</i>
1	UK	396	44	396	44	1	1	USA	231	38.5	231	38.5	1
2	USA	252	28	648	72	2	2	UK	102	17	333	55.5	2

3	Norway	48	5.33	696	77.33	3	3	Canada	71	11.83	404	67.33	3
4	Australia	33	3.67	729	81	4	4	Netherlands	48	8	452	75.33	4
5	Ireland	32	3.56	761	84.56	5	5	Norway	20	3.33	472	78.66	5
6	Canada	29	3.22	790	87.78	6	6	Australia	18	3	490	81.66	6
7	Singapore	29	3.22	819	91	6	7	Italy	11	1.83	501	83.5	7
8	USA	23	2.56	842	93.56	7	8	Denmark	10	1.66	511	85.16	8
9	Israel	7	0.78	849	94.33	8	9	Egypt	9	1.5	520	86.66	9
10	Switzerland	6	0.67	855	95	9	10	Israel	8	1.33	528	88.00	10
11	Sweden	3	0.33	858	95.33	10	11	Wales	8	1.33	536	89.33	10
12	Turkey	3	0.33	861	95.67	10	12	Finland	5	0.83	541	90.16	11
13	Germany	2	0.22	863	95.89	11	13	Switzerland	4	0.66	545	90.83	12
14	Netherlands	2	0.22	865	96.11	11	14	Germany	3	0.5	548	91.33	13
15	Estonia	1	0.11	866	96.22	12	15	news land	3	0.5	551	91.83	13
16	Hong Kong	1	0.11	867	96.33	12	16	Philippines	3	0.5	554	92.33	13
17	news land	1	0.11	868	96.44	12	17	Sweden	3	0.5	557	92.83	13
18	Russian Federation	1	0.11	869	96.56	12	18	Taiwan	2	0.33	559	93.16	14
Data not available about country		31	3.44	900	100	*	19	Czech Republic	1	0.16	560	93.33	15
							20	France	1	0.16	561	93.5	15
							21	Japan	1	0.16	562	93.66	15
							Data not available about country		38	6.33	600	100	*
Grand Total		900	100	900	100	*	Grand Total		600	100	600	100	*

Researchers in bibliometric studies are interested to find the countries which are contributing most in any given field. This type of analysis also helps to identify the countries which have taken up the research work in the field. The Table-5 shows the country-wise distribution of papers in two international journals such as: "Political Geography" and "Religion". Out of the total 900 papers, 396 (44%) papers have been published from UK, showing its dominance over other countries in the journal Political Geography, while USA found dominant in journal Religion with number of papers 231 (38.5%) out of 600. USA, and United Kingdom stands second rank in the list with 252 (28%), 102 (17%) papers respectively. Furthermore, Norway 48 (5.33%), Australia 33 (3.67%) and Ireland 32 (3.56%) got 3rd, 4th and 5th rank in 1st

journal, whereas Canada, Netherlands and Norway posed 3rd, 4th and 5th rank in 2nd journal and other countries ranked accordingly on the basis of their contribution to both the journals as the above table unearths.

Table-6: Top 20 Productive Institutions

<i>Political Geography</i>						<i>Religion</i>					
<i>Sl. No.</i>	<i>Name of Institution</i>	<i>Name of Country</i>	<i>No. of Papers</i>	<i>%</i>	<i>C. F.</i>	<i>Sl. No.</i>	<i>Name of Institution</i>	<i>Name of Country</i>	<i>No. Of Papers</i>	<i>%</i>	<i>C. F.</i>
1	University of Durham	UK	65	7.48	65	1	University of Maine	USA	30	5	30
2	University of California	USA	51	5.89	116	2	University of Leeds	UK	28	4.66	58
3	Durham University	UK	39	4.49	155	3	Mount Royal College	Canada	24	4	82
4	School of Geography	UK	39	4.49	194	4	Florida International University	USA	22	3.66	104
5	International Peace Research Institute	Norway	36	4.18	230	5	Faculty of Humanities	Netherlands	19	3.16	123
6	University of North Carolina	USA	35	4.09	265	6	School of English	Australia	16	2.66	139
7	University of Washington	USA	34	3.94	299	7	University of Bergen	Norway	16	2.66	155
8	Manchester University	UK	29	3.34	328	8	University College Chester	UK	15	2.5	170
9	National University of Singapore	Singapore	29	3.34	357	9	University of Amsterdam	Netherlands	14	2.33	184
10	University of Essex	UK	26	2.99	383	10	University of Chicago	USA	14	2.33	198
11	Indiana University	USA	25	2.88	408	11	University of Wisconsin	USA	13	2.16	211
12	University of Melbourne	Australia	25	2.88	433	12	Columbia University and New York State Psychiatric Institute	USA	12	2	223
13	Dublin City University	Ireland	23	2.64	456	13	University of Alberta	Canada	12	2	235
14	University of Oxford	UK	23	2.64	479	14	University of Manchester	UK	12	2	247
15	New Mexico State University	USA	21	2.47	500	15	University of Nijmegen	Netherlands	12	2	259
16	Lancaster	UK	19	2.19	519	16	North	Canada	10	1.66	269

	University						University Avenue				
17	University of Portsmouth	UK	15	1.72	534	17	Oxford University	UK	10	1.66	279
18	University of London	UK	14	1.62	548	18	University of California Riverside	USA	10	1.66	289
19	University of Southampton	UK	14	1.62	562	19	University of Ottawa	Canada	10	1.66	299
20	University of Wisconsin	USA	13	1.49	575	20	University of Tennessee	USA	10	1.66	309
<i>Total Publication of 20 Institutions</i>			575	63.88	575	<i>Total Publication of 20 Institutions</i>			309	51.5	309
Others	136 Institutions	39 Countries	293	32.55	868	Others	51 Institutions	31 Countries	245	40.83	554
Total	Data not Available on Inst. (13)	Data not Available on country	32	3.55	900	Total	Data not available on Inst. (9)	Data not available on Country	46	7.66	600
Grand Total	Institutions (169)	*	900	100	900	Grand Total	Institutions (80)	*	600	100	600

An examination of Table 06 indicates that Western institutions are in fact one of the major players in research publications and activities all over the world. Among those, University of Durham of UK and University of Maine Of USA produce the highest number of papers and achieve top ranking institutions with 65 (7.48%) and 30 (5%) appearances in top 25 hottest papers database in both the journals, followed by University of California, USA 51 (5.89%) appearances. Durham University, and School of Geography, UK 39 (4.49%) appearances each, and International Peace Research Institute, Norway 36 (4.18%) appearances in journal 1st, while University of Leeds, UK; Mount Royal College, Canada; Florida International University, USA; and Faculty of Humanities, The Netherlands adds 28 (4.66%), 24 (4%), 22 (3.66%), and 19. (3.16%) appearances of papers to their credit and achieve rank 2nd to 5th respectively in 2nd journal are all ranked among the top 20 prolific institutions. These institutions play a key role in research productivity and deserve a special attention among the global institutions of importance. With regard to the results in Table 06 identify those prolific top 20 institutional contributors in journal 1st are belong to only six countries such as: UK, USA, Norway, Singapore, Australia, Ireland, out of which ten institutions from UK, six institutions from USA and remaining four

institutions are from four countries one each i. e. Norway, Singapore, Australia, Ireland, whereas in case of 2nd journal it is viewed that there are also the same number of productive countries to which the top 20 most prolific institutional contributors belong to, out of which seven institutions are from USA, four institutions from UK is found significant and remaining nine institutions are from four countries such as: Canada, The Netherlands, Australia, Norway, so far the study explores.

Table-7: Average Factors

Sl. No.	Factors	Journal		Total	'O' Table	'E' Table	X ² Calculated Value (CV)
		Political Geography	Religion				
1	Avg. Citations per Paper	94.77	28.26	123.03	94.77	76.94	4.13
2	Avg. Papers per Unique Author	4.61	4.08	8.69	4.61	5.43	0.12
3	Avg. Authors per Paper (All Authors)	1.42	1.28	2.7	1.42	1.68	0.04
4	Avg. Authors per Paper (Unique Authors)	0.21	0.24	0.45	0.21	0.28	0.01
5	Avg. Page length per paper	21.33	17.28	38.61	21.33	24.14	0.32
6	Avg. Papers per Year (considering year of publication of papers in source journal)	45	46.15	91.15	45	57	2.52
7	Avg. Papers per Institution (Unique)	5.32	7.5	12.82	5.32	8.01	0.90
8	Avg. Papers per Country (Unique)	50	28.57	78.57	50	49.13	0.01
**		222.66	133.36	356.02	28.26	46.08	6.89
<p>Hy: H0: There is no variation in average factors of research papers of both the journals.</p> <p>Chi-Square (x²) Formula: $x^2 = (o-e)^2/e$</p> <p>Degree of Freedom (V) = 7 ; Calculated Value (CV) = 21.55 ;</p> <p>Tabulated Value (TV) at 0.050 or 95 % level of significance is = 14.1</p> <p>Chi-Square test applied over the data in the table no.7 with heading "Average Factors". Since, x² calculated value is 21.55 which is greater than the x² tabulated value 14.1, so the null hypothesis is false or rejected. Hence, it is concluded that, there is significant variation in the average factors of research papers of both the journals.</p>					4.08	3.25	0.21
					1.28	1.01	0.07
					0.24	0.16	0.04
					17.28	14.46	0.54
					46.15	34.14	4.22
					7.5	4.80	1.51
					28.57	29.43	0.02
**				X ² (CV) = 21.55			

Table-8: Citation Pattern of Publication

Political Geography						Religion					
Sl. No.	Citation Pattern	No. of papers	%	C.F.	C.P.	Sl No	Citation Pattern	No. Of papers	%	C.F.	C. P.
1	1-25	167	18.56	167	18.56	1	1-25	508	64.66	508	84.66
2	26-50	191	21.22	358	39.78	2	26-50	5	0.83	513	85.5
3	51-75	176	19.56	534	59.33	3	51-75	4	0.66	517	86.16
4	76-100	94	10.44	628	69.78	4	76-100	11	1.83	528	88
5	101-125	59	6.56	687	76.33	5	101-125	3	0.5	531	88.5
6	126-150	7	0.78	64	7.11	6	126-150	*	*	*	*
7	151-175	53	5.89	747	83	7	151-175	1	0.16	532	88.66
8	176-200	*	*	*	*	8	176-200	*	*	*	*
9	201 and above	130	14.44	877	97.44	9	201 and above	6	1	538	89.66

10	No Citation Data	23	2.56	900	100	10	No Citation Data	62	10.33	600	100
<i>Grand Total</i>		900	100	900	100	<i>Grand Total</i>		600	100	600	100

The Table 8 shows the Citation Pattern of Publications of both the journals and made a comparative analysis applying a statistical method the Chi-Square (χ^2) test. As far as the table is concerned a large number of papers i.e. 191 (21.22%) were achieved citations in the range of 26-50, followed by 176 (19.56%) papers in the 51-75, 167 (18.56%) papers of 1-25 citations, 130 (14.44%) papers proclaims the highest range of citations 201 and above and no cited papers 23 (2.56%) found in the 1st journal respectively. On the other hand the papers of 2nd journal achieve citations unlikely to 1st journal as the data in the above table prostrates. A major share such as: 508 (64.66%) papers achieve citations only in the range 1-25 and no cited papers are 62 (10.33%) so far.

Table-8.1: Application of Chi-Square (χ^2) test

"O" Table	"E" Table	χ^2 Calculated Value (CV)	
167	405	139.86	<p><i>Hy: H0: There is no variation among the journals in citation pattern of their papers.</i></p> <p><i>Degree of Freedom (V)=9 ; χ^2 Calculated Value (CV)=788.83 ; Tabulated Value (TV) at 0.050 or 95 % level of significance is 16.92</i></p> <p><i>Applying Chi-Square (χ^2) test using Formula $\chi^2 = (o-e)^2/e$ it is ascertained that:</i></p> <p><i>At (0.050) 95% level of significance χ^2 tabulated value is 16.92, while calculated value is 788.83. As calculated value of χ^2 is greater than tabulated value for which the hypothesis stands false or rejected, which means the citation patterns of papers of both journals are significantly varied from each other.</i></p>
191	117.6	45.81	
176	108	42.81	
94	63	15.25	
59	37.2	12.77	
07	4.2	1.86	
53	32.4	13.09	
00	00	00	
130	81.6	28.70	
23	51	15.37	
508	270	209.79	
05	78.4	68.71	
04	72	64.22	
11	42	22.88	
03	24.8	19.16	
00	2.8	2.8	
01	21.6	19.64	
00	00	00	
06	54.4	43.06	
62	34	23.05	
		χ^2 Calculated Value (CV) = 788.83	

Table-9: Pagination Pattern of Papers

Political Geography							Religion						
Sl. No.	Pattern of Paginations	No. of papers	%	C.F.	C.P.	Rank	Sl. No.	Pattern of Paginations	No. of papers	%	C.F.	C.P.	Rank
1	1-5	18	2	18	2	7	1	1-5	38	6.33	38	6.33	6
2	6-10	59	6.56	77	8.56	6	2	6-10	84	14	122	20.3	4

												3	
3	11-15	75	8.33	152	16.8 9	4	3	11-15	172	28.6 6	294	49	1
4	16-20	207	23	359	39.8 9	2	4	16-20	141	23.5	435	72.5	2
5	21-25	310	34.4 4	669	74.3 3	1	5	21-25	99	16.5	534	89	3
6	26-30	166	18.4 4	835	92.7 8	3	6	26-30	47	7.83	581	96.8 3	5
7	31 and above	65	7.22	900	100	5	7	31 and above	19	3.16	600	100	7
<i>Grand Total</i>		900	100	900	100	*		<i>Grand Total</i>	600	100	600	100	*

The Table 9 discloses the length of the papers of both journals. The large number of articles i.e. 310 (34.44%) were written in the range of 21-25 pages, followed by 207 (23%) papers in the range 16-20, 166 (18.44%) papers of 26-30 pages, and 65 (07.22%) papers are in the highest range 31 and above in the 1st journal. Moreover, the pagination pattern of 2nd journal denotes, 172 (28.66%) papers are of range 11-15 pages, 141 (23.5%) under range 16-20 papers, 99 (16.5%) are of range 21-25 and only 19 (03.16%) papers are of highest range 31 and above pages respectively.

Table-9.1: Application of Chi-Square (χ^2) test

"O" Table	"E" Table	χ^2 Calculated Value (CV)	Hy: H0: Pagination pattern of papers of both journals are not significantly different.
18	33.6	7.24	Degree of Freedom (V)=6 ; χ^2 Calculated Value (CV)=211.02; Tabulated Value (TV) at 0.050 or 95 % level of significance is 12.59 Applying Chi-Square (χ^2) test using Formula $\chi^2 = (o-e)^2/e$ it is ascertained that: At (0.050) or 95 % level of significance χ^2 tabulated value is 12.59, while calculated value is 211.02. As calculated value of χ^2 is greater than tabulated value, for which the hypothesis stands false or rejected, that means the pagination patterns of papers of both journals are significantly varied from each other.
59	85.8	8.37	
75	148.2	36.15	
207	208.8	0.01	
310	245.4	17	
166	127.8	11.41	
65	50.4	4.22	
38	22.4	10.86	
84	57.2	12.55	
172	98.8	54.23	
141	139.2	0.02	
99	163.6	25.50	
47	85.2	17.12	
19	33.6	6.34	
		χ^2 Calculated Value (CV)=211.02	

10. Key Findings

- i. The publishing trend totally depends on the output of contributors, patterns of contribution and the quality of research. As far as the data is concerned the years 2007, and 2004, adds maximum number of contributions considering the Year of Publication of papers in Source

Journal such as: 'PG' and 'RG' which clearly indicated in table chronological analysis of Papers.

- ii. Further the table number two convey a remarkable message that, the mean of papers per year approximately approaching 45 and 46 to the domain of top 25 hottest papers as the study discloses.
- iii. Withholding an examination of papers' authorship pattern the study ascertained that, a wide range of papers such as: 651 and 508 are contributed by single authors', which determines that 'solo authorship' is the principal pattern in both journals.
- iv. The productivity of authors based upon their individual research career cycles it is registered that 'Arturo Escobar' from University of North Carolina, and 'Henry Munson' from University of Maine were most proliferate authors who have contributed 35 and 29 the highest number of papers in 1st and 2nd journal categorically.
- v. Ranking of institutional contributors is one of the vital scholarly approaches undertaken for the present study focused that, 'University of Durham' of UK, and 'University of Maine' of USA are pride enough having been produced largest number of papers such as: 65, and 30 in two identical journals.
- vi. UK and USA found to be most productive geographical regions in 1st and 2nd journal accounting highest number of papers 396 and 231 produced to their credit and considerably, ranked 1st among other geographical contributors.
- vii. Applying Chi-Square test it is noticed that, there is significant variation in the average factors of research papers of both journals.
- viii. Chi-Square test applied over citation Pattern of Publication and resultantly proved that, the citation patterns of papers of both journals are significantly varied from each other.
- ix. In an investigation of pagination pattern of whole papers Chi-Square test applied and the study unfolds that, the pagination pattern of papers of both journals are significantly varied from each other and the null hypothesis stands false or rejected.

11. Conclusion

In the recent years, there has been an explosive growth in human knowledge. In fact, the nature and tempo of growth has been such far outstrip than the achievements of past centuries. The growth of literature itself has caused a fairly widespread alarm and the term that describes explosion also known as

information explosion. The periodicals are the indicators of literature growth in any area of knowledge. They emerge as the main channel for transmitting knowledge. Due to the escalating cost of the periodicals and lack of adequate library budgets the selection of any particular journal for a library should be done more carefully. Therefore, the library authorities are forced to reduce the number of journal subscriptions. In this context the bibliometric analysis has many applications in the Library and Information science field in identifying the research trends in the core journals, etc. and thereby framing new subscription policy for tomorrow. However, the present study provides important insights into the state of scholarship of the trend in international research productivity considering research output of two journals as the sample of study. Hence, the researchers earnestly hope the present study would be helpful for librarians/library practitioners to plan a better collection development keeping pace with the ever growing and changing needs of potential users, as well as the researchers, scholars would refer this piece of work as a knowledge base for their research practices.

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