

## LETTERS TO THE EDITOR

### Distortion of bibliometric indicators

The letter shows how a wrong methodology and casual approach can inordinately distort bibliometric indicators. Opines that most bibliometric articles emanating from our country are articles of least effort. Such articles are not based on comprehensive data, as such results of the analysis are likely to be fraught with errors. Publication of such articles needs to be curbed.

I am constrained to pen this letter to point out bibliometric distortion of indicators in a paper<sup>1</sup> published in the March 2017 issue of the *Annals of Library and Information Studies* (hereinafter referred to as *Annals*). It was also posted in the Facebook as well. The paper has made me persona non grata in a field which I have served for more than 50 years. To substantiate my point I am reproducing partly Table 4 from the aforesaid article<sup>1</sup>.

Most prolific authors and impact of their output		
Sl. no.	Authors	TNP (Total no. publications)
1	Gupta, B. M. (NISTADS)	70
2	Garg, K.C. (NISTADS)	32
3	Prathap, G. (NISCAIR)	25
4	Kademani, B. S. (BARC)	20
5	Bhattacharyya, S. (NISTADS)	17
6	Sangam, S. L. (Mysore Univ.)	16
7	Arunahalam, S. (MSSRF)	12
8	Basu, A. (NISTADS)	12
9.	Sudhier, K. G. (Univ. of Kerala)	10
10	Kumar, S. (NISTADS)	9
11	Gupta, Ritu (Sri Venkateswara University)	9
12	Rao, I. K. R.	9
13	Dutta, B. (Vidyasagar university)	8

It may be noticed that the name Sen, B. K. does not appear anywhere in the Table. The list of Sen's publications on bibliometrics and related fields given below indicates that Sen has contributed as many as 54 papers during 1995-2014, the period the study has covered. The question arises why Sen does not appear in the aforesaid Table. On going through the article it is found that the authors have conducted the study basing the first author only! Lo, for finding out the most prolific authors, the learned authors of the article have ignored all contributions in which the prolific authors occupy the 2<sup>nd</sup> position or beyond in the byline. In the list given below, Sen does not appear as first author in as many as 31 papers. Because Sen never subscribed to 'always first authorship' philosophy and more often than not he has given first authorship to his co-authors quite liberally. Let us see a concrete case. Tripathi, the second author of the article under discussion<sup>1</sup>, consulted Sen on numerous occasions while doing his PhD even though he was not his official guide and ailing from a dreaded disease. When Tripathi wanted an article on his PhD topic to be published jointly with him, he accepted the request and the article was published with Sen's name in the second position<sup>2</sup>. In other articles of Tripathi as far as is known he always appeared as second author.

It may be seen from the list of papers below, B K Sen appears as first author in 23 articles. Of these 23 articles 18 appeared in those sources which were consulted by the learned authors. With 18 articles Sen should have occupied the 5<sup>th</sup> position. But the Table 4 in Garg & Tripathi article does not show this.

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8. Mujoo Munshi U, **Sen B K**. INSA fellowships and Bhatnagar awards: a scientometric analysis *Library Herald* 1997/98, 35(3-4): 151-162
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In an era of multi-authorship, first-author-based studies have immense potential to distort bibliometric indicators. That is why first author approach is generally avoided.

- i) Prolific authorship is decided on the basis of author productivity. Suppose the author productivity of A is to be measured. A has 100 papers to his/her credit and A is such an author who never gave first authorship to any of his co-authors. In this case, A's productivity will be 100, and his co-authors zero. Authors like A are not rare. On the other hand if all authors of an article are taken into account, then the productivity of all authors will be above zero. Generally, in a multi-authored paper it is not possible to know how much an author has contributed in a paper. Hence all authors are given the same credit.
- ii) In *Science Citation Index* the citations are given under the first author only for obvious reasons. But credit for citations is given to all authors of the article. When citation scenario is generated of an author, it is not considered at all whether s/he is the first author or the last author. If a five-authored paper has generated 100 citations all the five authors are given the credit of 100 citations. In Google Scholar also, the same practice is followed. For depicting the citation scenario of scientists for Bhatnagar award, INSA fellowship, as well as other awards and rewards, all scientists are credited with the same number of citations as that of the first author of the paper.
- iii) Alfred J Lotka, while propounding his law way back in 1926, considered all the authors of an article, not only the first author only.
- iv) It goes without saying that indexing and abstracting services all over the world prepare author indexes considering all authors of an article.
- v) While compiling personal bibliography also all the contributions of the author are taken into account irrespective of his position in the byline.

## Conclusion

Most of our noted bibliometricians follow the law of least effort while generating a paper on bibliometrics and related areas. Usually they select a single database like Scopus. The data on the subject of choice is downloaded and analysed following a set pattern. In some cases the entire data is downloaded from Web. They do not conduct any field survey; neither do they visit any library. Sitting in the home or office, they download the data using a computer with internet connection and generate the article in a week or ten days. An article of this type may be termed as ‘articles of least effort’ or ALE. The characteristics of such articles are that they are not based on comprehensive data. The results of the analysis in most cases do not depict the authentic scenario and distort the bibliometric indicators beyond imagination. The culture of producing such articles needs to be looked into seriously. It should not be allowed to continue for long. Editors and referees can help a lot in curbing this menace.

## References

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**B K Sen**

Chairman, Bibliometrics Expert Committee,  
DST, Govt. of India

## AUTHOR’S RESPONSE

This concerns the letter by Prof. B K Sen on our article entitled “Bibliometrics and scientometrics in India: an overview of studies during 1995-2014. Part I: Indian publication output and its citation impact” published in *Annals of Library and Information Studies* (64) (1) 2017: 28-36.

Prof. Sen is a learned teacher and I was one of his students while undergoing INSDOC’s Associateship in Information Science course during 1979-1981. He can never be a *persona non grata* in a field in which he has served for more than 50 years.

In addition to the letter of Prof. B K Sen, the article was discussed on ResearchGate as well. The discussions and critical views were on the data collection method adopted in the article including the consideration of only the first author names for the analysis.

We agree with some of the comments and shall be publishing a corrected table in Part II of the article due to appear in a later issue.

As for the 54 papers listed by Prof. B K Sen, some of his papers could not be considered as these are conference papers, book chapters or letters to the editor which were not included in the study.

With best regards,

**K C Garg**