SHORT COMMUNICATION
REGENCY OF CITATIONS AND THE PLACE
OF WORK OF SCIENTISTS

A research workers usually consults the available literature in his subject to keep himself abreast of the latest developments. The relevant literature scanned by him gets subsequently reflected in his papers. This being the usual practice, it can be assured that the references cited by an author indicate the availability of literature to him - recent or otherwise.

Again, it has been generally found that the older scientific literature is used to a lesser extent than the recent ones - this phenomenon has been demonstrated in the “time distribution of the scientific literature references” [1], in the “received citations of journal articles” [2] and in the “library use data” [3]. In other words, generally the decrease in the number of citations is connected with the decrease of scientific value, barring a few exceptional cases.

Investigating the “citedness of science literature” from the past 100 years, De Solla Price came to the conclusion that there is a quick fall in the number of citations initially followed by a slower rate of descent; though the half life of citations vary from subject to subject.

OBJECTIVE

There is a general feeling that the place of work of a scientist has got some bearing on his citation pattern. In other words, it can be said that a scientist working in a remote place having less library facilities will cite older literature more than those working in a city or town having better library facilities. This study was undertaken to find out whether or not the aforesaid assumption was correct.

METHODOLOGY

With this objective in view, we have based our study on the citations given by the Indian scientists in their articles published in ten Indian journals on chemistry and chemical technology in 1985, viz., Indian Journal Chem. Sec. A & Sec. B, J. Indian Chem. Soc.; Chemical Abstracts Scs.; Trans. SAEST; Indian J. Biochem. and Biophys; J. Inst. Chemists, India, Acta Ciencia Indica, Pt. C; Indian Perfumer & Chemical Age of India.

The cities, the authors reside in, have been divided into 3 groups i.e. A grade (Delhi, Bombay, Calcutta, Madras, Hyderabad, Bangalore etc.); B grade (Ahmedabad, Bhavnagar, Baroda etc.), and C grade (Anantpur, Berhampur, Burla etc.) on the basis of the availability of literature. This division has been done in the following manner: The top ranking journals in the field on chemistry & chemical technology were identified from JCR, 1985. The percentage of availability of these journals in the concerned cities were indentified with the help of the Union List of Current Scientific Serials in India, 1980. Cities with 60-70% availability of such journals were grouped as A grade, 50-59% as B grade and the rest C grade. A grade comprised 16, B grade 27 and C grade 104 cities.

For calculating the recency of citations, the cited years of the reference of each article were divided into 4 blocks of years viz., 1980-85, 1970-79, 1960-69 and earlier.

The total number of papers published by the authors in each grade of cities were noted and the cited references were analysed on the basis of blocks of years.

RESULTS

The results obtained from this study are as follows:

(i) As can be expected, more papers are published in A grade cities (38.85/city) followed by B grade cities (10.15/city) and C grade cities (3.28/city).

(ii) The number of citations per paper emanating from A grade and C grade cities are more or less the same (12.33 & 12.27).
Why it is low (10.38) in the case of B grade cities is not known.

(iii) The citations in papers of A grade cities are more for the recent papers (24.9% pertain to 1980-85) compared to those in B & C grade cities (20.5% & 17.1%, 1980-83). The citations in the papers of C grade cities are generally more for the older literature.

CONCLUSIONS

The present study reveals that the scientists working to remote places usually cite comparatively older literature which may be due to lesser access to current literature.

REFERENCES


2. Morton, J.: Causes of low and high citation potentials in science: Citation analysis of biochemistry and plant physiology journals. JASIS 1983, 34(4), 244-46.


Table 1

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<th>Cities</th>
<th>No. of cities covered in each group</th>
<th>Total No. of Papers Published</th>
<th>Average No. of Papers Published</th>
<th>Total Citations</th>
<th>Average Citations per Paper</th>
<th>1980-85</th>
<th>1970-79</th>
<th>1960-69</th>
<th>Earlier</th>
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<td>38.81</td>
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