PREFACE

Since mid twentieth century, library and information scientists have been observing the evergrowing number of bibliographic units like books, periodicals, periodical articles and various other forms of printed output and the corresponding increase in the size of the library collection, number of readers, issue of library materials, variety of readers, and so on as a direct outcome of the deluge of graphic record or the literature explosion. Moreover, the traditional bibliographic techniques and skills for organising these vast and complex manifestations of knowledge into easily accessible form were felt to be no longer adequate. The library and information scientists have been showing much concern as to how best to have better management and control over them for effective and efficient service and as a result attempts were being made to make some generalization and formulate some empirical law towards the behaviour of such bibliographic unit. The measurement of bibliographic information was found to offer the promise of providing a theory that will resolve many of these practical problems. It is claimed that patterns of author productivity, literature growth rates and related statistical distribution can be used to evaluate authors, assess disciplines and manage collection.
The study and measurement of the publication patterns of all forms of written communication and their authors utilising the mathematical and statistical methods started being applied. Such studies, in course of time needed a name and after the usual terminological turmoil, has established itself as 'Bibliometrics'.

Although the term is of recent coinage, the practice started way back in 1896, when F. Campbell advanced the idea for the first time of the scattering of information. However, he did not coin any term for such studies. Cole and Eaeles in their publication on the history of comparative anatomy analysed the literature on the subject applying statistical methods and called it 'Statistical Analysis'. Wyndham E. Hulme used the term 'Statistical Bibliography' in 1923 for such studies. S.R. Ranganathan used the term 'Librametric Studies'; he implied the measurement of various library activities and services using mathematical and statistical techniques. Alan Pritchard (1969) coined the term 'Bibliometrics' to denote a new discipline where quantitative methods were employed to prove scientific communication processes by measuring and analysing various aspects of written documents. Schinidmeir (1978) defined it as the application of mathematical methods to bibliographical, information and library activities. Kerius (1980) Lawani (1980), Hjerpe
(1975) also tried to show relationship of bibliometrics with library and information science and in certain cases with science of science. Fairthrone (1969) defines it as "quantitative treatment of the properties of recorded discourse and behaviour appertaining to it".

Bibliometric study offers a new approach to the documentation of subject literature utilising quantitative and statistical methods to monitor the significant features in the published output of any subject or group of subjects. Its purpose is:

(a) to shed light on the process of written communication and of the nature and course of development of a discipline (in so far as this is displayed through written communication), by means of counting and analysing the various facets of written communication.

(b) the assembling and interpretation of statistics relating to books and periodicals - to demonstrate historical movements, to determine the national or universal research of books and journals and to ascertain in many local situations the general use of books and journals.
Both of these purposes emphasize that bibliometrics is primarily a method. In a general introduction to bibliometrics, Daniel O'Connor and Henry Voos argue that because bibliometrics has largely been used only to describe bibliographic phenomena and is not yet able to explain or predict these phenomena, it is merely a method not a theory. They state that if bibliometrics is to ascertain the status of a theory to be able to predict, explain, and thus to become more useful, researcher must concentrate on the casual factors underlying bibliographic phenomena.

Keeping all these things in mind, this investigation was undertaken to estimate the trend of growth rate as well as the various aspects of citation studies for the purpose of describing the literature and studying the relationship within the literature.

Thus, to operate effectively a library must be able to identify publications in library and information science periodical literature which are of high subjective value to its users and must also be able to acquire as well as organise these publications in such a way
to optimize their usefulness.

The present investigation is, thus, an able step which satisfies the present need of library personnels as well as a very new approach in this science which unfolds many interesting ideas to those who are ready to know the application of bibliometric techniques.

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