CHAPTER-I

BIBLIOMETRIC STUDIES ON ENGLISH LANGUAGE & LITERATURE

1. INTRODUCTION:

The main aim of any library is to satisfy the information needs of users within a limited budget, but in this world of information explosion it is a challenging job to any librarian to select the right kind of reading materials. For a judicious selection librarian usually depends upon various acceptable tools or techniques. Bibliometric study is one of the universally acceptable tool and technique. It helps in determining the major forms of reading materials like Periodicals, textbooks, manuals, handbooks, etc. Bibliometric studies are used to identify the pattern or patterns of authorship citation and or secondary journal coverage with the hope that such regularities can give an insight into the dynamics of the area under consideration. This consequently leads to better organization of information resource which is essential for effective and efficient use. Bibliometric studies are undertaken now-a-days enormously at national and international level. In most cases Bibliometric studies have been carried out on well established subject areas. The present study is also being done on the area of Bibliometrics itself.

Bibliometrics is an emerging thrust area of research in the field of Library and Information Science. It is first appeared in 1969 and it became popular during 1980’s. Bibliometrics is a qualitative and quantitative analyses of publication for the purpose of ascertaining specific kinds of phenomena. There are two types of Bibliometric studies: (i) Descriptive studies and (ii) Behavioral studies. The descriptive studies are those studies, which describes various features of literature. These studies cover the medium of communication, the subject matter, and the volume of information covered. Other type of Bibliometric studies are behavioral studies, which explore the bibliographic relationship between different documents. These studies also show the relationship between different authors, disciplines, etc. With the Bibliometric studies one can shed light on the process of written communications analyzing its various facets by Hulme.¹
1.1 LIBRAMETRY:

The term Librametrics has two roots, ‘Libra’ and ‘metrics’. The word Librametrics means measurement. Ranaganthan\(^2\) conceived the idea of Librametry in 1948 at the Aslib’s Conference held in Lamington Spa when he was asked to comment on the lecture of Prof. J.D.Bernal by the then president of Aslib. Later in 1969 at the annual seminar of the Document Research and Training Centre (DRTC), Bangalore, in his paper he elaborately explained application of libremetrics techniques in organizing various library activities and services of Madras University as its librarian\(^3\). Neelameghan also presented a paper reporting about the investigation conducted in 1969 by Research Unit of the DRTC on applicability of Librametic techniques\(^4\). The common definition introduced in 15\(^{th}\) All India IASLIC conference on Bibilometrics and Librametrics by Ravivhandra Rao\(^5\).

“Information process and information handling in libraries and information centers by quantitatively analyzing the characteristics and behaviors of documents, library staff and library users”. Sengupta defined Librametrics as “quantitative analysis of various facets of library activities and library documents by application of mathematical and statistical calculus to seek solution to library problems”\(^6\).

In the Madras University Library, S.R.Ranganthan maintained the statistics systematically relating to various library operations. This provided the base for calculating man hours needed in a year for each item of work in the library. This, in turn helped to reduce staff, and the staff formula can be used for the determination of the strength of staff in an objective and impersonal way. Thus, when the volume of new accession, the hours of working, number of readers, etc can be estimated, then the size of the staff required may also be estimated with the help of the staff formula. This has helped many librarians to justify demand for additional staff and also intelligently plan new services for new system.

Librametric studies can also help in the most judicious distribution of staff. The pressure of work in the circulation and reference sections usually, vary during different periods of the day. If the exact pattern of this varying work-load is known, provision of
staff in these sections can be accordingly planned. Dr S.R.Ranganathan suggested the use of Librametry for determining the optimum use of library service, design of library building, size of reading rooms and so on. Even in classification and cataloguing there was wide scope for Librametry, such as determining the most helpful facet sequence through statistical analysis of readers needs. Applications of quantitative techniques to libraries were until recently known as “Statistical bibliography”. In 1948 this subject was termed as Librametry by the late Dr..S.R.Ranganathan and the scope of this subject was however until recently, only to the application of quantitative methods in library management. In 1969 the term, Librametry was coined to describe all studies which seek to quantify process of written communication.

1.2 BIBLIOMETRICS-MEANING DEFINITION AND SCOPE:

The word Bibliometricis is derived from Latin and Greek words i.e. Bilio and Metrics. ‘Bybl’ meaning book, paper, the word “metric” on the other hand, indicates the science of the meter. So etymologically it is a measurement, and is derived either from Latin or Greek word ‘metricus’ or merticos respectively means measurement7.

Bibliometrics as a sub discipline in Information Science is first known to have been applied by F.J.Cole and N.B.Eales in 19178. They analyzed comparative anatomy papers by counting the number of publication by country. A subsequent study was conducted by counting by Hulme in 19239. Both of these studies have designed it as ‘Statistical bibliography’ and defined it as the application of quantitative techniques to library and bibliographical work. Gross and Gross10 is considered to be the third study in the field based on citations. After Hlume, the term statistical bibliography was used by Henkle in 1938 in his article the periodical literature of Biochemistry’ and Gosnell in his dissertation in 1943 and later in his article of 1948. Later Fussler in 1988 and 1949 Raising in 196211, Barker in 1966 and Prichard in 1968 and 1969 have used the term’ Statistical Bibliography’ in their work. As the term was considered very clumsy, not very descriptive, and can be confused with statistics itself or bibliographies on statistics Pritchard suggested the word “Bibliometrics”. ‘Librametrics’, Scientometrics and Informetrics are also in use in the literature. Bibliometrics is analogous to ‘Ranganthans’, Librameters; Russian concept, Scientomeris; FID’s, Informatics and also
to some other well established sub disciplines like ‘Econometrics’ Psychometrics,’ Sociometrics and Biometrics, where the mathematical and statistical Calculus has been applied to study and solve the problems in the field of library science, history of science, information sciences, Economics, Psychology, Sociology and Biology respectively. Kopelock (1978)\(^{12}\) points out, during the period 1967-1977, 52 different terms have been used to describe Bibliometricrcs.

Library Science is one of the oldest professional subject disciplines that started merely as a craft and remained so till 20\(^{th}\) century, which started developing like other sciences viz. Biometrics, Psychometrics, Econometrics and Scientometrics etc. One can notice the similar development in Library and Information Science namely, Bibliometrics, Informetrics and Scientometrics

**DEFINITIONS OF BIBIOMETRICS:**

Blbiometrics means application of statistical studies in library and information centers. Over the years the subject has been growing and gaining ground in libraries and information centers all over the world.

A famous definition in this regard is by Alan Prichard (1969)\(^{13}\) “Bibliometrics as the application of mathematics and statistical method to books and other media of communication”

British Standard Institution\(^{14}\) defines Bibliometrics as “The study of the used of documents and patterns of publication in which mathematical and statistical method have been applied”

According to Sengupta\(^{15}\) “Bibliometric as organizations classification and quantitative evaluation of publication pattern of all macro and micro communication along with their authorship by mathematical and statistical calculus”

Dr.S.R.Ranganathan\(^{16}\) explains that “Application of quantitative techniques to libraries were until recently known as “statistical bibliography” this subject was termed as”Librametry”. The scope of the subject was, however until recently limited only to the application of quantitative methods to library management”
According to Faithrone\textsuperscript{17} “Bibliometrics as the quantitative treatment of the properties of recorded discourse and behavior pattern”

While describing the importance of statistical Bibliography Hulme\textsuperscript{17} states that “The purpose of statistical bibliography is to shed light on the process of written communication and of the nature and course of development of a discipline by means of counting and analysis its various facets of written communication”.

There are number of definitions of Bibliometrics given by different researchers such as Hume\textsuperscript{18}, Potter\textsuperscript{19}, Schrader\textsuperscript{20}, Sengupta\textsuperscript{21}, Kaibar\textsuperscript{22} and others. However a more elaborative concept of Bibliometric has recently expounded by Egge\textsuperscript{23}, who defined it as the development and application of mathematical (including statistical and optimization of models and techniques to all aspects of communication

**BIBLIOMETRICS-SCOPE:**

According to Pritchard (1969, 1968)\textsuperscript{24,25} the purpose of Bibliometrics was:

1. To shed light on the process of written communication and the nature and course of development of a descriptive means of counting and analyzing the various facts of written communication.
2. To provide information about the structure of knowledge and how it is communicated.

Stevens (1953)\textsuperscript{26} considered Bibliometrics as a quantitative science and divided it into broad areas of several sub-areas as follows.

1. Descriptive Bibliometrics or productivity count.
   (a). Geographic
   (b). Different periods of time; and
   (c). Different disciplines.
2. Evaluative Bibliometrics or Literature usage count
   (a) Reference count; and
   (b) Citation count
APPLICATION OF BIBLIOMETRIC:

According to Ravichandra Rao (1983) bibliometric techniques are used in the identification of trends in a subject and also in the study of scientific communication. He states that “Bibliometrics has been accepted as a research area that gives us additional understanding of the form and structure of scientific communication”

As Bibliometrics lies between the broader area of the social science, its techniques have extensive application equally in sociological studies of science, information management, librarianship, history of science including science policy, study of science of science and scientist and also in different branches of social sciences. Some of the areas where Bibliometric techniques are consistently being applied have been enumerated by Sengupta (1992)

- To identify research trends and growth of knowledge in different scientific disciplines;
- To estimate comprehensiveness of secondary periodicals;
- To identify users of different subjects;
- To identify authorship pattern and trends in documents on various subjects;
- To measure usefulness of adhoc and retrospective SDI services;
- To identify core periodicals in different disciplines;
- To formulate an accurate need-based acquisition policy within limited budgetary and accurate weeding and stacking policy;
- To initiate effective multilevel network systems;
- To study obsolescence and dispersion of literature
- To predict productivity of publisher, individual authors, organization, countries or that of an entire discipline;
- To design automatic language processing for auto-indexing auto-abstracting and auto-classification; and
- To develop norms for standardization

To summarize, Bibliometrics studies have a wide range of application in such areas as book and journals acquisition, study of communication patterns, library use
analysis, obsolescence of literature, identification of specialties and in identification of influential authors and papers.

1.3 BIBLIOMETRIC LAWS:

The statistical data relating to the world of scientific information and document collection such as; scattering of subject, pattern of authorship, citation trends, and distribution pattern of information element have engaged the attention of statisticians and librarians for over 50 years. Attempts have been made collect and interpret these data and to study the underlying principles. The branch of library and information science activity was named as Librametrics by Ranganthan,(1959) and Bibliometrics (Pritchard,1969). The Bibliometric laws are useful in understanding some of the information phenomena and may help in planning many of the library activities, as they indicate certain basic patterns and relationship governing information items and activities. The study throw light on the pattern of literature growth, productivity and influence of authors, interrelationships among different branches of knowledge, distribution of terms in information storage retrieval, pattern of collection development, their use and the like. Following three empirical Bibliometric laws that provided tremendous boost in the research activities on Bibliometrics

SIGNIFICANT LAW’S OF BIBLIOMETRIC STUDY:

(1) BRADFORD’S LAW: Scattering of articles over different journals

(2) LOTKA’S LAW: Productivity of authors in terms of scientific papers

(3) ZIPF’s: Frequency of occurrence of words in a text

1.3.1 BRADFORD’S LAW: Scattering of articles over different journals

Bibliometric studies have been very popular in recent years, and the literature on the subject has been growing rapidly over the past five decades. Bibliometrics is the study and measurement of the patterns of all forms of recorded information and their products. Bradford first observed that periodical articles on a subject may be scattered over different periodical titles according to “zones” of decreasing
productivity of these titles. Many later studies confirmed this phenomenon of scattering in various indexing/abstracting services of machine readable data bases. According to Bradford (1934)\textsuperscript{29} a large number of the articles that relate to the same topic tend to be concentrated in a few journals. If we arrange journals, in a descending order according to the number of related articles appearing in them, with the journals yielding the most articles at the top of the list and the yielding the fewest at the bottom, and if the journals are divided into series, each group will contain the same number of articles, then the number of journals contained in each succeeding, main group will be of journals contained in each succeeding group will be proportional to the series: \(1: J: J^2\) \ldots For some constant \(J\). Thus a linear increase in the number of articles requires a geometric increase in the number of journals. This is Bradford's law which has been an important research topic in the area of Bibliometrics.

Vickery (1948)\textsuperscript{30} shows that Bradford's law implies a j shaped curve with an initial concave segment leading to a large liners segments and that such a curve gives a good fit to available data. Subsequently, Chen and Leimkuhler (1978)\textsuperscript{31} identified six different shapes of Bradford’s graphs, including the so-called convex “drop” in the tail of the graph. Naran (1989)\textsuperscript{32}, Egghe,(1990),\textsuperscript{33} Qui & Tague (1990),\textsuperscript{34} Pravdic & Vulcovic,(1991)\textsuperscript{35}. Most efforts have relied on a priority model of the relationship among journal size, rank and frequency.

Chen and Leimkuhiler (1987)\textsuperscript{36} took a different approach. They used an index approach to explicitly recognize the presence of graphs in the raw data where the actual numbers of articles in the journals do not run consecutively from ‘1 to ‘n. the gaps play an important role in three significant regions of a Bradford graph. The first region includes the “significant few” journals that contain the majority of related articles and the corresponding graph may be concavely increasing, linear increasing convexly increasing. The second region includes the ‘middle class” journals where the curve is approximately linear. Finally the third region represents the large number of journals that publish only few related articles. Here the publication pattern can be concavely
increasing, linear increasing, or convexly increasing. These differences pointed out by the dynamic nature of Bradford’s law.

1.3.2 LOTKA’S LAW:

PRODUCTIVITY OF AUTHORS IN TERMS OF SCIENTIFIC PAPERS:

The frequency distribution of productivity of authors of scientific papers was first studied by Alfred Lotka, (1926) who proposed that the number of authors making ‘n’ contributions is about ‘1/N^2’ of those making one contribution, and the proportion of all contributions, who make s single contributions is about 60% or ‘a (N) = K/N^2’ where a is the number of authors producing ‘n’ papers and ‘k’ is constant.

Lotka’s inverse square law “might reflected an underlying pattern in the behavior of those people who produce publication, whether those publication are books or journals articles”.

Lotka’s law has been in the study made by the Library of Congress (LC) of all author headings on its MARC tapes, and study of personal authors in the card catalogue, of the University of Illinois Library, these studies were conducted to aid in planning for the implementation of the second section of AACR2.

1.3.3 ZIPF’S LAW: If the words are ranked on the basis of the frequency of their occurrences in a long text in decreasing order, the law states the frequency of occurrence f (r) of word is the reciprocal of its rank ‘n’ (Zipf,1949). The law is represented by f (r) = c/n.

Where ‘c’ is a constant or’ log f (r) + log n=log c

The laws represents only an approximation of the relationship between rank and frequency, which is hyperbolic .Zipf’s formulation, has been further refined and may generalized forms have been derived (Mandelbrot; Wyllys, 1981)

The rationale behind the rank-frequency phenomenon has been stated by Zipf’s as the “principle of least efforts”. In any language, the words which have a high frequency of occurrence are those that cost less in usage or require less effort in
communication. A feature of Zipf’s law is that it highlights the phenomenon that once, by chance a group has achieved a dominant position it retains that position for a long time and indeed, is more likely to be promoted than the less fortunate groups (Scarrot, 1974). this feature is also known as the “success breeds success’ phenomenon, i.e. success increases the chances of further success.

Though the law has been applied to study the length of monographs in The Harvard University College Library through the measuring of the number of pages and vocabulary control in the design of information retrieval (IR) systems, its real significance to a library is yet to be brought out. Against this, the least-effort principle has significance, in all areas of library activities. Those planning and designing of library systems must consider the tendency of human nature to seek things involving least effort.

**CITATION DEALS WITH TWO TYPES OF DATA:**

1. Reference or cited: An item designating the source unit; thus it is always pre-dated with reference to the citation.

2. Citation or citing: An item designating the receiving unit; thus it is always post-dated in relation to the reference.

The coverage of citation analysis has now been extended form citations of articles to other items, such as books, journals, authors, institutions, and organizations, academic departments, Universities, countries, and many other areas. The prominent techniques of citation study are citation counting, bibliographic coupling and co-citation analysis.

**1.4. CITATIONS ANALYSIS:**

The citation represents relationship between the cited and citing documents. The study of this relationship in all aspects is the function of a citation analysis, which is an important area of Bibliometrics. The study of citation analysis has count of age, practically after the launching of Science citation index, Social Science Citation Index
and Art and Humanities Citation Index by the institute for scientific information (Garfield, 1972, 1980, 1981), 40 and the use of computers.

HISTORY OF CITATION ANALYSIS:

Although citation analysis was first used in 1848 or 1927, depending on the source historically, it is a by-product of citation indexes. Gross and Gross in 1927 41 used citation count to rank the periodicals in chemistry, which was regarded as the first user study of a significance based on a more systematic citation count that became the basis and a methodological direction to the Bradford’s law of scattering, the institute of international Scientific Information (ISI) produces these indexes that organized in the 1960’s. The subject coverage in the citation index has been expanded from the initial Science Citation Index (SCI), to include the Social Science Citation Index (SSCI) and Arts & Humanities Citation Index (A&HCI). Citation counting techniques are used in the evolution of scientific activities for few decades. The main objective of the citation analysis is to evaluation and to interpret citations received by articles, authors, institutions and other aggregates of scientific activities. It is also used as a tool for measuring communication links in the sociology of science.

IMPORTANCE OF CITATION:

The importance of citation includes the following:

1. Giving credit to related work,
2. The reference to standard methodology or a piece of equipment that has been used citing than describing it in detail,
3. Providing broad background to the topic
4. Correcting or criticizing the previous papers;
5. Equating earlier papers that offer collaboration for one’s ideas or claims,
6. Drawing attention to previous works that of not well known, but ought to be,
7. Identifying the earlier publication form, which the author obtained the original idea for his or her work,
8. Altering researchers to their forthcoming work
9. Citing major figure because it makes your look more respectable
10. Citing major figure because you think he or she may be your look More respectable,
11. Citing major figure because you think he or she may be reference to the paper, when you submit it to the journal
12. Citing articles that fit the authors’ perceptions of the journals readers and what they are expecting.
13. In other words, the characteristic and status of the journal and the authors are submitting the number of paper.

**CITATION COUNTING**

This technique involves counting the number of citations received by a given document or a set of documents over a period of time from a particular set of citing documents the documents are co-cited if both of them are commonly cited in papers published subsequently. Co-Citation links two or more documents published earlier in relation to later document. Citation analysis has been criticized for both the assumptions behind it and the method employed (Smith, 1981) these assumptions are as follows.

(1) Citation of a document implies use of the document by the citing authors.
(2) Citation of document (Author, Journal articles) reflects the merit quality, significance, and impact) of that document.
(3) Citations are made to the best possible works.
(4) A cited document is related in content to the citing document; if two documents are bibliographically coupled and co-cited they are related in content.
(5) All the citation are equal, with reliability of citation data is affected by the problems posed by; (a) Multiple authorship; (b) Self-Citations; (c) Homographs; (d) synonyms; (e) Type of source; (f) implicit citations; (paper referring to or discussing a work or idea without citing it) (g) Fluctuations in citing policy with time;(h) Field/subject variations; and (i) errors.
APPLICATIONS:

Citation analysis has been applied extensively to study various aspects of documents in their subject context and use environment. As an emerging technique, it provides a new approach to the study of information phenomena. The uses of the technique (Smith, 1981; Narian and Moll, 1977)\(^4\) broadly fall into the following categories

(1) COLLECTION DEVELOPMENT, USER STUDIES:

Citation analysis has been employed to formulate journal subscription policy by evaluating journals on the basis of the number of times a journal is cited. Another use is the formulation of weeding out policies based on citation. The relative values of different types of documents to various categories or users have also been studied

(2) INFORMATION RETRIEVAL:

Citation analysis also helps been to develop document surrogates, user-document-keyword relationship and search strategy, computer identification of citing statements, and access to interdisciplinary literature.

(3) DEVELOPMENT AND GROWTH OF SUBJECT AND THEIR LITERATURE:

Productivity of authors and their influence on others have been measured, through citation, citation coupling and co-citation. These techniques have also been employed to study the structure of scientific growth to map boundaries of a subject.

(4) HISTORICAL AND RESEARCH STANDARD STUDIES:

This includes tracing the development of subject through time, density and context of the citation and using a citation network as a measure to assess interrelationships and influence of different authors and their works on other works.

(5) PATTERN OF RESEARCH COMMUNICATION:

Another area of application of bibliographic techniques is to measure the impact of isolation due to barriers of language, distance, and non-availability of literature and scientific papers on scientific communications.
UTILITY OF CIATIONS ANALYSIS:

- Citation analysis is used to study the citation links between scientific papers. Technical notes and reviews, for example it may be used by the professionals in periodical section for study the structure of literature and to identify core journals,
- Citation analysis provides relevant measures of utility and relationship of journals where a primary function is to communicate research results.
- Citation analysis helps in identification of key documents and creation of core lists of journals.
- It helps in clustering of documents according to common references and citations, and
- Provides the study of the attributes of literature including growth rate, obsolescence, citation practices.

LIMITATONS OF CITATION STUDIES:

A number of factors contribute to limit the various values and applications of the information system.

a) Theory provides only incomplete and biased record of the working of the information system.

b) Data have been collected by one hand although citation indexes published by scientific institutes can used sometimes

c) Insufficient research has been conducted into the rationale behind the citing, to enable direct application of the data

A citation study by definition excludes all those publication that neither cites nor is cited, so as citing trends may be the province of particular subjects and publication. Certain specific areas are discriminated against.

Science citation index (SCI) is multidisciplinary index to the world literature annually. It processed thousands of articles; lakhs of articles and with millions of
references. Each source article and its link with the cited articles are mapped by this context. This type of analysis reflects a wider notation of the present study.

1.5 OBsolescence:

Growth in collection of documents as well as files representing them affects all aspects of library management. Every addition of a document beyond a size calls for extra space, adds to maintenance problem and hampers easy and effective access to all documents. To overcome these problems, or at least to minimize their adverse effects, there is a need to exercise control over the size of collection, by discarding documents or relegating them.

1.6 Scientometrics:

This term was introduced and came into prominence with the founding of the journal named ‘Scientometrics’ by Braunin, (1991). The scope of the journal is to publish all those studies of quantitative aspects of science as discipline of economic activity. Scientometric is a part of the sociology of science and has application to science-policy making. It involves quantatitative studies of scientific activities, including among others, publications, and so overlaps Bibliometrics to some extent Scientometrics is a branch of the of Science.

Nalomov and Mulchenko Scintometric has Defined this term,”as a sub-field which applies quantitative methods to the study of science as an information and promoters of communication”

Haituntreats defines “Scientometric” as scientific discipline which performs reproducible measurement of science activity and reveal its objectives of quantitative regularities"

1.6.1 SCope Of ScIentometrics:

The main aim of ‘Scientometrics is to determine the state and prospects of a subject and its further development. Several, Scientometrics indicators are used for this purpose, and one of the most significant indicator is the measure of research topically in
a given field. These indicators are on the way to become standard tools of evaluation and analysis in research management of science policy making. Considerable attention has been paid in recent years to measure scientific information, which may be used for the control of science development in two ways’ viz. practical and strategic. In practical way it includes search of information for users. As far as the strategic use of information is concerned it implies the monitoring of science development and the analysis of the changing structure of science.

1.6.2 APPLICATION OF SCIENTOMETRICS:

The mathematical and statistical techniques had made possible the process of quantifying the number of publications and the number of people participating in the social system of science, research or R & D. Although there might be methodological difficulties, still it was relatively easy since it was a process of counting. The question, however, is whether such a procedure is really adequate if one has to do with the quantification of the ‘intellectual products’ of scientists or researchers. It presupposes the emphasis on qualitative studies which should be descriptive in nature. This notion has promoted researchers in this field, in the decades, to develop special type of procedures and quantitative techniques to study the features of a given discipline and to observe changing structural pattern of the discipline over a period of time. It helps in developing.

1. Ability to map literature of a discipline intelligibly at different levels;
2. Ability to create useful indicators of development in science and increasingly in technology
3. Ability to model dynamic aspects of literature, mathematically with good-to excellent fits;
4. Growing skills in using computerized databases and practical software for Bibliometrics ends

1.7 INFORMETRICS:

The tem “Informetrics connotes the use and development of a variety of measure to study and analyze several properties of information in general, and documents in
particular. The term was first coined by Otto Nacke in 1979 and was later adopted by VEROSIIISKY INSTITUT NAUCHNOI I TEKHNICHESKOI INFORMATSII (VINITI). And International Federation of Documentation (FID). The scope of it; covers bibliometrics, Scientometrics, and other quantitative studies related to information science. Informetrics seeks to develop statistical and mathematical techniques to evaluate and improve the efficiency of information services and their use. It's important applications fall in the areas of collection management and library and information services. Most of the informetric studies are connected with different types of users and the extent to which the user needs are fulfilled.

From simple data analysis of library statistics, informetrics has now grown to a well-defined concept, involving, applied statistics, modeling, simulation, cluster analysis etc. The trend in “Informetrics” is mostly towards discovery of theory and or a generalized mathematical model, which can help, in achieving efficiency in fulfilling Ranganathan’s five laws of library science.

“Informatics studies different aspects pertaining to information” (I.N.Sengupta 46)

“The term informetrics covers almost all aspects of Bibliometrics and Librametrics” (MORALES 47)

1.8. WEBOMETRICS:

The term, ‘webometric’ was coined from two English words i.e. “web” & “metrics”. The word ‘web’ is the short of World Wide Web and ‘metrics’ denotes the mathematical theory of measurement. The ODLIS defines webometrics as “description and evaluation of the impact of the Internet as a scholarly communication tool, primarily by means of quantitative analysis of web-based scholarly and scientific communications” (ODLIS). Sometimes it is used synonymously with ‘cybermetrics’. Simply, Webometrics, therefore, is the study of the quantitative aspects of the construction and use of information resources, structures and technologies on the Web, drawing on bibliometric and informetric approaches.

The World Wide Web has now become one of the main sources of information on academic and research activities and therefore it is an excellent platform to test new
methods of evaluating webometric activities. Webometric studies have focused their analyses mainly in the performance of the academic web domains, because academic institutions like colleges and universities are stable and well-defined institutions on the Web since long time ago. Furthermore, this interest is due to the possibility of building Web indicators which explain the academic activity and production (Scharmhost & Wouters, 200648; Thelwall, 200149, 200250).

Academic institutions, web sites, in many countries, are large multifaceted communication devices, and are increasingly used for a wide variety of purposes, from attracting new students to providing online library catalogues. In terms of research, academic institutions, web sites can announce the existence and promote the achievements of individuals, research groups, institutes and departments. They can also disseminate their findings, either by hosting online articles or by publishing summaries, data sets or tools. The pages themselves can be created centrally, by administrators or webmasters, or locally by individuals for themselves or their research team or projects. Potential benefits of an effective web presence include greater research impact, attracting students, media interest and commercial contacts. In this context, it is quite logical to investigate the measures of the effectiveness of web sites, both to study the communication activity that they represent and to build useful evaluation metrics (Vaughan and Thelwall, 2005)51.

Definition:

Bojorneborne (2004)52 on the other hand, defined webometrics as “the study of the quantitative aspects of the construction and use of information resources, structures and technologies on the web, drawing on bibliometric and informatic approaches. This definition covers both the construction and usage aspects of the web, which embrace the following four key domains of webometrics study:

1. Web page content analysis.
2. Web link structure analysis (e.g. hyperlink, self link and external link).
3. Web usage analysis (e.g. exploiting log files for users searching and browsing behavior).
4. Web technology analysis, (including search engine performance)
The present study mainly concentrated on the Bibliometric study and citation analysis of English Language and Literature; appended in English Ph.D thesis; which are produced between 1953-2006, from the department of English, Andhra University, Visakhapatnam.

1.8.1. Concept of Webometrics

According to Bjorneborn and Ingwersen (2004), the definition of webometrics is “the study of the quantitative aspects of the construction and use of information resources, structures and technologies on the Web drawing to bibliometric and informetric approaches.”

The term webometrics has also been introduced, coined by Almind and Ingwersen (1997). Webometrics has also been introduced, “the study of web based content with primarily quantitative methods for social science research goals using techniques that are not specific to one field study.”

The Online Dictionary of Library and Information Science defines a web page as “an electronic document written in HTML script, stored on a Web server and accessible using Web browser software at a unique Internet address (URL), usually one of a group of related, interlinked files that together comprise a Web site. A Web page may include formatted text, graphic material, audio and/or video elements, and links to other files on the Internet” (DLIS).

1.9 ENGLISH LANGUAGE AND LITERATURE: A BRIEF HISTORY:

1.9.1 LITERARY FORMS:

English literature is a rich literature. It includes masterpieces in many literary forms, particularly the novels, the short story, epic and lyric poetry, the essay, literary criticism and Drama. English literature is an area of the oldest national literature in the western world.

English literature consists of the Poetry, Prose, Novel, and Drama written in the English language by authors in England, Scotland and Wales since 1707, the three countries have been politically united under the name Great Britain. Each of the countries, but especially England had produced outstanding writers, William
Shakespeare, and Charles Dickens are only two of the great names in English Literature.

Literary forms such as the novel or lyric poem, or genres, such as the horror story are very popular. In one sense, they appear because they have not been thought of but a history in one sense, they appear because they have not been thought of before, but they also appear, or become popular for other cultural reasons, such as the absence or emergence of literacy. In studying the history of literature or any kind of art, one has considered.

a) What constitutes a given form,
b) How it has developed, and
c) Whether it has a future.

The novels of the late Catherine Cookson may have much in common with those of Charlotte Bronte, but is it worth mimicking in the late 20th century, what was ground-breaking in the 1840s. While Bronte examines what is contemporary for her, Miss Cookson invents an imagined past which may be of interest to the cultural historian in studying the present sources of her nostalgia, but not to the student of the period in which her novels are set. Daniel Defoe’s Robison Crusoe is a long work of prose fiction, but critics do not necessarily describe it as a novel.

(a) OLD ENGLISH, (b) MIDDLE ENGLISH AND (C) CHAUCER:

(a) OLD ENGLISH:

English, as we know it, descends from the language spoken by the North Germanic tribes who settled in England from the 5th century A.D. onwards. They had no writing (except runes, used as charms) until they learned the Latin alphabet from Roman missionaries. The earliest written works in Old English (as their language is now known to scholars) were probably composed orally at first, and may have been passed on from speaker to speaker before being written. We know the names of some of the later writer’s, but most writing is anonymous. Old English literature is mostly chronicle
and poetry. Lyric, descriptive but chiefly Narrative or Epic. By the time literacy becomes widespread, Old English is effectively a foreign and dead language. And its forms do not significantly affect subsequent developments in English literature. (With the scholarly exception of the 19th century poet, Gerard Manley Hopkins who finds in Old English verse the model for his metrical system of "sprung rhythm")

(b) MIDDLE ENGLISH CHAUCER:

From 1066 onwards, the language is known to scholars as Middle English. Ideas and themes from French and Celtic literature appear in English writing at about this time, but the first great name in English literature is that of Geoffrey

(c) Chaucer (1343-1400) Chaucer introduces the iambic pentameter line, the rhyming couplet and other rhymes used in Italian poetry (a language in which rhyming is arguably much easier than in English, thanks to the frequency of terminal vowels) Some of Chaucer's work is prose and some is lyric poetry, but his greatest work is mostly narrative poetry, which we find in Troilus and Criseyde and The Canterbury Tales. Other notable mediaeval works are the anonymous Pearl and Gawain and the Green Knight (probably by the same author) and William Langland's' Piers Plowman.

THE BEGINNINGS OF AMERICAN LITERATURE:

The early 19th century sees the emergence of American literature, with the stories of Edgar Allan Poe (1809-1849), the novels of Nathaniel Hawthorne (1804-64), Herman Melville (1819-91), and Mark Twain (Samuel Langhorne Clemens;1835-1910), and the poetry of Walt Whitman (1819-92) and Emily Dickinson (1830-86) Notable works include Hawthorne's The Scarlet Letter, Melville's Moby Dick, Twain's Huckleberry Finn and Whitman's Leaves of Grass

LATER VICTORIAN NOVELISTS:

After the middle of the century, the novel, as a form, becomes firmly-established: sensational or melodramatic "popular" writing is represented by Mrs. Henry Wood's East
Lynne (1861), but the best novelists achieved serious critical acclaim while reaching a wide public, notable authors being Anthony Trollope (1815-82), Willkie Collins (1824-89), William Makepeace Thackeray (1811-63), George Eliot (Mary Ann Evans 1819-80) and Thomas Hardy (1840-1928) Among the best novels are Collins's The Moonstone, Thackeray's Vanity Fair, Eliot's The Mill on the Floss, Adam Bede and Middlemarch, and Hardy's The Mayor of Caster bridge, The Return of the Native, Tess of the d'Urbervilles and Jude the Obscure.

1.9.2 MODERN LITERATURE

EARLY 20th CENTURY POETS:

W.B.(William Butler) Yeats (1865-1939) is one of two figures who dominate modern poetry, the other being T.S. (Thomas Stearns) Eliot (1888-1965) Yeats was Irish; Eliot was born in the USA but settled in England, and took UK citizenship in 1927. Yeats uses conventional lyric forms, but explores the connection between modern themes and classical and romantic ideas. Eliot uses elements of conventional forms, within an unconventionally structured whole in his greatest works. Where Yeats is prolific as a poet, Eliot's reputation largely rests on two long and complex works: The Waste Land (1922) and Four Quartets (1943)

The work of these two has overshadowed the work of the best late Victorian, Edwardian and Georgian poets, some of whom came to prominence during the First World War. Among these are Thomas Hardy, Rudyard Kipling (1865-1936), A.E. Housman (1859-1936), Edward Thomas (1878-1917), Rupert Brooke(1887-1915), Siegfried Sassoon (1886-1967), Wilfred Owen (1893-1918) and Isaac Rosenberg (1890-1918) The most celebrated modern American poet, is Robert Frost (1874-1963), who befriended Edward Thomas before the war of 1914-1918.

EARLY MODERN WRITERS:

The late Victorian and early modern periods are spanned by two novelists of foreign birth : the American Henry James (1843-1916) and the Pole Joseph Conrad (Josef
Korzeniowski; 1857-1924) James relates character to issues of culture and ethics, but his style can be opaque; Conrad's narratives may resemble adventure stories in incident and setting, but his real concern is with issues of character and morality. The best of their work would include James's The Portrait of a Lady and Conrad's Heart of Darkness, Nostromo and The Secret Agent. Other notable writers of the early part of the century include George Bernard Shaw (1856-1950), H.G. Wells (1866-1946), and E.M. Forster (1879-1970) Shaw was an essay-writer, language scholar and critic, but is best-remembered as a playwright. Of his many plays, the best-known is Pygmalion (even better known today in its form as the musical My Fair Lady) Wells is celebrated as a popularize of science, but his best novels explore serious social and cultural themes, The History of Mr. Polly being perhaps his masterpiece. Forster's novels include Howard's End, A Room with a View and A Passage to India.

1.9.3 RECENT AND FUTURE TRENDS:

In recent times the novel has developed different genres such as the thriller, the who a unit, the pot-boiler, the western and works of science-fiction, horror and the sex-and-shopping novel. Some of these may be brief fashions (the western seems to be dying) while others such as the detective story or science-fiction have survived for well over a century. As the dominant form of narrative in contemporary western popular culture, the novel may have given way to the feature film and television drama. But it has been proved surprisingly resilient. As society alters, so the novel may reflect or define this change; many works may be written, but few of them will fulfill this defining those which seem to do so now, may not speak to later generations in the same way.

1.9.4 EVALUATING LITERATURE:

The "test of time" may be a cliché, but is a genuine measure of how a work of imagination can transcend cultural boundaries; we should, perhaps, now speak of the "test of time and place", as the best works cross boundaries of both kinds. We may not "like" or "enjoy" works such as Weathering Heights, Heart of Darkness or The Waste Land but they are the perfect expression of particular ways of looking at the world; the
The author has articulated a view which connects with the reader's search for meaning. It is, of course, perfectly possible for a work of imagination to make sense of the world or of experience (or love, or God, or death) while also entertaining or delighting the reader or audience with the detail and eloquence of the work, as in A Midsummer Night's Dream, The Rime of the Ancient Mariner or Great Expectations.

1.10 INDIAN ENGLISH LITERATURE: HISTORY:

History of English language and literature in India starts with the advent of East India Company in India. It all started in the summers of 1608 when Emperor Jahangir, in the courts of Moguls, welcomed Captain William Hawkins, Commander of British Naval Expedition Hector. It was India's first tryst with an Englishman and English. Jahangir later allowed Britain to open a permanent port and factory on the special request of King James IV that was conveyed, by his ambassador Sir Thomas Roe. The English were here, to stay. As East India Company spread its wing in southern peninsula, English language started to get newer pockets of influence. But it was still time for the first English book to capitalize. Late 17th century saw the coming of printing press in India but the publication were largely confined to either printing the Bible or government decrees, then they came into newspapers. It was in 1779 that the first English Newspaper named Hickey's Bengal Gazette was published in India. The breakthrough in Indian English literature came in 1793 A.D. when a person by the name of Sake Dean Mahomet published a book in London titled Travels of Dean Mahomet. This was essentially Mahomet's travel narrative that can be put somewhere between a Non-Fiction and a Travelogue.

OLD ENGLISH (450 - 1100 AD):

During the 5th Century AD three Germanic tribes (Saxons, Angles, and Jutes) came to the British Isles from various parts of northwest Germany as well as Denmark. These tribes were warlike and pushed out most of the original, Celtic-speaking inhabitants from England into Scotland, Wales, and Cornwall. One group migrated to the Brittany Coast of France where their descendants still speak the Celtic Language of Breton today. Through the years, the Saxons, Angles and Jutes mixed their different
Germanic dialects. This group of dialects forms what linguists refer to as Old English or Anglo-Saxon. The word "English" was in Old English "English", and that comes from the name of the Angles. The Angles were named from English their land of origin.

Before the Saxons the language spoken in what is now England was a mixture of Latin and various Celtic languages which were spoken before the Romans came to Britain (54-5BC). The Romans brought Latin to Britain, which was part of the Roman Empire for over 400 years. Many of the words passed on from this era are those coined by Roman merchants and soldiers. These include win (wine), candle (candle), belt (belt), and wall (wall). The influence of Celtic upon Old English was slight. In fact, very few Celtic words have lived on in the English language. But many of place and river names have Celtic origins: Kent York, Dover, Cumberland, Thames, Avon, Trent, Severn. The arrival of St. Augustine in 597 and the introduction of Christianity into Saxon England brought more Latin words into the English language. They were mostly concerned with the naming of Church dignitaries, ceremonies, etc. Some, such as church, bishop, baptism, monk, Eucharist and presbyter came indirectly through Latin from the Greek. Around 878 AD Danes and Norsemen, also called Vikings, invaded the country and English got many Norse words into the language, particularly in the north of England. The Vikings, being Scandinavian, spoke a language (Old Norse) which, in origin at least, was as Germanic as old English. Words derived from Norse include: sky, egg, cake, skin, leg, window (wind eye), husband, fellow, skill, anger, flat, odd, ugly, get, give, take, raise, call, die, they, their, them. Several written works have survived from the Old English period. The most famous is a heroic epic poem called "Beowulf Beowulf". It is the oldest known English poem and it is notable for its length - 3,183 lines. Experts say "Beowulf" was written in Britain more than one thousand years ago. The name of the person who wrote it is unknown.

MIDDLE ENGLISH (1100-circa 1500 AD):

After William the Conqueror, the Duke of Normandy, invaded and conquered England in 1066 AD with his armies and became king, he brought his nobles, who spoke French, to be the new government. The Old French took over as the language of the court, administration, and culture. Latin was mostly used for written language,
especially that of the Church. Meanwhile, The English language, as the language of the now lower class, was considered a vulgar tongue. By about 1200, England and France had split. English changed a lot, because it was mostly being spoken instead of written for about 300 years. The use of Old English came back, but with many French words added. This language is called Middle English. Most of the words embedded in the English vocabulary are words of power, such as crown, castle, court, parliament, army, mansion, gown, beauty, banquet, art, poet, Romance, Duke, Servant, peasant, traitor, and governor. Because the English underclass cooked for the Norman upper class, the words for most domestic animals are English (ox, cow, calf, sheep, swine, deer) while the words for the meats derived from them are French (beef, veal, mutton, pork, bacon, venison). The Middle English is also characterized for the beginning of the Great Vowel Shift. It was a massive sound change affecting the long vowels of English. Basically, the long vowels shifted upwards; that is, a vowel that used to be pronounced in one place in the mouth would be pronounced in a different place, higher up in the mouth. The Great Vowel Shift occurred during 15th to 18th centuries. The most famous example of Middle English is Chaucer's "The Canterbury Tales", a collection of stories about a group of thirty people who travel as pilgrims to Canterbury, England. The portraits that he paints in his Tales give us an idea of what life was like in fourteenth century.

MODERN ENGLISH (1500 to the present):

Modern English developed after William Caxton established his printing press at Westminster Abbey in 1476. John Gutenberg invented the printing press in Germany around 1450, but Caxton set up England's first press. The Bible and some valuable manuscripts were printed. The invention of the printing press made books available to more people. The books became cheaper and more people learned to read. Printing also brought standardization to English. By the time of Shakespeare's writings (1592-1616), the language had become clearly recognizable as Modern English. There were three big developments in the world at the beginning of Modern English, period: the Renaissance, the, Industrial, Revolution, and, the, British, Colonialism. It was during the English Renaissance that most of the words from Greek and Latin entered English. This period in English cultural history (early 16th century to the early 17th century) is
sometimes referred to as "the age of Shakespeare" or "The Elizabethan era", taking the name of the English Renaissance's most famous author and most important monarch, respectively. During the reign of Queen Elizabeth-I, there was an explosion of culture in the form of support of the arts, popularization of the, Printing press and massive amounts of sea travel.

England began the Industrial Revolution (18th century) and this had also an effect on the development of the language as new words had to be invented or existing ones modified to cope with the rapid changes in technology. New technical words were added to the vocabulary as inventors designed various products and machinery. These words were named after the inventor or given the name of their choice (trains, engine, pulleys, combustion, electricity, telephone, telegraph, camera, etc).

Britain was an Empire for 200 years between the 18th and 20th centuries and English language continued to change as the British Empire moved across the world - to the USA, Australia, New Zealand, India, Asia and Africa. They sent people to settle and live in their conquered places and as settlers interacted with natives, new words were added to the English vocabulary. For example, 'kangaroo' and 'boomerang' are native Australian Aborigine words; 'juggernaut' and 'turban' came from India. English continues to change and develop, with hundreds of new words arriving every year. But even with all the borrowings from many other languages the heart of the English language remains the Anglo-Saxon of Old English. The grammar of English is also distinctly Germanic - three genders (he, she and it) and a simple set of verb tenses.

1.11 HISTROY OF LITERARY MAGAZINE:

Literary magazines first began to appear in the early part of the 19th century, mirroring and overall rise in the number of books, Magazine and scholarly journals being published at that time. In Great Britain, critics Francis, Jefferie, Henry Brougham and Sydney Smith founded the Edinburg Review in (1802). Other British reviews of the this period included the Westminster Review in (1842),the Spectator (1828) and Athenaeum (1828).in the United states early journals included the Philadelphia Literary Magazine (1803-08) the monthly Anthology (1803-11), which became the North American Review, the Yale Review( found in 1819),Dial (1804-44) and the new Orleans,
based De Bow's Review (1846-80). Several prominent literary magazines were published in Charleston, South Carolina, including the Southern Reviews from 1828-32 and Russell's magazine from 1857-60.

The North American Review is the oldest American literary magazine, but publication was suspended during World War II where as the Yale Review was not, making the Yale Journals the oldest literary magazine in continues publication, by the end of the century, literary magazine had become important features of intellectual life in many parts of the world. Among the literary magazines that began in the early part that century is poetry magazine, founded in 1912. Which published T.S. Eliot's first poem. “The Love Song of J. Alfred Prufrock” other important early 20th century literary magazines included the times literary supplements (1902), southwest Reviews (1915) Virginia Quarterly Reviews (1925) Southern Review (1935) and new letters (1935)

Two of the most influential and radically different journals of the half of the 20th century were the Kenyon Review and the Partisan Review. The Kenyon Review, founded by John By John Crowned Ran son, espoused the so called New Criticism. Its platform was avowedly apolitical. Although Ran son came from the south and published form that region, KR also published many New York based and international authors. The Partisan Review was first associated with the American communist Party and the John Reed, however, it soon broke ranks the party nevertheless, and political remained central to its character, while it also published literature and criticism.

The middle 20th century was a boom in the number of literary magazines, which corresponded with the rise of the small press. Among the important journals which began in this period were Nimbus: A magazine of literature, the Arts and New Ideas, which began publication in 1951, in England, the Paris Review, which was founded in 1953, Poetry Northwest, which was founded in 1959 and the Denver quarterly, which began in 1965. In 1970 saw another surge in the number of literary magazines, with a number of distinguished journals getting their start during this decade, including Plough shares, the print magazines, Granta Agni, the Missouri Review and New England Reviews and New England Review. Other highly regarded print magazines of recent years include three penny Review, the Georgia Review, The Massachusetts Review,
Ascent, Shenandoah, The Greensboro Review, Glimmer Train, Tin House, the Canadian Magazine Brick, the Australian Magazine Skive and Zoetrope: All-Story, some short fiction writers, such as Steve Almond, Jacob Appeal Dizon and Mary Yukari waters, have built national reputation in the United States primarily through publication in literary magazines.

The Committee of Small magazine Editors and Publishers was founded by Hugh Fox in the mid-1970. It was an attempt to organize the energy of the small presses. Len Fulton, editors and founder Dust book publishing, assembled and published the first realist of these small magazines and their editors in the mid-1970. This made it possible for poets to pick and choose the publication most amenable to their work and the vitality of these independent publisher were recognized by the larger community including, the National Endowment for the Arts, which created a committee to distribute support money for this burgeoning group of publishers called the coordinating council of Literary magazines.

Many prestigious awards exist for work published in literary magazines including the Push chart Prize and the O Henry Awards. Literary magazines also provided many of the pieces in the best American short stories and the best American Essays annual volumes.

1.12 ANDHRA UNIVERSITY: A Brief History

Andhra University a premier institution of higher learning was established in 1926. The University which had humble beginning in an area of 53 acres with four departments and six teachers has how grown into one of the biggest Universities in India with a campus of 500 acres. There are four University Colleges, Viz. College of Arts and Commerce, College of Science and Technology, college of Engineering and College of Law, in the main campus and two post-Graduate Centers function at Srikakulam (Now Dr.B.R.Amebedkar University, Srikakulam) and A.U.Campus, Kakinada. The University has 900 teachers, 3000 research Scholars and nearly 9000 students. The teaching and research work that has been carried out in the University Departments has been considered very high and qualitative. The University library
started in 1926 was renamed as the V.S.Krishna Memorial Library in 1968. The library is one of the premier academic libraries and today it holds about 5,00,000 books including 1,50,000 back volumes, 4,000 manuscripts and about 1800 periodicals that caters the information needs of the students, research scholars and faculty members.

1.13 PROFILE OF DEPARTMENT OF ENGLISH:

English as part of the department of European languages was started in 1932 with Mr. M.V.N.Subba Rao as its head. English as a general paper then was taught to B.A (Hons.), B.Sc.(Hons.) and Law student of University B.A.(Hons) English was started in 1945 while the University was at Guntur with Mr.B.Muthu Swami, Mr.N.F.Thyagaraju, a product of London University, as its headed, Mr.MuthuSwami, Mr.K.Viswanatham, Dr.K.R. Srinivas, lyengar, Mr.G.Subbarao, Mr.S.Hanumunatha Rao and Mr.Narasimha Das were the other members of the faculty. In 1947 Dr.K.R.Srinivas lyengar joined the Department in 1962 the present 2 year M.A.Course was introduced, and also B.A (special) was also continued. In 1976 the semester system was adopted and continued up to 1980.

“In 1932 the English department stared as part of the European languages. The department of English, one of the oldest in the university was carried out of the department of Modern Languages, offered by the University in 1945”. What began as the course in general English has grown into a post-graduate course, offering 10 papers in two years of study 5 elective in emerging areas. Many have contributed to its growth as a research department. G.Subba Rao, did pioneering work on Indian words in English, K.Viswanadham worked on comparative poetics and criticism and Prof. K.R.Srinivasa Iyengar conceptualized the study of Indian writing in English as Foundation paper. Prof. K.R.Srinivasa Iyegner worked as the head of the Department and Vice-Chancellor of the University. His initiative in writing in English impelled the study of this course all over the world today for the first university. Many Universities in the world offering Indian writing in English at the post-graduate level owe their genesis to the pioneering work of Iyengar. In the 1960’s the department offered Indian writing in English, American and common wealth Literature. This was new area of study. In tune with the disciplinary needs subsequently Literary Criticism, new Literature, special,
studies in American Literature, in English Language teaching European classical translation, Novel were offered. At present the restructured course is offered 4 semesters since 2001 1& 2 semesters and core papers in Indian writing in English, Literary Criticism, in translation in the third and fourth semesters. The electives offered for the third and fourth semesters are English Language teaching, translation theory and practice, a woman’s writing, colonial encounters a Black Literature. In the English department Prof.K.R.Srinivasa Iyengar prepared his lectures in Indian writing in English to be give at the University of Leeds in 1958 that later formed the basis of the famous book, Indian writing in English, in very recently stated Prof.Srinivasa Iyengar Corner, provides as a source centre for young scholars to study on his works

1.14. OBJECTIVES OF THE STUDY:

The present study evaluated on use patterns of English Language and Literature has been done with the following objective.viz.

1. To study the use patterns of English Language and Literature available in various sources, identified by the Research Scholars of the Department of English, Andhra University, Visakhapatnam.
2. To verify the various forms of English Language and Literature and its distribution of citations, country wise, form wise, age wise.
3. To identify the titles of the comprehensive list of journals, core Journals and core documents.
4. To tested applicability of Bradford’s Law of Scattering.
5. To find out the availability of Journals and books in Dr.V.S.Krishna Library, Visakhapatnam.
6. To suggest an accurate need based acquisition policy for journal subscription of English Language and Literature Journals according to the findings of the present study.

1.15. NEED FOR THE STUDY:

A literature is a body of thought and expressed in published writings many evolutionary trends have been observed in the publication and use of English
Language and Literature. Realizing these facts there is a need for the library to adopt some means of tailoring the library collections to the current and potential needs of users. There are two reasons for doing so. Viz. (i) Developing of need oriented collections, on one hand and (ii) utilizing the available budget cost-effectively on library acquisition on the other hand.

So far no comprehensive study has been made for identifying core literature which has been made for identifying core literature which is potentially most useful to users in any of the disciplines in Andhra University, Department of English. The present study is a kind of initiative to encourage such efforts in all those disciplines of study on which significant portion of the journals budget is being spent, nearly one crore rupees is being spent every year on acquisition of journals by Dr V.S.Krishna library Andhra University, Visakhapatnam. The scientific study of potential requirements of researchers in terms of potential requirements of researcher in terms of core literature through citation studies will ensure standard and needful acquisitions but also optimum use of journal collections by the researchers in the university.

1.16 Limitations:

The present study has attempted to cover different aspects of literature use pattern by the researchers in English Language and Literature. But due to lack of time and the constraints involved in questioning and interviewing the researchers and research directors, citation behavior pattern of the researchers, could not be undertaken in the present study.

Due to irregular and incomplete information especially in terms of name of the authors in cited data a study on Bibliographic coupling could not be included in the present study. Due to lack of time the sample is limited only to the theses awarded in English by Andhra University. Due to paucity of the time the study could not covered other research publications of researcher like books and Journal articles.
1.17 CONSPECTUS:

Chapter-I presents an introduction, covering the concept, importance, growth and development of Bibliometric studies. It also explains the relevance and application of the techniques of Bibliometrics in the field of Library & information science. Chapter- II Deals with the Review of literature on Bibliometrics by both Indian and foreign authors, published in journals in English Language and Literature. Chapter-III deals with the scope, purpose objective and Methodology of the study. It also presents a list of hypotheses which are tested for their validity using the findings of the statistical data. Chapter- IV Deals with the analysis of the data on various aspects of citations and presented in both tabular and graphical form. The analysis is presented under two parts Part-I deals with Bibliographic data analysis, Part-II data with the Citation Analysis and. Chapter-V Deals with a summary and discussions of the findings based on the analysis of data. The researcher offered few suggestions at the end, to guide the further research in this area.
REFERENCES


