



Use of Grey Literature by the researchers in social science in India

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ABSTRACT

Grey literature has an important role in the information transfer process in any field. The study aims to analyse the journal "Economic and Political Weekly" of social science for a period of 2015 to 2019. In this study the year wise different type wise distribution and growth pattern of the use of grey literature are analysed. The study also analysed the citations of grey literature according to producers of the articles and the number of electronic grey literatures out of total Grey literature (GL). From this study it is shown that the use of Grey Literature from 2015 to 2019 was increasing.

Key Words : Grey Literature, Electronic Grey Literature, Citations, Social science etc.

Introduction: Grey Literature belongs to the primary sources of information, and it has a very important role in the information transfer process in any field. Both producers and users of grey literature have always considered it to be a primary source of information although librarians have been reluctant to acquire these materials and add to their catalogues because it has a variety of formats. According to the most widespread and generally recognized definition, grey literature is all that non-conventional document which is not available through the conventional, commercial distribution channels. The study is to evaluate the actual use of grey literature in the field of social science. This goal is realized through the analysis of citation appearing in the journal literature of the field which permits also to identify the types of grey literature producers and the years of grey literature references.

Review of Literature: The importance of grey literature is also represented by an extensive number of articles written about them. There were even two international conferences solely devoted to this topic. Many of these articles point out the problematic nature of these publications and stress the need for better access. The variety of subject matter these articles address underscores the widespread nature of the problems. For example, grey literature is a concern for such subject fields as public policy, geology, aquaculture and fisheries, economics, and health sciences.

Augar states that the amount of grey literature varies from field to field, and the field of life science and medicine does not have as much grey literature as other fields such as technology, sociology, business, or education. Auger further states that this is due to the primacy of open publication in this field. In life science and medicine, even typical originators of grey literature such as public agencies, and societies and other organizations strive to publish their work in commercial or otherwise well known publications. This presents an interesting contrast to the field of agriculture and food, which enjoy "a wealth of grey literature".

Vilma Alberani describes some initiatives in the field of grey literature (GL) and the activities, from 1985, of the Italian Library Association Study Group. The major categories of GL are defined; a survey that evaluates the use of GL by end users in the health sciences is described.

References in selected periodicals and databases have been analyzed for the years 1987-1988 to determine the number of articles citing GL, the number of GL citations found in selected periodicals, the various types of GL found, and the number of technical reports cited and their country of origin and intergovernmental issuing organization. Selected databases were also searched to determine the presence of GL during those same years.

The hypothesis of the work by Vilma Alberani and Paola Decastro Pietrangeli was to evaluate the use of grey literature in information science on the basis of citation analysis. After a selection of a number of relevant journals in this field, the citations contained in scientific articles were analyzed to evaluate the types of GL references (technical reports, proceedings, standards, theses etc.), the languages used, the main producers (countries and international organizations), and the years of GL references. The results of the analysis are given with comments and reflections on the main producers and circulation channels.

A citation study by Ramadevi, Takalkar & Faras found that the number of citations relating to grey literature and the number of citations of grey references are increasing. Analysis of the articles published in the Journal of Rural Development (India) indicated the importance of and demand for grey literature.

Mr. Partha Sarathi Mondal and Dr. Sukumar Mandal analysed citation study. They found that the grey literature citations are 2490 citations out of 5192 citations, i.e., 47.96% which indicates that the grey literature play a vital role in enhancing research and development.

Types of Grey Literature: Grey literature refers to publication issued by government, academia, business and industry in both print and electronic formats, but not controlled by commercial publishing interests and where publishing is not the primary business activity of the organization. There are various types of grey literatures which have been given by different experts in their articles. According to Dean Giustin and Deane Thompson grey literature are two types, traditional and newer papers.

1. Traditional types of Grey Literature :

- I) Thesis and dissertations
- II) Census, economic and other data sources
- III) Database of ongoing research
- IV) Statistics and other data sources
- V) Conference proceedings and abstracts
- VI) Newsletters
- VII) Research reports(completed and uncompleted)

- VIII) Technical specifications, standards and annual reports
- IX) Informal communications (telephone conversations, meetings etc)
- X) Translations

2. Newer types of Grey Literature (technology based)

- I) e-prints, preprints
- II) electronic networks
- III) Blogs, audio, video over the web
- IV) Repositories
- V) Listserv archives
- VI) Spatial data (i.e. Google Earth)
- VII) Meta searching, federated searching, portals
- VIII) Digital libraries
- IX) Wikis, blikis

I have classified Grey Literature into print format and electronic formats. In print format or traditional types of Grey Literature are :

- i) Thesis and dissertations
- ii) Conference proceedings
- iii) Newsletter and Bulletins
- iv) Reports –including preprints, preliminary progress and advanced reports; technical and statistical reports; research memoranda; state –of-art-reports, market research reports ; reports of commissions and study groups etc
- v) Working papers
- vi) Census, economic and other data sources
- vii) Research reports (completed and uncompleted)
- viii) Others (telephone calls, meetings, maps, fact sheets, translation, guidance sheets)

Some examples of Grey Literature in electronic formats are as follows:

- i) e-print, preprints
- ii) Electronic networks
- iii) Blogs, audio, video over the web
- iv) Repositories
- v) Listserv archives
- vi) Digital libraries
- vii) Spatial data (i.e. Google Earth)
- viii) Meta searching, federal searching, portals
- ix) Wikis, blikis etc.

Objectives: The main objectives of the study are in the followings :

- a) to evaluate the actual use of grey literature in the field of social science

- b) to identify the types of grey literature in the reference of articles used by the researchers in social science in India.
- c) To aware librarians and documentalists about the importance of grey literature.

Methodology: I have taken up the periodical 'Economic and Political Weekly' which covers the subject economics and political science. All the references of the articles in EPW are analyzed first. Then the grey literatures used by the researchers in their articles allotted into different types like reports(pre prints, preliminary progress, advanced reports, technical , statistical reports, research memoranda, state- of- the art , market, commission and study group), working papers, census, economic and other data sources, research report(completed and uncompleted), newsletters and bulletin, others(telephone calls, lectures, meetings, maps, fact sheets, translation, guidance sheets) and electronic(e-prints, preprints, electronic networks , blogs, audio, video over the web, repositories, listserv, archives, digital libraries, special data(i.e. google earth) meta-searching , portals, wikis, blikis etc). After year wise and different types wise distribution , the growth of use of grey literature was carried out this. The data were grouped into one year interval from 2015 to 2019. Each single reference was separately analyzed to see how many references were related to grey literature documents. Considering all references together 32,415 references as a whole. The percentage of use of grey literature was 32%(10371). Again the total numbers and percentages of grey literature references according to the types of documents were analyzed. The number of electronic grey literature is also calculated.

Analysis and Interpretation:

Table-1: Use of Grey Literature appearing in the references of articles in selected periodical (2015-2019):

Sl. No.	Year	Total no. of literatures	Total no of Grey Literatures	Percentage of Grey Literatures
1	2015	6281	1893	30.14
2	2016	6535	2022	30.94
3	2017	5991	1853	30.93
4	2018	6883	2312	33.59
5	2019	6725	2291	34.07
Total		32415	10371	31.99

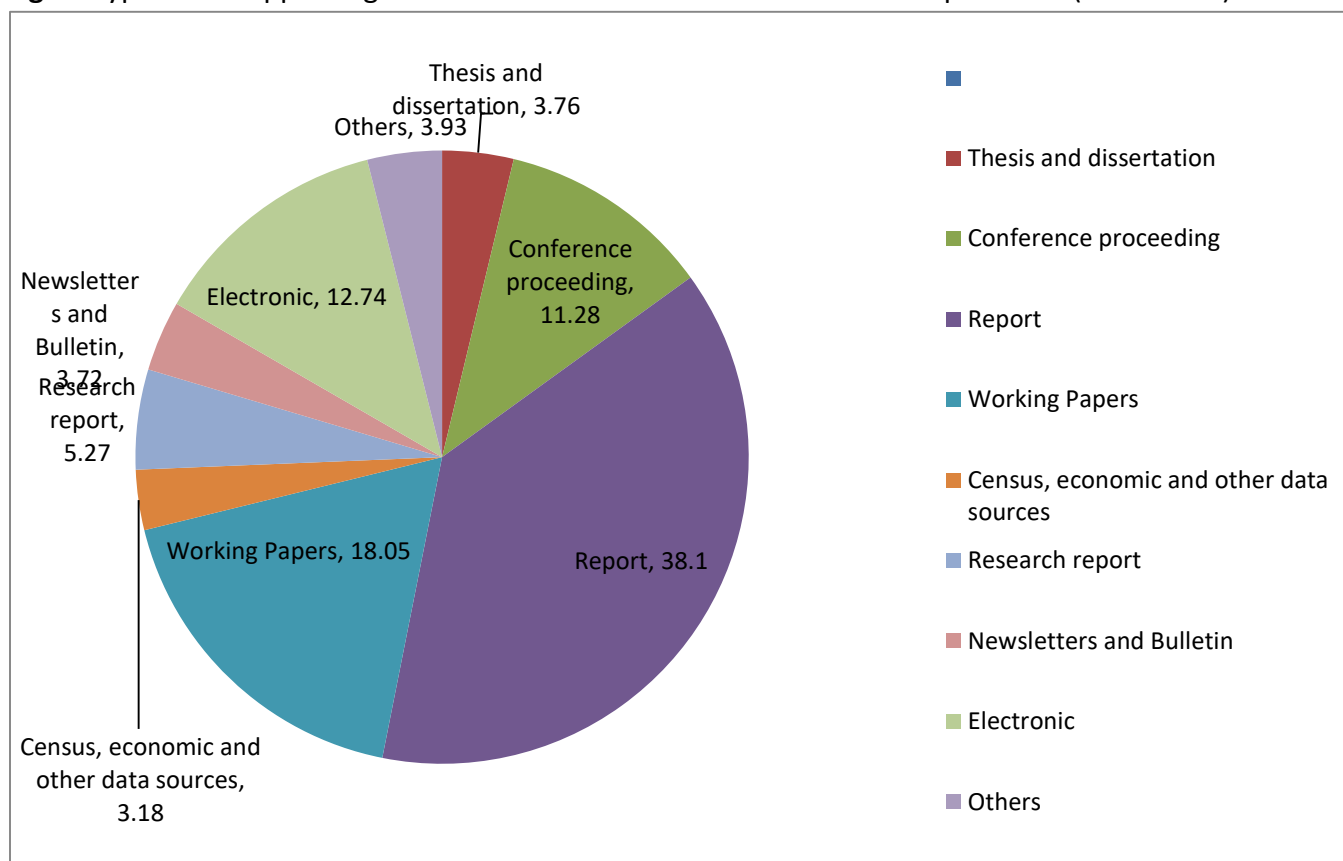
Table-1 shows that total number of references is 32415 and total number of Grey Literature references is 10371. In 2015-2019 total numbers of Grey Literatures were 1893, 2022, 1853, 2312 and 2291 successively. The percentages of used Grey Literature in 2015 to 2019 were 30.14, 30.94, 30.93, 33.59 and 34.07. This study reveals that used of Grey Literatures are gradually increasing.

Table -2: Types of Grey Literatures appearing in the references of articles in selected periodical (2015-2019).

Sl. No.	Types of GL	Years					Total	Percentages
		2015	2016	2017	2018	2019		
1	Thesis and dissertation	73	86	74	82	75	390	3.76

2	Conference proceeding	221	239	170	282	258	1170	11.28
3	Report	721	798	826	808	794	3947	38.10
4	Working Papers	295	351	367	455	404	1872	18.05
5	Census, economic and other data sources	47	55	58	76	94	330	3.18
6	Research report	125	68	73	133	148	547	5.27
7	Newsletters and Bulletin	83	64	48	96	95	386	3.72
8	Electronic	260	289	148	303	321	1321	12.74
9	Others	68	72	89	77	102	408	3.93
Total		1893	2022	1853	2312	2291	10371	100

Table-2 shows that reports prevail over the other types of Grey Literature(38.10%) followed by working paper(18.05%) , electronic(12.74%) , conference proceedings(11.28%), research report(5.27%), thesis and dissertation (8.76%), newsletters and bulletin(3.72%), census, economic and other data sources(3.18%) . The term other types (3.93%) includes some translation, official documents, meeting, fact sheets, maps, guidance sheet etc.

Fig 1 : Types of GL appearing in the references in the articles in selected periodical(2015-2019).**Table 3 :** Number of traditional GL(9050) and Electronic GL(1521) appearing in the references of articles in selected periodical(2015-2019).

Total number of GL references	Total number of traditional GL references	Total number of electronic GL references
10371	9050(87.26%)	1321(12.74%)

Table -3 shows that the percentage of used traditional type of GL was 87.26 , where electronic type of GL was 12.74 only.

Fig.2: Number of Traditional Grey Literature(9050) and Electronic Grey Literature appearing in the references of articles in selected periodical(2015-2019).

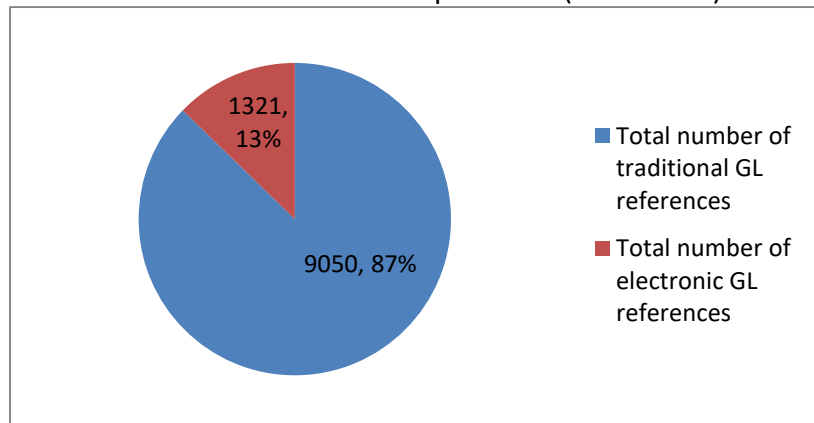


Table-4: GL references and references to non grey literatures over the total number of references of articles in selected periodical (2015-2019).

Total number of references	References to non GL	References to GL
32415	22044(68.01%)	10371(31.99%)

Table-4 shows that the use of GL appearing in the references of articles in the selected periodical from 2015-2019 was 32%.

Fig.3 : GL references and references to non grey literatures over the total number of references of articles in selected periodicals(2015-2019).

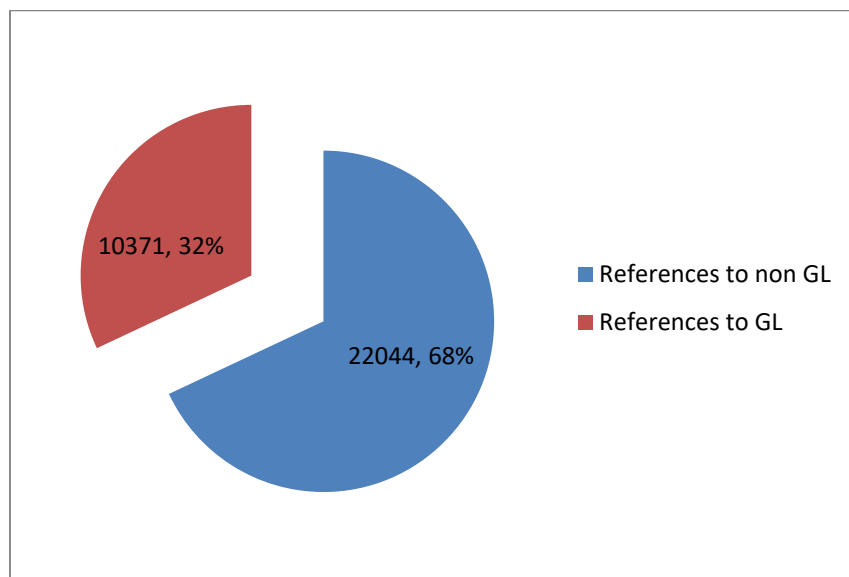


Table 5: Grey literatures produced by Institutions, organizations and Governments in the selected periodical (2015-2019).

Year	Educational Institution		Organization		Government			Others
	India	Outside India	India	Outside India	Central	State	Foreign	
2015	213	225	324	442	421	135	49	84
2016	194	229	335	453	479	114	48	170
2017	203	187	321	455	388	173	63	63
2018	327	337	383	463	418	162	83	139
2019	287	359	468	491	423	102	56	105
Total	1224	1337	1831	2304	2129	686	299	561

Table 6 : Grey Literatures produced by Institutions, Organizations and Governments in selected periodical(2015-2019).

Total Number of Grey Literature	Institutions	Organizations	Governments	Others
10371(100%)	2561(25%)	4135(40%)	3114(30%)	561(5%)

Table7: Grey literatures produced by Indian government (Central and State) and foreign government in selected periodical (2015-2019).

Year	Government		
	Central	State	Foreign
2015	421	135	49
2016	479	114	48
2017	388	173	63
2018	418	162	83
2019	423	102	56
Total	2129	686	299

Table 5, 6 and 7 shows that the percentages of grey literatures produced by the Institutions are 25% , Organizations 40%, government 30% and the term 'other' followed 5%. Institutionally produced grey literature references are 2561, where 1224 references are produced by Indian Institutions and 1337 references are produced from outside India. In case of organization, total number of grey literature references is 4135, where Indian organizations produce 1831 references and 2304 references are produced from outside India. In case of government's references, central government of India produces maximum percentages of references compared with state and foreign governments.

Fig4: Producer wise Grey Literature references in selected periodical (2015-2019).

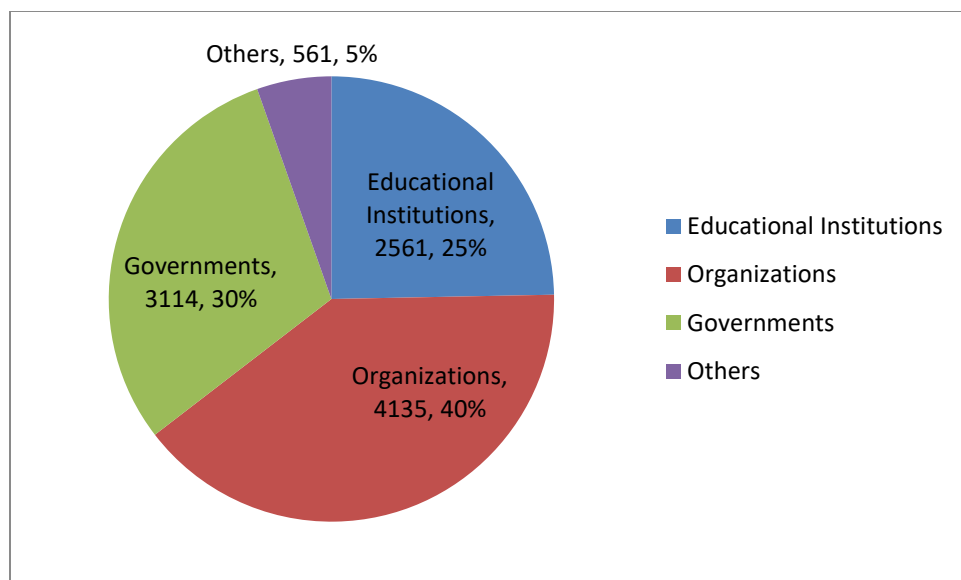
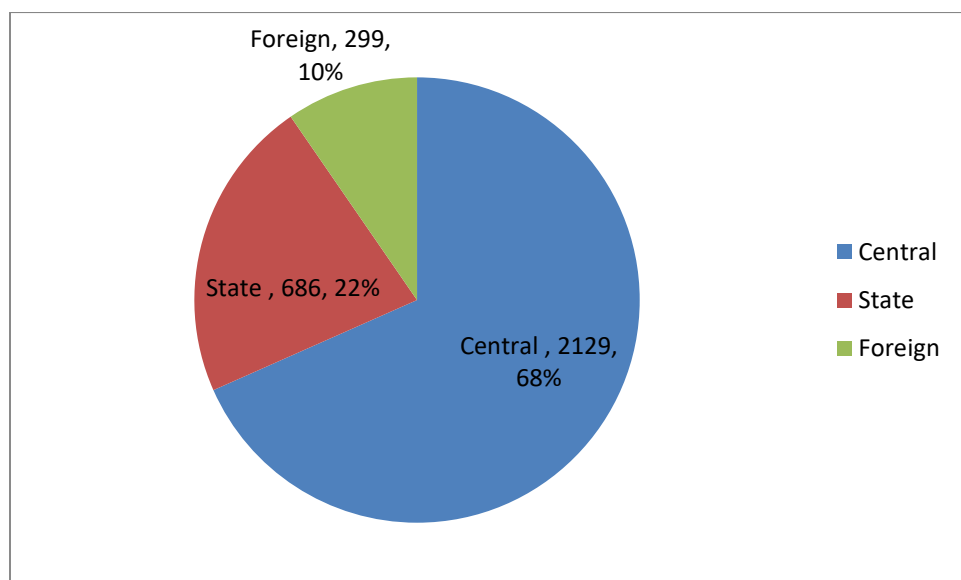


Fig6: Various government wise Grey Literature references appearing in articles of the selected periodical(2015-2019).



Findings: At first data are collected and it is presented in different tables, then it is analyzed from different angles. Now it is the time to find what has been got and what are not.

- 1) From this study it is found that the use of grey literature form 2015-2019 was increasing.
- 2) Reports (38.10%) were the major type of Grey Literature cited ; working papers , electronic and conference proceedings also played an important role.
- 3) From this study it is found that traditional type (printed) of grey literatures is cited more compared to the electronic type of grey literatures.
- 4) In this study grey literature made up 32% of the total number of references cited.

Conclusion:

Some final considerations points out the most relevant difficulties encountered in the study.

First of all it is important to stress that data were taken manually, directly from the selected journals and it was surprising to see a general wide spread in a accuracy in the list of references.

In general, the result obtained in this study confirms the use of grey literature by researchers n social science is gradually increases.

In social science reports prevailed over other types of grey literature (39.02%), thus confirming the attention given in literature to this material with bibliographical and cataloguing initiatives. The results obtained shown that working papers and conference proceedings generally play an important role in the ranks of grey literature.

These and other aspects of grey literature will be the subject of a future study that we hope to carry on in the next future.

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