LIS TODAY

Year 2024, Volume-10, Issue-1 (June)



Grey Literature Citations by Social Science Researchers in India: A Study

Partha Sarathi Mandal¹ and Dr. Sukumar Mandal²

¹PhD Research Scholar, Department of Library and Information Science, The University of Burdwan, Burdwan, 713104.

ARTICLE INFO

Key words: Grey literature; Citation analysis; Information utilization; Unpublished Research, Social sciences, Academic resources, Accessibility

doi: 10.48165/lt.2024.10.2

ABSTRACT

Grey literature has a pivotal role in the research study. It offers valuable insights that are often overlooked in traditional academic publications. Nonconventional published materials such as reports, theses, and conference proceedings are examples of grey literature. This study investigates the utilization of grey literature by social science students in India, and the findings reveal that it is widely utilized due to its accessibility, relevance to local contexts, and provision of current information. The recent publication of grey literature is used more than the earlier published literature. Researchers frequently rely on government reports and NGO publications. This study encourages researchers to cite grey literature in their research. The present paper also evaluates the grey literature citations made by researchers in social sciences in India during 2019–2023.

Introduction

Grey literature is particular, addressing specific problems and often not of widespread interest, but it contains valuable research information. The "grey literature" is essential for research and development because it is not readily available or published conventionally. Grey literature is objective and focuses on research documentation. These are unrefined and unpolished. Sometimes, these need to be peer-reviewed. Grey literature is generally unstructured and prepared for specific purposes. It has intellectual property. Libraries now capture and use grey literature

due to its high demand among researchers. Some grey literature provides valuable knowledge for problem-solving and strategy. Reports, theses, conference proceedings, technical specifications, grant proposals, and non-commercial translations are examples of this type of literature (Yasin et al., R, 2020). Non-conventional, fugitive, rarely available, informally published, and sometimes ephemeral publications are included in this genre. This paper evaluates the grey literature citations cited by social science researchers in India during 2019–2023. It identifies the forms and the publication years of grey literature references.

E-mail address: mandalpsm@gmail.com (Partha Sarathi Mandal) Received 25.09.2024; Accepted 06.10.2024 Copyright @https://acspublisher.com/journals/index.php/lt/

²Assistant Professor, Department of Library and Information Science, The University of Burdwan, Burdwan, 713104.

^{*}Corresponding author.

Literature Review

Researchers use various forms of literature, such as books, journals, theses, and reports, to establish their study (Mandal, P.S., 2020). Grey literature contains precise information from various information sources, often addressing particular problems. The term "gray literature" originated around 1978 at a seminar in New York, although there is no consensus on its exact origin. Despite not being readily available or conventionally published, grey literature is as essential for research and development as other published documents: businesses, academics, government, and industry produce it in various forms, including print and electronic production. Publishers should consider the valuable yet untapped information in grey literature. M.C. Debachere (1995) defines grey literature as often original and recent. It includes preprints, technical reports, and conference and seminar papers, usually unavailable through conventional channels (Mandal & Mandal, 2021). Grey literature has been gaining increasing recognition in the academic community as a valuable resource for social science research (Gelfand, 1998). This type of literature can provide essential insights and contextual information that may not be added to traditional peer-reviewed publications (Adams et al., 2016). The critical advantage of grey literature in research is that it mitigates the impact of publication bias (Conn, V.S. et al., 2003). This type of literature can be crucial for comprehensively understanding a particular topic or issue. Grey literature can also offer valuable details on the implementation and effectiveness of complex interventions, which can be particularly useful for applied researchers and practitioners (Hoffecker, L., 2020). Despite these benefits, social science researchers have historically hesitated to engage with grey literature, often citing concerns about the quality and reliability of these sources (Denda, K., 2002). However, as the research landscape evolves, the need to consider a broader range of information sources has become increasingly apparent (Pappas & Williams, 2011).

Objectives

To examine the grey literature citations in Social Sciences; To classify the forms of grey literature referenced in articles by Social Sciences researchers in India;

To explore the use of references based on their publication dates.

Scope

Due to financial and time constraints, the study only covers one "Economic and Political Weekly" journal from 2019 to 2023. This journal has one volume each year. These volumes had 51 issues in 2019, 51 in 2020, 52 in 2021, 53 in 2022, and 53 in 2023. The total number of issues is 260 because some issues are published jointly in a single issue. The total number of references used by the researchers in the selected journal articles is 31,415, and 9,435 citations are grey literature for this study.

Methodology

The study examines references from the journal "Economic and Political Weekly," which covers Economics and Political Science. The authors analyze the references in the articles of this journal to determine grey literature citations. This paper investigates "year-wise" and "form-wise" citations and usage patterns from 2019 to 2023. This study also calculates the electronic and traditional grey literature references out of the total used references. It also examines grey literature citations based on their publication year. Simple percentages are used to analyze and interpret the table data. Fig. 1 and Fig. 3 are designed using Tableau. Fig. 2 is prepared in Microsoft Excel.

Data analysis

Table 1 provides data on cited grey literature (G.L.) references in the "Economic and Political Weekly" journal from 2019 to 2023. For each year, it lists the total number of cited grey literature references and the percentage of grey literature references out of the total cited references. In 2019, 2,133 grey literature references were cited out of 6,484 references. In 2020, 2,035 grey literature references were cited out of 6,731 references. In 2021, 1,895 grey literature references were cited out of 6,195 references. In 2022, 1,723 grey literature references were cited out of 5,368. In 2023, there are 1,649 grey literature references out of 6,637. From 2019 to 2023, 9,432 grey literature references were cited out of 31,415 total references, accounting for 30.03% of the total cited references. The percentages of the total number of grey literature references are 22.61%, 21.57%, 20.09%, 18.26%, and 17.47%, respectively, in 2019, 2020, 2021, 2022, and 2023. This study reveals that the grey literature citations gradually decreased until 2022, but it increased in 2023. It suggests that grey literature is an important source of information.

Year	Cited Grey Literature	Total cited References	Percentage
2019	2133	6484	22.61
2020	2035	6731	21.57
2021	1895	6195	20.09
2022	1723	5368	18.26
2023	1649	6637	17.47
Total	9435	31415	30.03

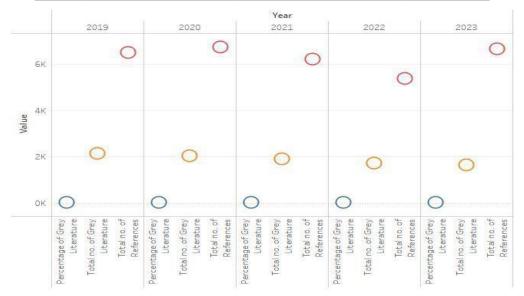


Fig. 1: Cited Grey Literature references in the selected journal from 2019 to 2023

Table 2:

	Year-wise Citations				Form-wise Total			
Form of Grey Literature	2019	2020	2021	2022	2023	Citation	on Percentage	
Theses and Dissertation	93	86	74	59	54	366	3.88	
Conference Proceedings	249	239	170	182	165	1005	10.65	
Report	755	811	868	623	627	3684	39.05	
Working Paper	375	351	367	360	277	1730	18.34	
Census, Statistical, and other sources	67	55	58	55	46	281	2.98	
Research Report	123	68	68	83	95	437	4.63	
Newsletters and Bulletin	93	64	53	58	47	315	3.34	
Electronics	280	289	148	253	251	1221	12.94	
Others	98	72	89	50	87	396	4.20	

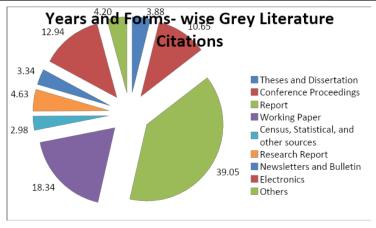


Fig. 2: Form-wise Grey Literature Citations

Table 2 and Fig. 2 show the different forms of cited grey literature and their cited numbers. Among the various cited literature, Reports (39.05%), Working papers (18.34%), Electronic forms (12.94%), Conference proceedings (10.65%), research reports (4.63%), Theses and Dissertations (3.89%), Census, Statistical and other data sources (2.98%), and the 'other' types (4.20%) are used in articles as citations. Other types include

translations, official documents, meetings, fact sheets, maps, and guidance sheets. Reports are used more than other forms of grey literature. The number of traditional grey literature references is 8,214 (87.06%), whereas the number of electronic grey literature references is only 1,221 (12.94%). This shows that traditional forms of grey literature are cited more than electronic forms of grey literature.

Table 3:

Years	Citation based on Publications in 2023	Citation based on Publications in 2022	Citation based on Publications in 2021	Citation based on Publications in2020	Citation based on Publications in 2019	Total Number of Citation	Percentage
2013-2023	1301	1385	1294	1107	963	6050	64.12
2002 -2012	226	240	485	771	1029	2751	29.16
1991 - 2001	34	42	43	63	77	259	2.75
1980 -1990	27	21	27	29	16	120	1.27
1969-1979	19	12	11	21	9	72	0.76
1958-1968	11	9	13	13	13	59	0.63
1947-1957	13	7	6	9	17	52	0.55
1936-1946	6	2	8	6	2	24	0.25
1925-1935	7	3	3	5	4	22	0.23
1914 - 1924	5	2	5	11	3	26	0.28

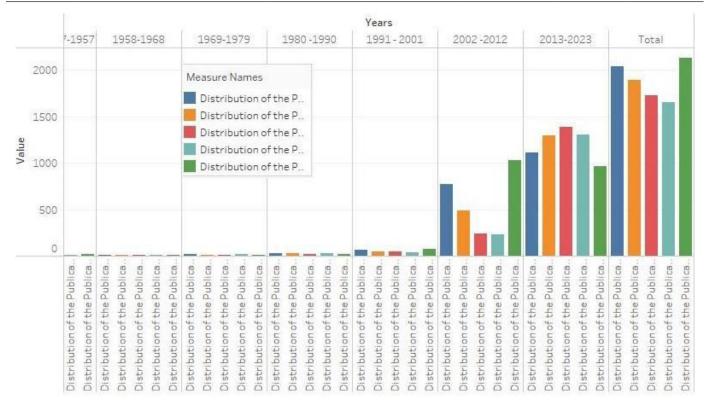


Fig. 3: Publication Year-wise Citations of Grey Literature References

Table 3 and Fig 3 show the number of citations based on publications from different years and their respective percentages of the total citations. From 2013 to 2023, 6,050 citations comprised 64.12% of the total citations, indicating that most of the citations came from recent publications within this decade. From 2002 to 2012, 2,751 citations accounted for 29.16% of the total, showing a significant but minor contribution compared to the most recent decade. From 1991 to 2001, there were 259 citations, representing 2.75% of the total, which suggests a steep decline in citations from this period. From 1980 to 1990, 120 citations comprised 1.27% of the total. This period also saw a low number of citations. From 1969 to 1979, 72 citations accounted for 0.76% of the total. From 1958 to 1968, 59 citations represented 0.63% of the total. From 1947 to 1957, 52 citations comprised 0.55% of the total. From 1936 to 1946, there were 24 citations, accounting for 0.25% of the total. From 1925 to 1935, 22 citations represented 0.23% of the total. From 1914 to 1924, there were 26 citations, making up 0.28% of the total. Most citations come from the most recent decade (2013-2023), with a noticeable decrease in citations as the publication years go back.

Insights of this Study

The use of grey literature is decreasing daily, but the researchers use recently published grey literature as references. The dates of the highest percentages of citations refer to the twenty years before the journals containing them. This shows that the maximum percentage of grey literature cited was ten years prior to the journal publication date (Table 3 & Fig 3).

Reports (39.05%) are the primary type of grey literature cited by the researchers. Working papers, electronics, and conference proceedings are also crucial in research (Table 1 & Fig 1).

Traditional forms of (printed) grey literature are cited more than electronic grey literature (Table 2).

Conclusion

Grey literature, a vital resource for social science researchers in India, offers substantial benefits regarding access to timely and context-specific information. Efforts should be made to improve the accessibility and quality assessment of grey literature to enhance its utility further. The results show that the grey literature citations by social researchers in India are gradually decreasing. In social science, reports

prevail over other types of grey literature (39.05%), thus confirming the attention given in the literature to this material with bibliographical and cataloguing initiatives. The results show that working papers and conference proceedings generally play an essential role in the ranks of grey literature.

References

- Adams, J., Hillier-Brown, F. C., Moore, H. J., Lake, A. A., Araujo-Soares, V., White, M., & Summerbell, C. (2016). Searching and synthesizing 'grey literature' and 'grey information' in public health: Critical reflections on three case studies. Systematic Reviews, 5(1), 164. https://doi.org/10.1186/s13643-016-0337-y
- Benzies, K. M., Premji, S., Hayden, K. A., & Serrett, K. (2006). State-of-the-evidence reviews: Advantages and challenges of including grey literature. Worldviews on Evidence-Based Nursing, 3(2), 55–61. https://doi.org/10.1111/j.1741-6787.2006.00051.x
- Conn, V. S., Valentine, J. C., Cooper, H. M., & Rantz, M. J. (2003).

 Grey literature in meta-analyses. Nursing Research, 52(4), 256–261. https://doi.org/10.1097/00006199-200307000-00008
- Debachere, M. C. (1995). Problems in obtaining grey literature. IFLA Journal, 21(2), 94–98. https://doi.org/10.1177/034003529502100205
- Denda, K. (2002). Fugitive literature in the crosshairs: An examination of bibliographic control and access. Collection Management, 27(2), 75–86. https://doi.org/10.1300/J105v27n02_07
- Gelfand, J. (1998). Teaching and exposing grey literature: What the information profession needs to know—Examples from the sciences. Collection Building, 17(4), 159–166. https://doi.org/10.1108/01604959810238301
- Hoffecker, L. (2020). Grey literature searching for systematic reviews in the health sciences. The Serials Librarian, 79(3–4), 252–260. https://doi.org/10.1080/0361526X.2020. 1847745
- McKimmie, T., & Szurmak, J. (2002). Beyond grey literature: How grey questions can drive research. Journal of Agricultural & Food Information, 4(2), 71–79. https://doi.org/10.1300/J108v04n02_06
- Mandal, P. S., & Mandal, S. (2021). Grey literature citation in doctoral theses of library and information science awarded by the University of Burdwan from 2010 to 2019. Library Philosophy and Practice (e-Journal). Retrieved from https://digitalcommons.unl.edu/libphilprac/4894

- Mandal, P. (2020). Text citations and bibliographic analysis of doctoral theses in library and information science awarded by the University of Burdwan from 2010 to 2019. Library Philosophy and Practice (e-Journal). Retrieved from https://digitalcommons.unl.edu/libphilprac/4551
- Pappas, C., & Williams, I. (2011). Grey literature: Its emerging importance. Journal of Hospital Librarianship, 11(3), 228–234. https://doi.org/10.1080/15323269.2011.587100
- Paez, A. (2017). Grey literature: An important resource in systematic reviews. Journal of Evidence-Based Medicine, 10(3), 233–240. https://doi.org/10.1111/jebm.12266
- Yasin, A., Fatima, R., Wen, L., Afzal, W., Azhar, M., & Torkar, R. (2020). Using grey literature and Google Scholar in systematic literature reviews in software engineering. IEEE Access, 8, 36226–36243. https://doi.org/10.1109/ ACCESS.2020.2971712