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Use and Access of Grey Literature by the Scholars of Aligarh Muslim University with reference to Arts, Social Sciences, and Sciences: A Study

Abdul Moid
Aligarh Muslim University, moid556@gmail.com

M Masoom Raza
Aligarh Muslim University, masoomr@yahoo.com

Keshwar Jahan
Aligarh Muslim University, keshwarjahan@gmail.com

Abstract

The aim of this study is to examine the use and access of grey literature by Scholars of Aligarh Muslim University (AMU) and to evaluate the grey literature contents along with general contents in AMU Repository. The study used a quantitative approach using the survey method to collect data by applying the questionnaire as a tool and analyzing the archived resources in AMU repository. Results showed that the Thesis is the highest in number among other archived resources in AMU Repository. Based on the survey, majority of the Scholars opted Theses & Dissertations as the most essential resources for their research activities, whereby they expressed the need of an information system for effective retrieval of grey resources from diverse access points within/outside the campus. There have been various studies in the past on grey literature, but none have intended to cover the use of grey literature by Scholars of Aligarh Muslim University.

Keywords: Aligarh Muslim University, Grey Literature, Institutional Repository, Scholar, Information System, Fugitive Literature

Paper type: Research paper

Introduction

In the 21st century, Grey literature has become a daily work experience in governmental, educational, and business sectors. In the prevailing scenario of the internet, grey literature is moving from disorganized content to a more common source of information. Such dramatic changes in information sources have an immense impact on society, where grey literature is produced, processed, and utilized (Farace, D.J. & Frantzen, J., 2004). Before the established and accepted definition of grey literature, it was referred to as "fugitive literature" due to its elusiveness and difficulty in finding it (Pelzer and Wiese, 2003; Pappas and Williams, 2011).

For information professionals, grey literature was a challenge because these resources were not classified or protected and could not be obtained through the market channel. Therefore, they felt the need for networks that could be helpful in disseminating grey literature (Schopfel & Rasuli, 2018).

Schofel asserted that previous definitions of grey literature were given with an economic approach, therefore in 'Prague Definition' he proposed a definition of grey literature as "Grey literature stands for manifold document types produced on all levels of government, academics, business and industry in print and electronic formats that are protected by intellectual property rights, of sufficient quality to be collected and preserved by library holdings or institutional repositories, but not controlled by commercial publishers i.e., where publishing is not the primary activity of the producing body." In a university system, an Institutional Repository (IR) makes available the scholarly output of students, faculty, and researchers in different electronic forms and

gives open access to the global community. Mainly, IRs must be focused to bestow the research community of the institutions by storing, preserving and making them accessible by digital medium (Lynch, 2003; Foster & Gibbons, 2005).

Aligarh Muslim University known as AMU, is a central academic public university of India, which facilitates primary to higher education. The university has 15 centers and institutions, 12 faculties, consisting of 98 teaching departments, and three academies. The university offers about 300 courses in traditional as well as modern education (AMU fact, 2020). AMU has five major libraries, such as Maulana Azad Library: Central Library; Engineering College Library; Medical College Library; Ajmal Tibbiya College Library and Social Science Cyber Library. Besides five major libraries, each department has its library called Seminar Library (AMU, 2020).

Review of Related Literature

Being not commercially controlled, grey literature has been challenging in searching and retrieving (Adams et al., 2016). For the last quarter-century, government research units, departments, and several other public and private sector organizations have produced thousands of reports on environmental issues only, most of which have been published as grey literature (MacDonald, Cordes, & Wells, 2007). The majority of subject databases and institutional repositories contain grey literature in various types. And the increasing level of collection of grey literature in institutional repositories facilitates preservation and enhances the exploration and reach of grey literature (Marsolek, Cooper, Farrell, & Kelly, 2018). Apart from environmental reports, a study found that technical grey literature are most used, followed by doctoral theses by the researchers of Council for Scientific and Industrial Research (CSIR), India (Shivaram & Biradar, 2019). Based on data from the Australian Bureau of Statistics (ABS) for the policy-oriented grey literature user community, at least 30,000 organizations, departments, companies, agencies, and other consultants generate grey literature and these Australian organizations spend an enormous amount of $234 million annually on projects that result in the production of grey literature, an average of $3.3 million per respondent annually. On this basis, a total of nearly $33 billion could be spent annually on projects related to grey literature (Australian Bureau of Statistics, 2013; Lawrence, Thomas, Houghton, & Weldon, 2015). Such indications show that interest and value are growing day by day. Over the last few decades, developments in information technology have had an immense impact on the way we manage information in general, and on the way we generate, disseminate and use grey literature (Savić, 2018). Librarians and end-searchers often find it challenging to locate grey literature because it is not indexed or bibliographically controlled. There are many different sources that provide relatively easy access to grey literature and helpful for searching that content across different disciplines. Some examples noted by Pappas and Williams, 2011 include: ACRL, ClinicalTrials.gov, Docuticker, Grey Matters, GreyNet International, International Conference on Grey Literature, Conference Alerts, Scirus and so on.

Objectives of the Study

In order to conduct this study, researcher focused on the following parameters:

- To identify availability of resources in the AMU Repository.
- To examine usages of grey literature by the Scholars at AMU.
- To know frequency of use of grey literature by this user community.
- To figure out satisfaction status of Scholars concerning library staff cooperation in accessing and learning about grey literature.
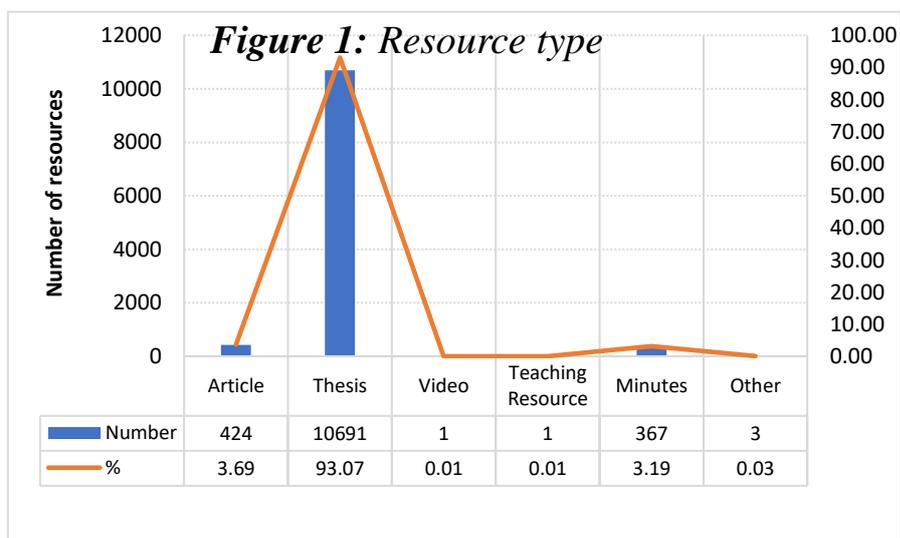
Methodology

The study divided into two parts: Part I deals with the analyses and findings of the data collected through AMU's IR and Part II deals with the analyses and findings of the data collected through questionnaires, which distributed among Scholars of AMU.

After conducting a literature review related to our study, a sample of questionnaires was composed and distributed to reviewers for comment. A final questionnaire was composed. This study covered a random 10% of total Scholars in three faculties (https://www.amu.ac.in/rscholar.jsp), 1) Arts, 2) Social Sciences, and 3) Sciences at AMU, Aligarh. The 168 questionnaires distributed randomly through direct contact with the Scholars, one hundred two (102) questionnaires were returned for a 61% (approx.) participation rate. Sixteen (16) questionnaires proved to be invalid; the study thus had 86 questionnaires to evaluate. Likert Scale was used to test the multiple variables by the scholar. In the case of AMU Repository, browsing interface on the website was used to find the type of resource. We have browsed the Division interface to get the number of Theses & Dissertations and Meeting Minutes.

Analyses of Part I

Types of Resources in AMU Repository

Figure 1 shows that there are various resources available in AMU Repository, such as Theses (10,691; 93.07%), which are the highest in number, followed by Articles (424; 3.69%), Minutes (367; 3.19%), (1; 0.01%) in each Video and Teaching Resource and 'Other' resources are 3; 0.03%.
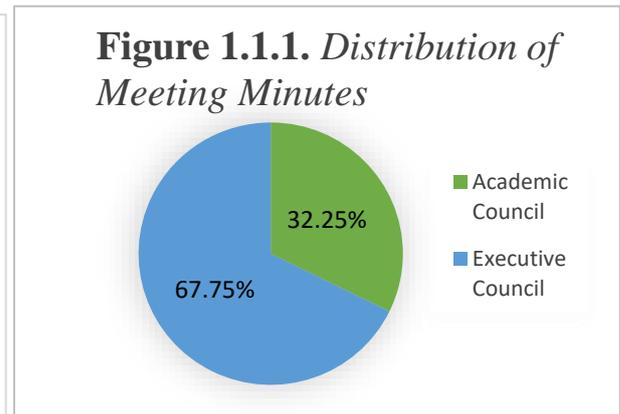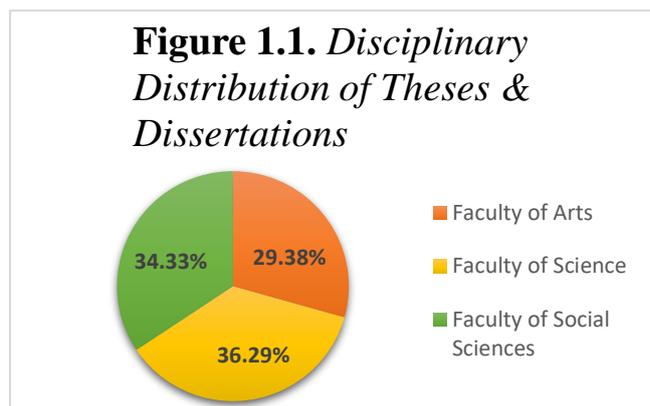

Figure 1: Resource type

	Article	Thesis	Video	Teaching Resource	Minutes	Other
Number	424	10691	1	1	367	3
%	3.69	93.07	0.01	0.01	3.19	0.03

Disciplinary Distribution of Theses & Dissertations

Figure 1.1 shows the total number of Theses & Dissertations in three disciplinary faculties to be 7,162, i.e., 66.99% of the total number of Theses & Dissertations of all the faculties. Of 7,162, Science reflects (36.29%) the highest disciplinary content, followed by Social Sciences (34.33%) and Arts (29.38%).

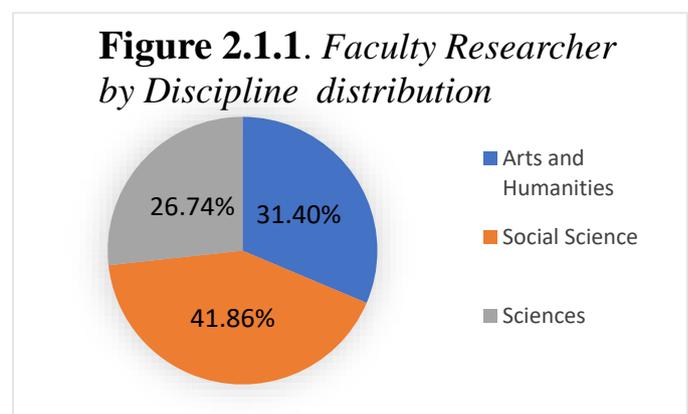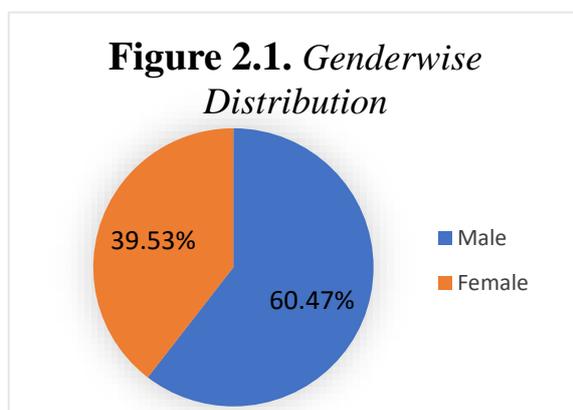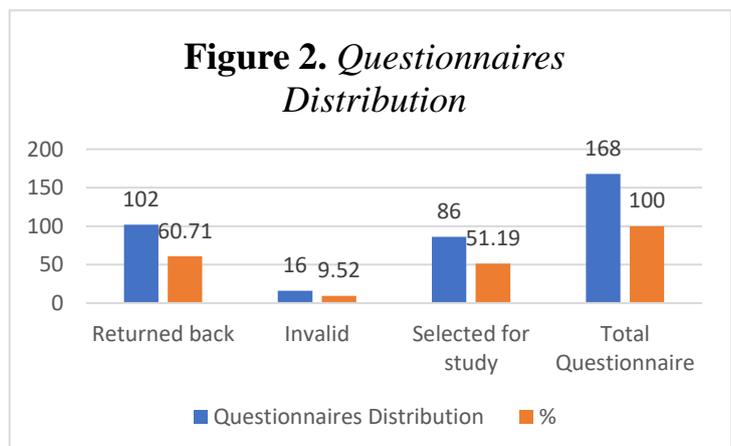**Distribution of Meeting Minutes**

Figure 1.1.1 indicates that 67.75% of the total Minutes are the Executive Councils Minutes, where 32.25% is the Minutes of the Academic Council Meetings.

Figure 1.1. *Disciplinary Distribution of Theses & Dissertations*

- Faculty of Arts
- Faculty of Science
- Faculty of Social Sciences

34.33% 29.38% 36.29%

Figure 1.1.1. *Distribution of Meeting Minutes*

- Academic Council
- Executive Council

32.25% 67.75%

Analyses of Part II

Distribution of the Study Sample

Figure 2 shows that 168 questionnaires were distributed among the Scholars at AMU, out of which 102 (approx. 61%) questionnaires were returned, where 16 (9.51%) questionnaires were identified as invalid and around 51% (86) selected for analysis. As far as gender distribution is concerned, the

Figure 2. *Questionnaires Distribution*

- Questionnaires Distribution
- %

Returned back	Invalid	Selected for study	Total Questionnaire
102 / 60.71	16 / 9.52	86 / 51.19	168 / 100

Figure 2.1. *Genderwise Distribution*

- Male
- Female

39.53% 60.47%

Figure 2.1.1. *Faculty Researcher by Discipline distribution*

- Arts and Humanities
- Social Science
- Sciences

26.74% 31.40% 41.86%

study contained 40% female and 60% male participant researchers (**Figure 2.1**). The disciplinary split-up by the three different faculties are, Social Science (41.86%), Arts (31.40%), Science (26.74%) are part of the study (**Figure 2.1.1**).

Use of Grey Literature
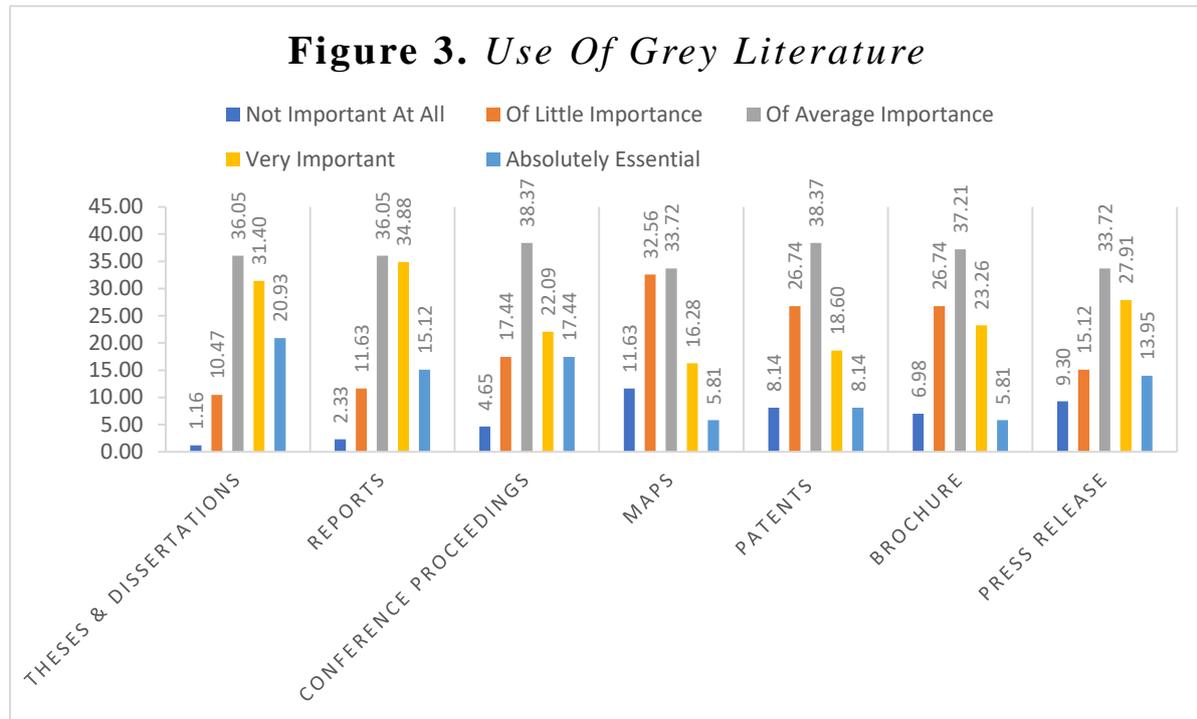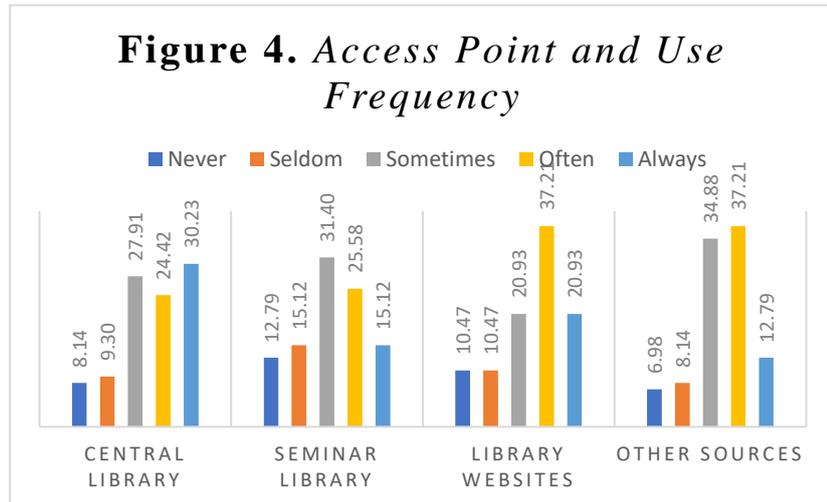

Figure 3. *Use Of Grey Literature*

Figure 3 indicates that there are seven examples of grey resources that were examined by five importance levels. The rankings were: Not Important at All, Of Little Importance, Of Average Importance, Very Important, and Absolutely Essential. There are few percentage of the resources which are Not Important at All, such as Maps, which are not used with maximum 11.50%% of the responses, followed by Press Release (9.30%), Patents (8.14%), Brochures (6.98%), Conference Proceedings (4.65%), Reports (2.33%) and Theses & Dissertations (1.16%). Both Conference Proceedings and Patents are equally Average Importance with 38.05% each, followed by Brochure (37.21%), Theses & Dissertations and Reports is 36.05% in each, where Press Release and Maps (33.72%) are also equally used by the scholars. Likewise, 32.56% of the respondents preferred Maps as Little Importance for their use, followed by Patents and Brochures (26.74%), Conference Proceedings (17.44%), Press Release (15.12%), Reports (11.63%) and 10.47% preferences of Theses & Dissertations. Scholars preferred Reports (34.88%) as Very Important resources, followed by Theses & Dissertations (31.40%), Press Release (27.91%), Brochure (23.26%), Conference Proceedings (22.09%), Patents (18.60%) and 16.28% are Maps. Similarly, 20.93% of the respondents opted Theses & Dissertations as Absolutely Essential for the study, followed by Conference Proceedings (17.44%), Reports (15.12%), Press Release

(13.95%), and Patents (8.14%), 5.81% of the respondents preferred each Map and Brochure.

Therefore, a few percentage of respondents expressed their view on the listed resources that these resources are not at all important compared to the majority who opted these resources as important with different scale for the research activities.

**Access Point and Use Frequency of Grey Literature**

Figure 4 shows the location or access point, from where the content is accessed. Nearly thirteen percent (12.79%) of the respondents prefer not to access in Seminar Library, followed by Library Websites (10.47%), Central Library (8.14%) and Other Sources (6.98%). Similarly, 15.12% of respondents access grey literature Seldom in Seminar Library, followed by Library Website (10.47%), Central Library (9.30%), and 8.14% of the

Figure 4. *Access Point and Use Frequency*

respondents access from Other Sources. Furthermore, 34.88% of the respondents preferred Sometimes to access grey literature by Other Sources, followed by Seminar Library (31.40%), 27.91% preferred Central Library, and Library Website (20.93%). As far as, Often preference is concerned, the majority of the respondents prefer both Library Websites (37.21%) and Other Sources (37.21%) to access grey literature, followed by Seminar Library (25.58%) and Central Library (24.42%). Besides, 30.23% of the respondents opted Central Library as their Always preference, followed by Library Websites (20.93%), Seminar Library (15.12%), and Other Sources (12.79%). Regarding access point and its use frequency of grey resources, it is figure out that the all listed access points are never used by few scholars, on the other hand majority of the scholars access the list access in different span of frequency.

Frequency use of Grey Literature

In order to identify the use frequency of grey literature by the Scholars, **Figure 5** depicts that 23.26% respondents Always use grey literature and 31.40% respondents use grey literature quite Often, whereas 38.37% respondents use grey literature Sometimes and 6.98% are use Seldom. As per the figure 5, all the respondents use grey literature with different frequency.

Figure 5. *Usage of Grey Literature*
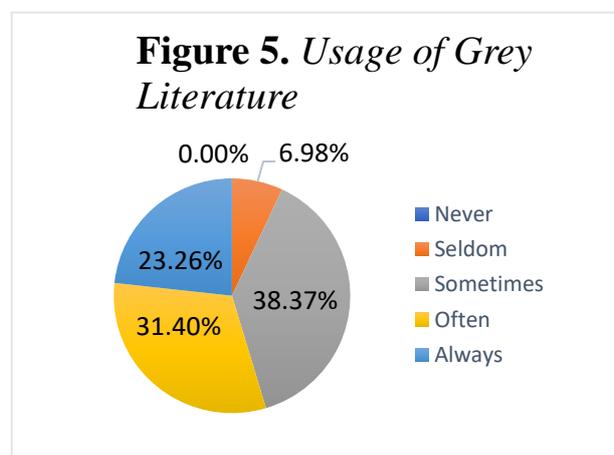
Orientation to use Grey Literature

59.30% of the Scholars Agree, where 20.93% of the respondents Strongly Agree and 18.60% Agree to a little to organize regular orientation in the Library. And 1.16% of the respondents Disagree to hold proper orientation in the Library (**Figure 6**).

Figure 6. *Orientation to use grey literature*

- Strongly Agree
- Agree
- Agree to a little extend
- Disagree

1.16% / 18.60% / 20.93% / 59.30%

About 99% of the respondents gave to positive sign to organize regular orientation programs to effective use of grey literature collection in the library, where approximately 1% respondents are in disagreements.
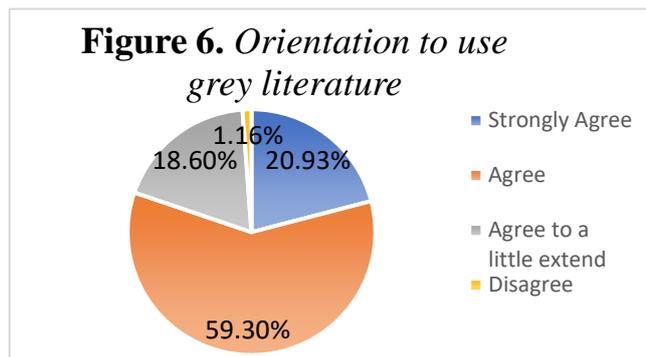
## Staff Cooperative and helpful in getting Grey Literature

46.51% of the respondents rated the library staffs are Moderately Helpful, where 32.56% as the Highly Helpful. Similarly, 16.28% perceived that staffs as Slightly Helpful, where 4.65% opted that library staff are not helpful at all (**Figure 7**). The respondents with regard to the coopeation of the library staff in findability grey literature.

Figure 7. *Staff Cooperation Satisfaction*

- Highly helpful
- Moderately Helpful
- Slightly Helpful
- Not at all helpful

4.65% / 16.28% / 32.56% / 46.51%

Figure 7 clearly shows that almost 95% respondents are satisfied with the cooperation from the library staff, whereas the remaining approximately 5% respondents rated the cooperation rendered by the library staff as of not helpful at all.
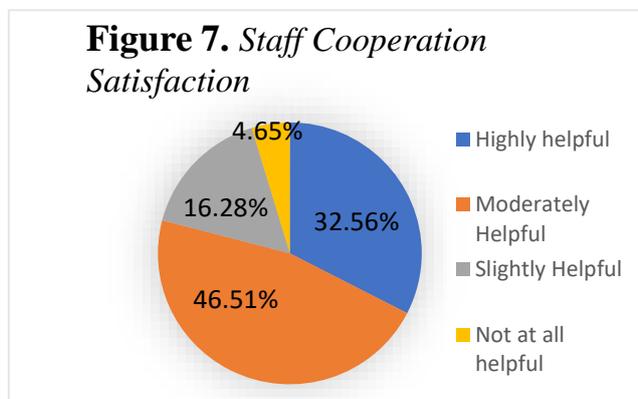
Need of Independent Information System to Access Grey Literature

87.21% of the respondents agree to develop an independent information system to access grey literature, where 2.33% do not agree with it. **Figure 8** also shows that 10.47% do not understand whether an independent information system is required or not.

This can be easily interpreted that almost 88% respondents agree and remaining respondents don't know or

Figure 8. *Information System for Grey Literature*

- Yes
- No
- Don't Know

10.47% / 2.33% / 87.21%

not agree to have independent information system to access grey literature.
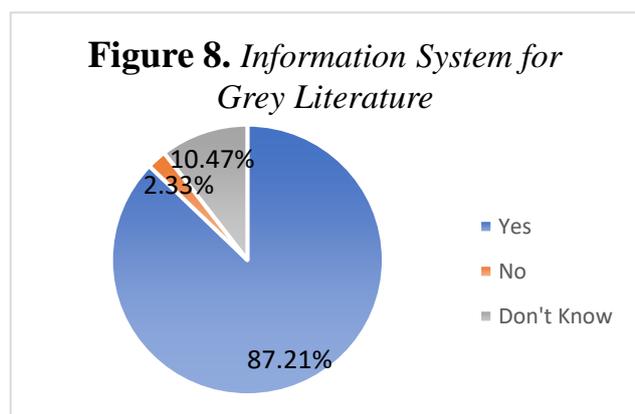
Findings of the Study

This study was conducted among a selective number of AMU Scholars in three faculties, i.e., Arts, Social Sciences, and Sciences and examined the AMU Repository and reviewed the usage of grey literature contained there. Apart from identifying the different resources available in AMU Repository, this paper also examines the Dissertation & Theses in select faculties along with Minutes of Academic and Executive council meetings.

Not only the distribution of Dissertation & Theses, but also AMU Repository preserves the others resources which are produced within the university, such as articles, videos, teaching resources and minutes, where the Dissertation & Theses are maximum in numbers, and the entire contents are accessible outside the university as well (**Figure 1**). Majority of the Theses & Dissertations are from the select faculties, where the minimum gap between Science and Social Science but Science faculty a step ahead of social science in number (**Figure 1.1**). As far as the distribution of Meeting Minutes are concerned, out of two types of Minutes of the councils, the records of the Executive are higher than the Academic council (**Figure 1.1.1**).

Noting here that only seven types of grey literature were examined to find out preferred resource importance. **Figure 3** demonstrates that very few people do not use grey literature as these sources are not useful at all for research activities. In terms of importance level, majority of respondents think that grey resources are of average importance for their research work. The figure also shows that Theses & Dissertations are the most preferred ones, where Maps are the least important as preferred by respondents.

Other Sources indicates that such sources are not available in the university system, in particular, web-based sources, i.e., Google, Yahoo, and some examples also identified by Pappas and Williams. Most Scholars prefer Other Sources because of their vastness to access grey resources followed by the Central Library of AMU, because of its huge collection of resources. Due to subscription of various services and databases, Library Websites also preferred by the respondents after Central Library. On the other hand, due to limited collections, Seminar Libraries are the least favored in accessing grey resources (**Figure 4**).

Figure 5 shows that the majority of the respondents use grey resources Sometimes, and in remaining responses, three-quarters of the responses Seldom use, Often and Always, where the responses of Always are third in position. Thus, the frequency of use varies, but all respondents use grey literature.

Most users have asserted that regular orientation should be coordinated because it can be helpful to get as well as to make effective use of grey resources. Where a minimum number of respondents feel that there is no need for orientation programs to be

organized **(Figure 6)**. As regards staff cooperation and assistance in obtaining appropriate resources, about half of the respondents believe that library staffs are Moderately Helpful in responding to their grey resources queries. While one-third of the respondents were completely satisfied and the least of the respondents were not at all satisfied with the library staffs in obtaining grey resources **(Figure 7)**. As the libraries install information systems for storing and disseminating general material records, the majority of respondents also argued that there is a need for an independent information system to access grey resources, where bibliographic details of grey resources should be recorded in order to save their time (**Figure 8**)

Conclusion

As discussed in the findings that irrespective of faculties and subjects, scholars of all subjects are bound to use grey resources from different sources. Grey literature is an essential resource type for the research community, especially Theses & Dissertations because they provide a road-map for their research. Therefore, AMU Repository provides a large number of Theses & Dissertations, which help the research community to access them at any time and from anywhere. In the age of information explosion, adequate and fast access of grey resources is possible only when some sort of information system is available as for the special type of collection, such as for manuscripts, archival documents, and so on.

Suggestions

The study suggests that Scholars should be capable enough to access grey resources adequately because it will save their time as well as the time of library staff. And that capability can be developed through workshops, training and other programs of orientation. A special section of grey resources in the institution library should be for accessing hard copy. The utmost need is to fulfill the requirement of scholars, libraries, and universities that may be recommended to maximize the use of grey literature by establishing dedicated systems for grey literature.

Appendix: Questionnaire

1. Gender of the participants

Gender	No. of Respondent
Male	52
Female	34
Total	**86**

2. Choose your Faculty

Faculty	No. of Respondent
Arts	27
Social Science	36
Sciences	23
Total	**86**

3. Choose importance level for the use of following Grey resources

Resources	Not Important At All	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
Theses & Dissertations	1	9	31	27	18
Reports	2	10	31	30	13
Conference Proceedings	4	15	33	19	15
Maps	10	28	29	14	5
Patents	7	23	33	16	7
Brochure	6	23	32	20	5
Press Release	8	13	29	24	12

4. Grey literature is accessed through the following points with different frequency
   Note: Other Sources-Google, Yahoo, ACRL, Conference Alerts, Scirus, etc

Access Points	Never	Seldom	Sometimes	Often	Always
Central Library	7	8	24	21	26
Seminar Library	11	13	27	22	13
Library Websites	9	9	18	32	18
Other Sources	6	7	30	32	11

5. Choose use frequency of grey literature

Frequency	No. of Responses
Never	0
Seldom	6
Sometimes	33
Often	27
Always	20
Total	**86**

6. Are the library staff co-operative and helpful in getting grey literature?

Staff Cooperation	No. of Responses
Highly helpful	28
Moderately Helpful	40
Slightly Helpful	14
Not at all helpful	4
Total	**86**

7. Do you agree that regular Orientation is required for you to effectively make use of Grey Literature collection in the library?

Response	No. of Preferences
Strongly Agree	18
Agree	51
Agree to a little extend	16
Disagree	1
Total	**86**

8. Do you think it is necessary to have an Independent Information System for the Grey Literature in the university?

Response	No. of Responses
Yes	75
No	2
Don't Know	9
Total	**86**

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