



Use and Awareness of Open Access Sources: A Study of Faculty, Scholars and Students of Andhra University

M. HIMA BINDU*

Dr. V. DHANARAJU**

ABSTRACT

It is a well-known fact that the open access sources of use and awareness is turn out to be an important theme of substance for researchers, academics, librarians, university administrators, funding agencies, government officials, commercial publishers, and learned-society publishers etc. The exposed access literature can be pragmatic to all forms of published research output, including scholarly journal articles, conference papers, theses, book chapters and monographs. Prior to the advent of the Internet publishers and academic societies subjugated scholarly communication, and researchers channeled their research output exclusively through authoritative publishers and academic societies.

Present-day when Internet has become a part of our lives, it endures to make changes in every facet of our society and restructures scholarly communication in many ways and publishing are progressively enchanting place in the electronic environment. Open Access was initiated in the developed countries and was marked by three notable declarations known as Budapest Open Access Initiative in 2002, Bethesda statement in June 2003 and the Berlin declaration in October 2003 and since then the issue is dispersion through the world and many developing countries as well as India have joined the effort. Open Access literature and journals and are expected to be read more often than those with subscriptions thereby having a higher impact rate. Additionally, open access suggestively accelerates the publication and use of new research by reducing the time lag between the actual accomplishment of a piece of research and its publication.

Key words: open access; pragmatic; monographs; subjugated; authoritative; facet; declarations; dispersion; subscriptions; accelerates; accomplishment.

* **Research Scholar**, Dept. of Library and Information Science, Andhra University, Visakhapatnam.

** **Assistant Professor**, Dept. of Library and Information Science, Andhra University, Visakhapatnam.

Introduction:

The open access has many passionate supporters because of its promise to make scholarly information more readily available, slow the commercialization of scholarly communication, and reduce the cost of scholarly publications. The open-access initiative has been at the forefront of countless discussions regarding the future of scholarly communication because open access promises to transform the future (Pritpal S. Tamber, 2003). Encyclopedia of Earth defines, open access sources are those that can be accessed by anyone at any time without restraint. When the resource is plentiful relative to the mandate for it, an open-access regime may not only be unproblematic, it may essentially be the best management administration since it involves so little oversight. In the

present study, open access is conceptualized as the freely available scholarly communication sources, which are helpful for students, researchers, and faculty to pursue and progress their acquaintance. The widespread use of the internet has tremendously changed scientific communication and has given researchers unique opportunities to participate in an information exchange with their colleagues about the continuing research results and research materials. The cost associated with the production and circulation of research has diminished unusually.

There are several apparatuses by which the open access is achieved. Stevan Harnard (2004), identified two main roads to open access 'gold' and 'green'. The gold road refers to open access journals which are openly accessible proximately on publication. The green road refers to open access self-archiving. The green road is quicker and economy, whereas the gold road is more costly, but better upheld and accomplished. Open access is one of the foundations of information conversation and is freely and enduringly obtainable online, with access to scholarly and scientific information. Unrestricted use, circulation and reproduction in any medium are permitted, provided the author is appropriately accredited. In the current deliberation information refers primarily to publicly fund academic knowledge.

One of the vital regularities is the scholarly literature sources, which researchers support by advantageous their research outputs; it should be distinguished from common- property resources, which allows many researchers to share the resources (Tietenberg, 2006). Open access is utterly compatible with peer review, and all the major open access ingenuities for scientific and scholarly literature insist on its reputation. There are many open access resources/databases available for management professionals like open access Journals Search Engine, Directory of Open Access Books, Shodhganga-Indian etc., for academic, practice, and research, besides using different type of tools, directories, library websites, portals, blogs, forums, and social networks for accessing information. Management education is also an important subject to study in the world. There are many courses/degrees available for students to study on a regular and or correspondence basis. The use of new technologies in management teaching is a trend that is catching up fast. Presently, the management education system highly depends on Internet- based information and communication system like other subjects.

Open access to scientific article means online access without charge to readers or libraries. Committing to open access means dispensing with the financial technical and legal barriers that are designed to limit access to scientific research articles to paying customers (Suber; 2008). It functions within the legal framework and own the original copyright for their work. Authors can transfer the rights to publishers to post the work on the web or else can retain the rights to post their work on the documentations.

Open access movement:

The perception of open access existed at the time of distribution of scientific materials globally without any barriers, but it was affluent in the past decade. Open access provided worldwide by researchers when the opportunity was opened by the beginning of the Internet and the World Wide Web. The momentum was additional amplified by a increasing movement for academic journal publishing reform with it gold and libre open access. Electronic publishing twisted new benefits as compared to paper publishing, but beyond that, it contributed to instigating problems in outmoded publishing models. Many researchers write articles for impression but, not for currency. In the year 1665 first scientific research was done. It condensed the cost of publication and also there was agreement among authors without losing money. The open access movement began in the year 1990, the World Wide Web became widely available and online publishing became the norm.

The term open access refers to the free and unhindered access to scholarly material available on the internet, which can be downloaded, read, copied, or used by the researchers and scholars. This can also be defined as information resources available in an open access province which gives the rights to users to access the anticipated material from anywhere, anytime without any charges. Budapest open access initiative identified two strategies for open access; self-archiving where authors will place their refereed articles in an open, freely accessible online archive, and open access journals where authors publish their articles in open-access journals that

do not charge subscription/access fees from person who reads nor apply copyright restrictions (Schmidt, Sennyey, and Carstens, 2005).

The Internet archive was founded in the year 1996 to build an Internet library. It is whole and sole archival system, which suits to all kinds of academic community including persons with disability. It facilitates access to documents and files in all formats of text, .doc, audio format, video format, font magnification system, and also downloads a text content to read in the kindle eBook reader. In 1997, the idea of Scholarly Publishing and Academic Resources Coalition (SPARC) was mooted at the annual meeting of the Association of Research Libraries. This supports free access to all kinds of research and believes in open access of research outputs to the people. According to Suber, Peter (2008), open access comes in two degrees:

- Gratis open access, which is online access free of charge, and
- Libre open access, which is online access free of charge and with some additional usage rights.

In general, there are two ways authors can provide open access. They are:

- Green open access is the self-archiving of articles or other materials published in an institutional or central repository or other Open Access websites.
- Gold open access is when articles are published in any journal that is open access with immediate, free access.

In the following paragraphs, the important open access initiatives and movements have been briefly discussed.

Budapest Open Access Initiative – Budapest Conquer:

A group of people from the Open Society Institute gathered to organize a conference to promote open access by implementing the Budapest Open Access Initiative in December 1–2, 2001 at Budapest. This is one of significant milestone in the open access movement and on the 10th anniversary of the initiative in 2012, it was reaffirmed and accompanied with a set of concrete endorsements for attaining "the new goal that within the next ten years, open access will become the default method for dispensing new peer-reviewed research in every field and country". BOAI applies to all academic fields like science, arts, management, etc.

Berlin Declaration:

The Berlin Declaration on open access to Knowledge in the Sciences and Humanities is emerged in 2003 in a conference on open access hosted in the Harnack House in Berlin by the Max Planck Society. In November 2004, Google announced its Google Scholar, a significant search engine, which gives access to full text of scholarly materials. By toward the inside keywords in the search box, a person can get a greater number of results from different sources.

The Brisbane statement on open access was issued in the September 2008 conference on open access and Research held in Australia, hosted by the Queensland University of Technology. Between 2007-2008, two different publishers, one from the professional publishing organization and the other independent of scientist/scholar began to deliberate nearby starting a formal association for open access publishers. Due to the highly competitive market, open access publishers of journals decided to get together to establish a suitable business model, and to share their involvements and plans with each other. To receive all recent information and progresses about open access, Peter Suber, a famous leader in the open access movement, started an open access tracking project by tagging new developments at Connote on April 16, 2009. Later he involved others in this project.

Open Access in India:

With the rise of the open access movement in the West, a large number of people started to follow the open access concept also in India. Initially, Paul Ginsparg recognized server for the centralized service of sharing of e-preprints documents, which was located at the Los Alamos National Laboratory. The Indian Academy of Sciences, founded by Sri. C. V. Raman in 1934 is a extraordinary organization for open access movement in many ways. In 1999, the academy accommodated a meeting to discuss about public access to geographical information. The M.S.Swaminathan's Research Foundation, Chennai, hosted a two- day conference on Advances in Information Access and Science Communication as a tribute to Dr. Eugene Garfield.

Research Work:**The need and importance of the study:**

The information explosion has resulted in the production of a wide variability of information possessions encompassing of print and non-print materials. These possessions are composed and deposited in library and information centres. Every field of knowledge has its own designated users. Several studies have pointed out that there is a general lack of awareness or low awareness and skill deficits among the scholar community (Dechman and Syms, 2014). Many studies have been conducted in this area, but there is no detailed study focusing on the attitude and awareness towards open access sources and services among students, research scholars, and faculty.

Statement of the problem:

The statement of problem of the study is Awareness and Attitude towards Open Access Sources and Services among Students, Research Scholars and Faculty of Andhra University, Visakhapatnam. Cambridge Dictionaries Online defines awareness is a knowledge that something exists, or understanding of a situation or subject at the present time based on information. Oxford Advanced Learner's Dictionary defines attitude as a settled way of thinking or feeling about something or a position of the body indicating a particular mental state. Wikipedia.org explains awareness is the state or ability to perceive, to feel, or to be conscious of events, objects or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding.

Review of literature:

A significant and primary component of any research, enables the investigator to understand the earlier research interests, research patterns and the magnitude of the research output in a field of knowledge. There are many studies about the awareness towards the open access sources and services, attitude towards the open access sources and services, sharing of education resources, opinion on open access vs. commercial publishers and role of libraries. Primary requirement of information resources for management professionals are dependent on their academic and research.

Prosser (2003) mentioned that current model of scholarly communications fails to meet the information needs of researchers world-wide. New technology (in particular the coming of the internet) allows us to revise or to reinvent scholarly communication.

Poynder (2005) mentioned that the growing conviction that scientific progress will significantly benefit if scholarly articles and research papers are made freely available on the World Wide Web has given rise to the Open Access movement.

Cassella (2008) explained that open access discussion has dominated the STM field to date while in Arts and Humanities the scholarly approach to professional and intellectual practices has moved researchers away from Open Access ideas.

Frandsen (2009) mentioned that greatest number of open access journals (OAJs) is found in the sciences and their influence is growing. However, there are only a few studies on the acceptance and thereby integration of these OAJs in the scholarly communication system

Erturk and Kucuk (2010) mentioned that –the scholars are beginning to place their works into the open repositories or open access journals as well as their personal web sites.

Fowler (2011) found that most –mathematicians have papers, but posting to their own web pages remains more common, a third of mathematicians have published papers in open access journals.

Jadoo (2012) found that –open access benefits researchers, innovators, teachers, students, media professionals, and the general public. It promotes global knowledge flow for the benefit of scientific discovery, innovation, and socio-economic development.

Kocken Gregory and Wical (2013) stated that –small colleges and universities, often late adopters of institutional repositories and open access initiatives, face challenges that have not fully been explored in the professional literature.

Hahn and Wyatt (2014) conducted study on –business faculty were surveyed to determine their attitudes toward institutional repositories, disciplinary repositories, and open access journals.

Mammo and Ngulube(2015) explained on the whole, -they have a perceived positive attitude towards open access journals and would like to use them in the future.

Objectives:

The present study is confined to students, research scholars, and faculty members in management colleges, who hereafter will be referred to as -users. The objectives of the study are:

- To assess the extent of awareness and familiarity of different types of open access sources and services by the users;
- To find the purpose of use of open access sources and services by the users;
- To analyze the frequency of accessing open access sources and services by the users
- To identify the most preferred open access resources and services by the users;
- To know the adequacy of information available in the open access sources in the area of the users of this study;

Methodology: Sample

A main study was conducted through stratified random sampling of 200 respondents belongs to the students 125 (62.5%), research scholars 50 (25.0%), and faculty 25 (12.5%) groups from having postgraduate and Ph.D programmes.

Tools employed:

In order to study the awareness and attitude of students, researchers, and faculty towards open access sources and services, a questionnaire was developed by the researcher in consultation with experts in the field, which had sufficient reliability and validity. To develop the questionnaire the following methodology was envisaged. Awareness is the knowledge regarding a particular issue, and in the present context, it is awareness towards open access. Attitude is state of mind or a feeling. The awareness and attitude of the respondents towards open access sources vis-a-vis the commercial and traditional sources was examined through a structured questionnaire developed by the researcher. Statements related to the attitude and awareness of the respondents towards open access was formulated. These statements help in understanding the behaviour and perception about open access.

The purpose of the pilot study was -

- To check the clarity of the items listed in the selected questionnaire.
- To get an approximation of the time required to complete the questionnaire.
- To ensure the feasibility of the tools selected for the study.
- To get a fair idea of the respondent's reaction towards the research study and questionnaire
- The following observations were made during the pilot study -
- Some respondents wanted feedback about the questionnaire

Few minor suggestions were in the main study.

Main study:

In the first step, the investigator collects the data from the respondents. He personally visited each respondent with prior appointment and requested them to read each sentence of the scale carefully and select the best option for each statement. They were briefed about the study and informed of the concept and their consent was obtained. Once the data collection was over, the questionnaires were scrutinized and checked for completeness and the responses were fed to the data sheet for statistical analysis. Descriptive statistics and contingency table analysis were employed in the present study, keeping in mind the objectives framed initially.

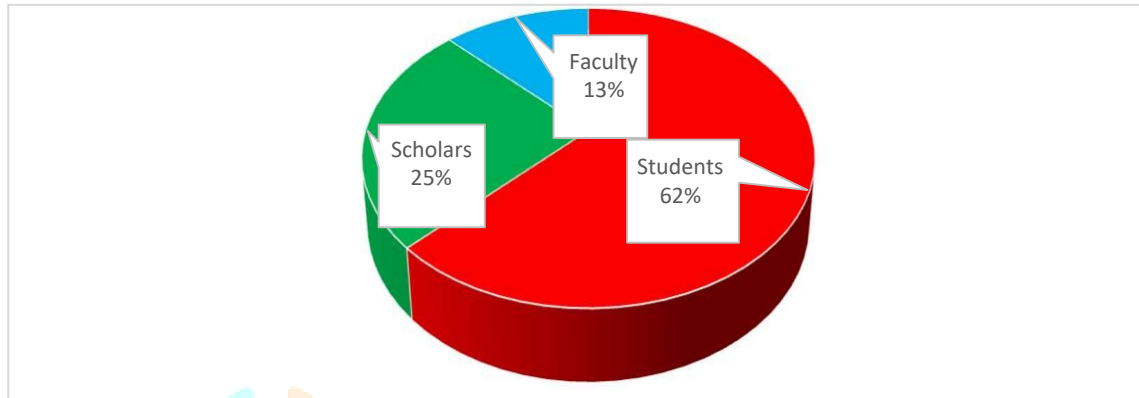
Scope and limitations:

The scope of this study is to cover all colleges of university departments having post graduate and Ph.D programmes in various branches of management in Andhra University. As the user population for the study is likely to be very high, the study intends to cover only the open access sources and services relevant to the respondents. The number of respondents for the questionnaire will be limited using the appropriate sampling method.

Table:1- Profile of the Selected Samples

N = 200

Subject	Sample size	Percentage
Students	124	62
Scholars	50	25
Faculty	26	13
Total	200	100



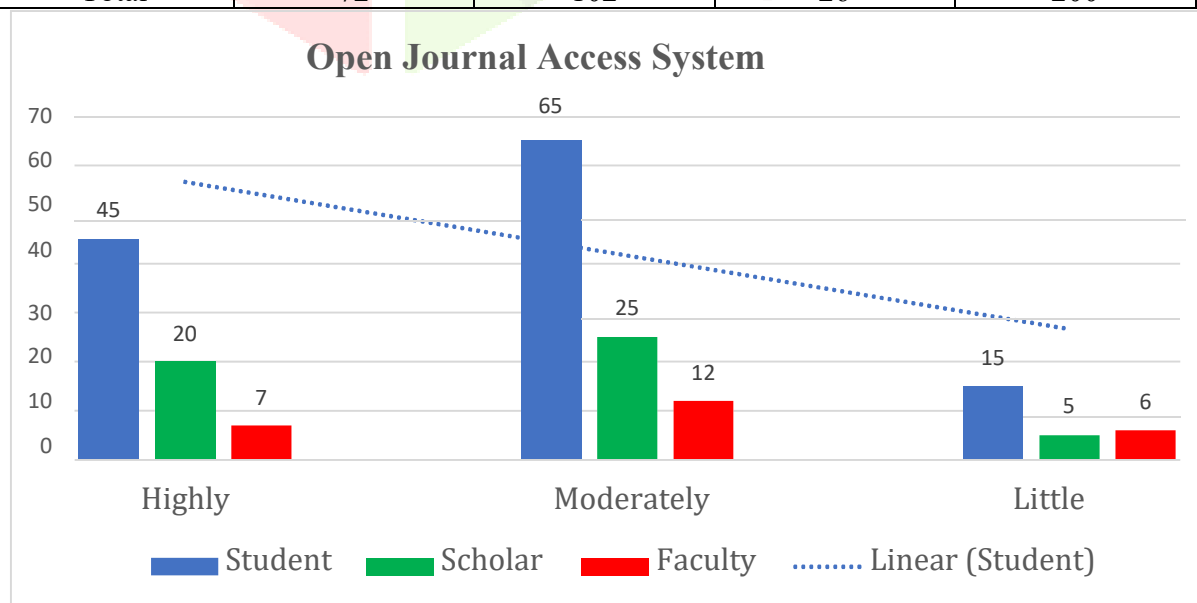
The designation- wise distribution shows that more than half the percentage of the respondents are students (62%). The remaining part of the sample consists of faculty members (13%) and research scholars (25%).

The e-journals/directories were included in the questionnaire, namely, the Open Journal Access System (OJAS) and the Directory of Open Access Journals (DOAJ): Business and Economics and the responses were recorded. The designation- wise responses are shown below.

Table: 2 - Awareness Towards Open Access E-Journal Directories by the Respondents

N=200

Subject	Highly	Moderate	Little	Total
Students	45	65	15	125
Scholars	20	25	5	50
Faculty	7	12	6	25
Total	72	102	26	200



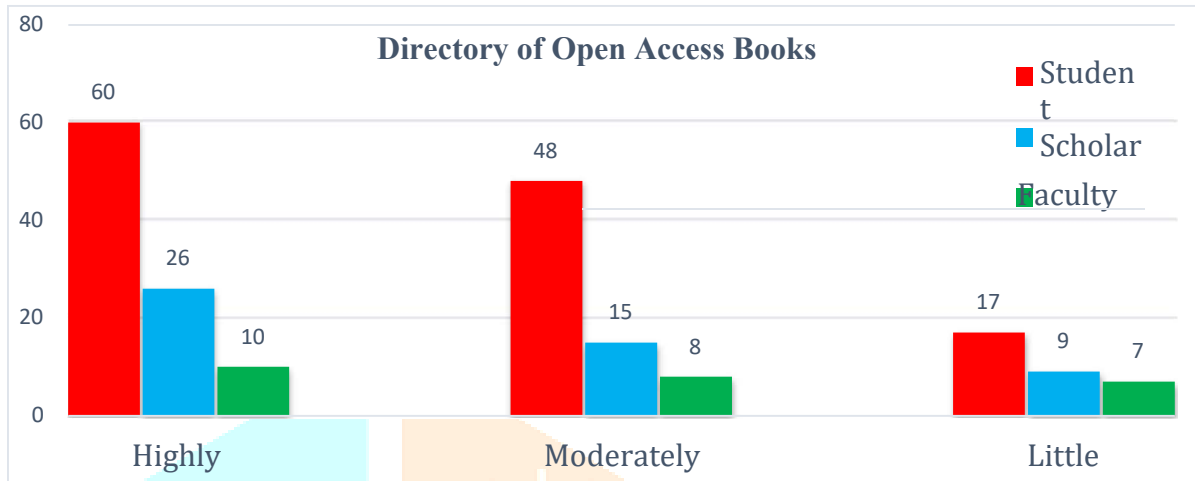
For the statement, -Open Journal Access System, 26 of the respondents indicated little, 72 of the respondents indicated high awareness, 102 of them had moderate awareness.

Important e-book resources were included in the questionnaire. The patterns of responses among three designations for these listed e-books and their test statistics are shown in the tables below.

Table: 3 - Awareness Towards Open Access E-Books by the Respondents

N=200

Subject	Highly	Moderate	Little	Total
Students	60	48	17	125
Scholars	26	15	9	50
Faculty	10	8	7	25
Total	96	71	33	200

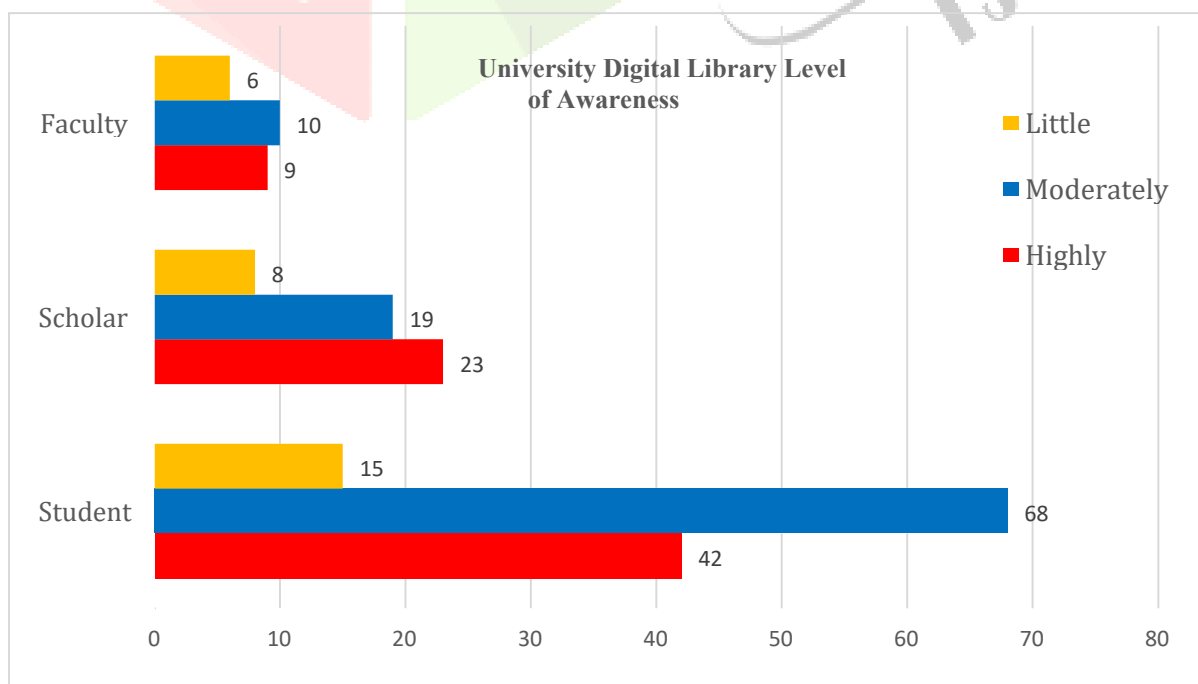


For the statement, — Directory of Open Access Books, 96 of the respondents indicated highly, 71 of the respondents indicated moderately, 33 of them had little awareness.

Table: 4 - Awareness Towards Open Access E-Books by the Respondents

N=200

Subject	Highly	Moderate	Little	Total
Students	15	8	6	29
Scholars	68	19	10	97
Faculty	42	23	9	74
Total	125	50	25	200

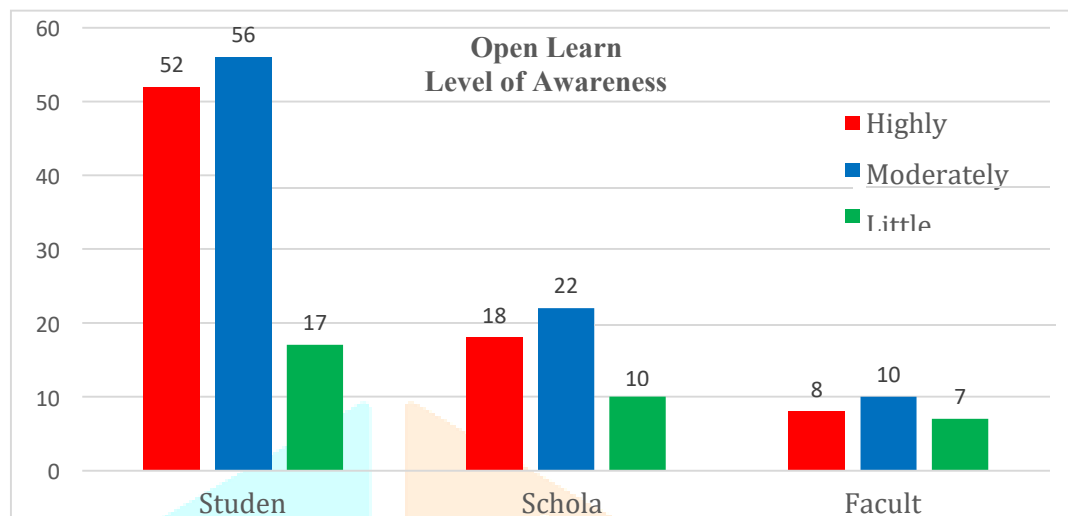


As far as awareness regarding University Digital Libraries is concerned, 29 of them had little awareness, 107 of them had moderate, 74 of them had highly awareness.

Table: 5 - Awareness towards open access courseware by the respondents

N=200

Subject	Highly	Moderate	Little	Total
Students	52	18	8	78
Scholars	56	22	10	88
Faculty	17	10	7	34
Total	125	50	25	200



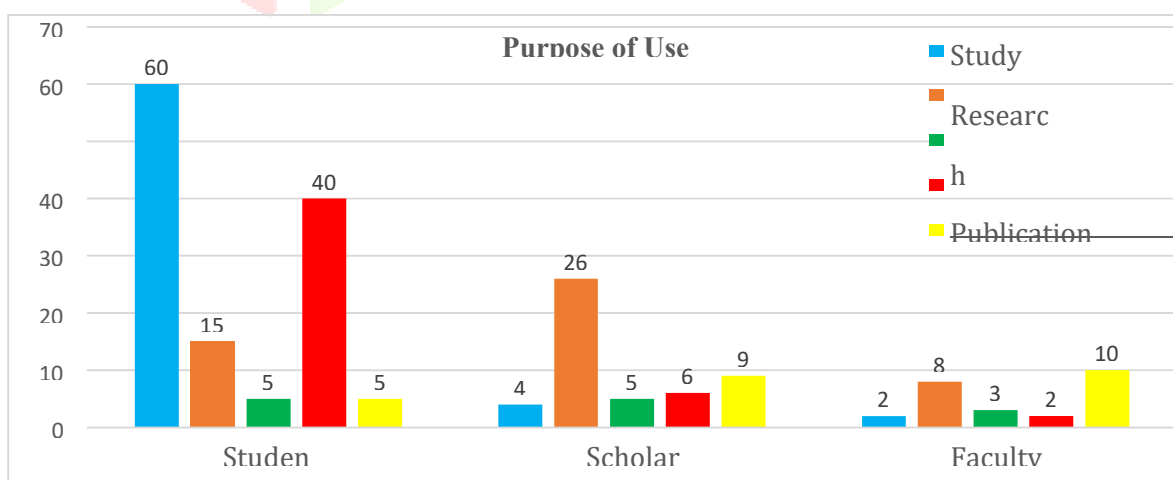
Open Courseware, 78 of the respondents indicated high awareness, 88 of the respondents had moderate levels of awareness, 34 percent of them had little.

There are various purposes for which a person can use open access in his/her academic life. In this section, the results are presented from this point of view. The results here indicate the opinion differences and preferences for uses of open access sources and services.

Table: 6 - Purpose of use of open access sources and services by the respondents

N = 200

Subject	For Study	For Research	For Publication	For Examination	For Teaching	Total
Students	60	15	5	40	5	125
Scholars	4	26	5	6	9	50
Faculty	2	8	3	2	10	25
Total	66	49	13	48	24	200

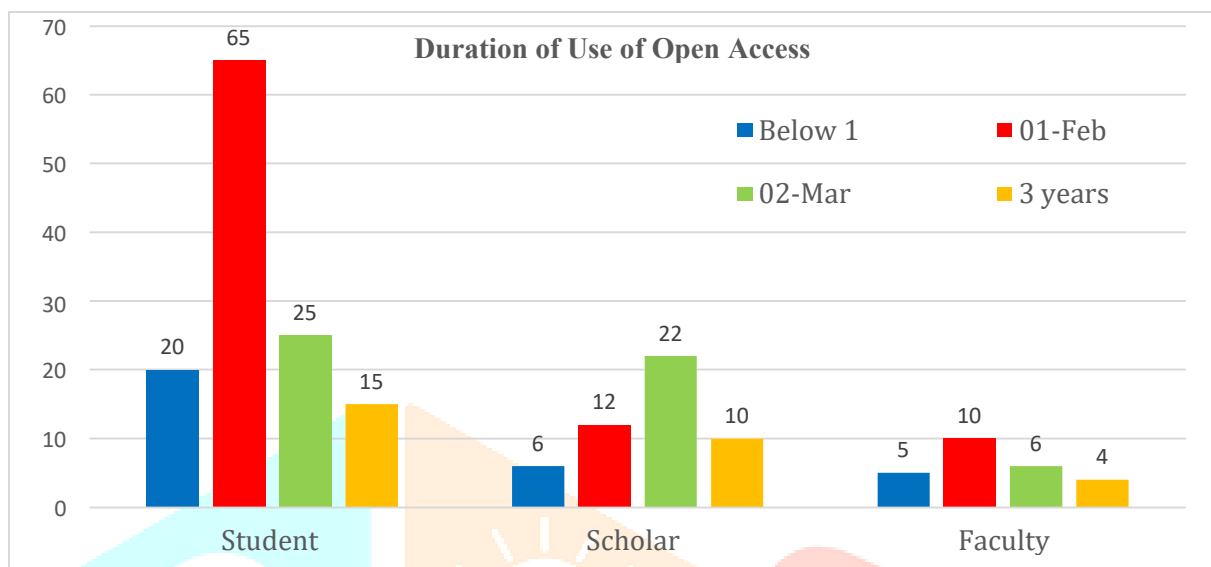


On the whole we find that 66 of the sample respondents used open access for study, 49 for research, 13 for publication, 48 for examination, and 24 percent for teaching purposes. Significantly we find more students and research scholars indicated –study than the faculty. The tables below explore the differences among students, research scholars, and faculty with respect to duration since they are used to Open Access resources. The time duration is classified into 4 categories, viz., below 1 year, 1 to 2 years, 2 to 5 years, and 5 years and above.

Table: 7 - Duration Use of Open Access Sources and Services By the Respondents

N=200

Subject	Below - 1	1 - Feb	2 - Mar	3 - Years	Total
Students	20	65	25	15	125
Scholars	6	12	22	10	50
Faculty	5	10	6	4	25
Total	31	87	53	29	200

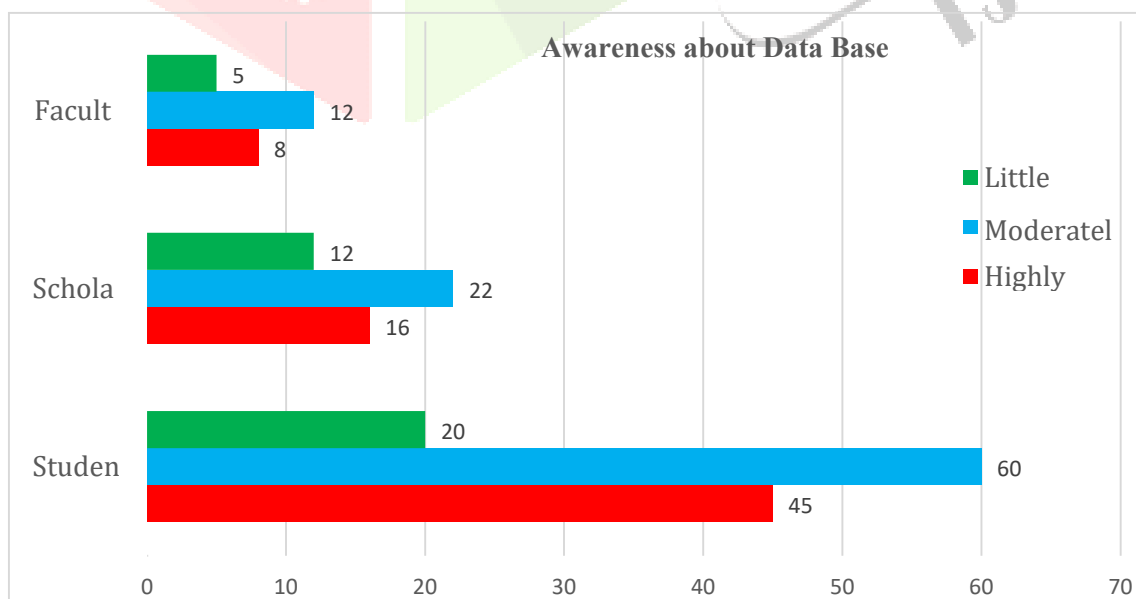


The sample respondents indicated that 31 of them had used open access for 1years, 1-2. 87 of them for 2-3 years, 51 of them for less than a year, and the remaining 29 for more than 3 years and above.

Table: 8 - Awareness Towards Databases/Aggregates by the Respondents

N=200

Subject	Highly	Moderate	Little	Total
Students	45	60	20	125
Scholars	16	22	12	50
Faculty	8	12	5	25
Total	69	94	37	200



The whole, 69 of the respondents indicated highly, 94 of the respondents indicated moderately 37 of them had little. However, this pattern was found to be different students, research scholars and faculty, where test statistics indicated that both researchers had significantly higher awareness compared to the faculty and students

CONCLUSION:

The preceding review has clearly brought out the fact that the awareness and utility of open access and open access sources and services are highly limited and not utilized at the expected levels due to varied reasons. A large number of open access developmental projects are underway with the active support of government funding agencies, learned societies and publishers to make the fruits of scientific progress equally available to all. These efforts are to be consolidated and other important Indian organizations and funding agencies which have a strong research base with a large output of science and technology papers can set up institutional archives and provide subscription free journals. The open access archiving should be given much higher attention in policy circle so that they would raise the profile of Indian research. Open access to scientific journals is beneficial to scholars and has wide support as a concept, but it needs viable revenue models and great commitment among its promoters. Therefore, the emphasis should be primarily on setting up open archives rather than on persuading journal publishers to make their journals open access. While we realize the importance and value of expanding open access to scholarly research, it is equally important to address the many questions that are being raised about the prospects of open access. Its principal strength will continue to derive from technology that enables accessing and sharing distributed resources by the community of scientists. Though the open access concept is still debated and there is no consensus within the scientific community or a proven model, indeed, the benefits of open access to results of research cannot be denied.

References:

1. Budapest Open Access Initiative (2012). Ten years on from the Budapest Open Access Initiative: setting the default to open.
2. Cassella, M. (2008). Open access in the human sciences. *Biblioteche Oggi*, 26(10), 40-49.
3. Dechman, M. K., & Syms, L. R. (2014). Working together to maximize the utilization of open data across social science and professional disciplines. *Behavioral & Social Sciences Librarian*, 33(4), 188
4. Erturk, K. L., & Kucuk, M. E. (2010). The visibility of scholarly knowledge: Awareness for open access in Hacettepe University. *Turk 196 Kutuphaneciligi/Turkish Librarianship*, 24(1), 63-93.
5. Fowler, K. K. (2011). Mathematicians' views on current publishing issues: A survey of researchers. *Issues in Science & Technology Librarianship*, (67)
6. Frandsen, T. F. (2009). The integration of open access journals in the scholarly communication system: Three science fields. *Information Processing & Management*, 45(1), 131-141.
7. Hahn, S. E., & Wyatt, A. (2014). Business faculty's attitudes: Open access, disciplinary repositories, and institutional repositories. *Journal of Business & Finance Librarianship*, 19(2), 93-113.
8. Jandoo, T., & Vedamurthy, A. B. (2012). Open access to scientific information: A review of initiatives. *DESIDOC Journal of Library & Information Technology*, 32(3), 255-260.
9. Kocken, G. J., & Wical, S. H. (2013). "I've never heard of it before": Awareness of open access at a small liberal arts university. *Behavioral & Social Sciences Librarian*, 32(3), 140-154.
10. Krista D. Schmidt, Pongracz Sennyey, (2005), *New Roles for a Changing Environment: Implications of Open Access for Libraries, College & Research Libraries*, Published by ACRL Publications.
11. Mammo, Y., & Ngulube, P. (2015). Academics' use and attitude towards open access in selected higher learning institutions of Ethiopia. *Information Development*, 31(1).
12. Poynder, R. (2005). The role of digital rights management in open access. *INDICARE Monitor*, 2(2)
13. Pritpal S. Tamber, Fiona Godlee, and Peter Newmark, (2003) "Open Access to Peer-reviewed Research: Making It Happen," *Lancet* 362, no. 9395, Nov.8.
14. Prosser, D. (2003), *Institutional repositories and Open Access. The future of scholarly communication. Information Service and Use*, 23(3/3),167.
15. Stevan Harnad. (2004); The "Green" and "Gold" Roads to Open Access: The Case for Mixing and Matching Jean-Claude Guédon *Serials Review* 30(4)
16. Suber Peter, (2008), *Gratis and Libre Open Access*. Arl.org.
17. Tietenberg, Tom (2006). *Open access resources*.