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# International e-journal of Library Science

Volume No. 10 | Issue No. 2 | July - December 2022

ISSN No. 2319-992X Indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor SJIF (2021) 7.237 Impact Factor PIF (2019) 4.650 Impact Factor IIJIF (2017) 4.101

A Peer-Reviewed and Referred Bi-Annual Journal

: Contents :



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Tel. : +91-22-24043927 / 28 • Telefax : +91-22-24043933
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# VIRTUAL ETIQUETTES FOR LIBRARIANS IN THE NEW NORMAL

**Ms. Vrushali Rane**
Deputy Librarian,
SNDT Women's University. Bharat Ratna Maharshi Karve Knowledge Resource Centre, Juhu Branch, Mumbai, India.
E-mail: libraryjuhu@sndt.ac.in

## ABSTRACT:

*Virtual meetings were already a part of corporates and those having business remotely. During the pandemic not only businesses but in academics also teaching, learning, webinars, discussions, official meetings etc all became the only way to communicate. Attending and conducting online webinars, official online meetings, asking QA online, submissions, presentations became a new normal. Though each gained tremendous knowledge and shared knowledge from home, there are several skills one must be equipped with when online. One needs to have virtual etiquettes when online. Virtual webinars / meeting etiquette is a whole new ball game compared to in-person meetings or gatherings like seminars etc. As a leading objective to this paper the author has taken up review of the articles in the area of virtual etiquettes for librarians. In addition to reviewing the most important literature, the paper also explores the subject and identifies the key areas that are required to be followed when librarians are in an online environment. The present paper discusses the virtual skills & etiquettes that librarians may develop within themselves or build on the existing ones that they already possess. The tips shall help librarians to be professional and productive virtually.*

## KEYWORDS :

**Virtual skills, Virtual Etiquettes, Online Communication, Soft Skills, Image Building, Pandemic**

**Introduction :**

The global economy is predicted to contract; because of prolonged lockdowns across the globe in the aftermath of the pandemic. However lock downs have seen a new normal in various fields. Virtual meetings have gained greater significance now, when the entire world was mostly working from home due to the pandemic. Co-workers are communicating with one another through various online tools, to keep the work momentum going. Virtually meeting for any official purpose was found to be the only mode at the time of social distancing. Being virtual has given opportunity for communication, participation, and engagement to fulfil the purpose of work undertaken. These troubling times have given different ways to

stay connected with all. Depending upon what role one has to play as a student, teacher, employee, learner, manager and so on. Everything that needs to be communicated virtually be it a webinar, formal discussion, teaching may be coined broadly as an online meeting.

An online meeting, also called virtual conferencing, is a method of communication that allows for multiple parties to meet and interact in the same space without physically being present. Through electronic device channels like internet service, projectors (for large teams), reliable sources of audio, laptops, tablets, webcams, etc.,business employees and higher-ups can communicate back and forth with each other using various virtual meeting platforms (Benson, 2020). One has to be comfortable in online platforms to connect virtually. There are many platforms that can be seen like skype, zoom, WebEx, GoToMeeting, goggle hangout, Microsoft teams, google meet, Cisco WebEx etc.

Virtual world presence is important in an academic environment to gain visibility personally and for the libraries. Library and information science professionals are continuing communication through video-conferencing, to stay in touch and to plan and execute a large part of the services and work online. This new normal has in fact given an opportunity to the Librarian's to build their image with respect to personal knowledge and personal grooming. In addition there are virtual services that gain momentum to connect with the users and offer them online resources as much as possible.

**Need of the study:**

It is worthwhile to mention that virtual etiquette is the most discussed topic not only in the field of LIS but in other domains also due to the generality of the concept which can be applied across all the disciplines. The focus on virtual etiquette increased during the pandemic although it was not always the case earlier. Now as the culture is slowly moving back to offline mode some organizational communication still prefers to be online due to its comfortability and feasibility. Hence virtual etiquette always needs to be studied as part of soft skills in LIS and largely in any global environment.

**Scope:**

Library professionals come in contact with many individually or in groups for official reasons, meetings of professional bodies, with its users etc. They play an important role in providing information services to its users, in dealing with the other stakeholders like vendors etc. While doing so virtually, librarians need to keep in mind the image that it needs to maintain and the etiquettes to follow. The paper shall put forth review of some of the literature available on virtual etiquette and various roles that librarians play virtually. The paper aims to raise awareness on virtual etiquettes among the librarians when attending meetings, webinars, communicating with users & staff or authorities or even while conducting sessions.

**Objectives:**

1. To review important literature in the area of virtual etiquettes for librarians.
2. To identify the key etiquettes for librarians in an online environment.

**Review of Literature:**

There has been very limited research found in the area of virtual etiquettes for librarians.

Not only is the topic ignored in the profession of librarians but also ignored in other professions. However, one page write up, blogs, discussions, comments can be seen in general on virtual etiquettes. A chapter or articles on online skills at times cover the topic briefly. The paper is the outcome of the literature read, few ideas implemented and many from the observations made at various online meetings. It is purely the author's thoughts and writing from the experience.

**Discussion and Suggestions:**

**Objective 1: To review important literature in the area of virtual etiquettes for librarians**

There is limited literature available on virtual etiquettes for librarians. The literature mostly touches on the virtual reference service, netiquette, and online student etiquette.

Virtual reference service showcases poor user etiquette. The disruptive behaviour of users is also seen in virtual communication. The traditional role and responsibility of the reference librarian now includes the virtual reference support. Barrett and Greenberg (2018) share the training challenges that virtual reference librarians face. Virtually the training plays an important role along with the service and student evaluation. The criteria like Ask a librarian, Chat reference service etc needs training. The etiquettes are seen to be informal. The communication is usually casual. Due to this the aim of reference interview is not achieved. To achieve quality virtual reference service, training programs that address communication etiquette is required. Librarians face different types of users online as well as offline. The most challenging task is to provide virtual reference service to the young generation. These young users are born in the internet era where accuracy does not matter much to them. Janes (2003) suggests that librarians must understand the etiquette if they want young users to take up virtual reference service seriously.

There are hundreds of specific netiquette suggestions published. The 2021 article on netiquettes gave an analysis of the existing literature from Scopus database and Web of Science. It covered important points like the date, country, objective, methodology, variables, sample and analysis of the articles. The result showed that there is a poorly defined line of research in theory as well as practice. Attention is required in this area for developing theories and practicality. Netiquettes becomes an important area for librarians in a digital environment. Not only does it help to showcase oneself appropriately but also helps in offering virtual services. One of the important literature was by Yarmohammadian, Iravani, & Abzari (2012). They examined the relationship between netiquette and organizational culture among faculty members of the Isfahan University of Medical Sciences (IUMS), Iran. Netiquette word means a combination of network and etiquette. It was a descriptive survey where correlational research method was applied. Simple stratified sampling method was used to randomly select 150 faculty members from the population of 594. The data collection tool was two questionnaires while SPSS was used to analyze the data. There was a significant gap found between the organizational culture and netiquette and it was also below average level. Further the authors suggested several etiquette tips for the librarians when one is working or communicating in a network.

Other literature reports on student etiquette within online virtual classes. Conrad (2010) directed towards the students' social presence. Here the students were nice to each other and to the faculty during the class. Atlas (2012) discusses the Generation Y medical student's Facebook habits. While discussing their life on Facebook and response to social networking the author emphasized on etiquette that should reflect in an appropriate way, responsibly and with maturity. Further the author believes that the librarian's expertise to manage the literature to provide online to students needs attention. It also addresses the ethics of other online activities.

ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

To sum up, ensure use of resources by actively participating and providing online services to the users in a virtual environment. Any activity taken up virtually be it to conduct engaging online sessions for the databases, chat reference service, ask a librarian, answering email or instant messaging reference service. Follow these etiquettes for virtual service -

- Be aware of fake news
- Be cautious on social network
- Be flexible but follow protocol
- Be responsible
- Behave with maturity
- Communication etiquette
- Follow ethics
- Formal training
- Handle cyber bullying
- Ignore or avoid haters on social networks
- Watch digital scams

**Objective 2: To identify the key etiquettes for librarians in an online environment**

There are several virtual skills that a Librarian must acquire to be effective online. As Librarian one may need to interact online with users of different levels that are right from subject expert, faculty, researcher, students, external members, corporate members, etc. As an administrator, communicating from top to bottom in the hierarchy and coordinating with its own staff for smooth working shall be a part of daily activity. To share and gain knowledge for building one's image and to develop libraries by learning new skills, knowledge of virtual etiquettes will help Librarians and take them a long way.

**Host / Co-ordinator:**

When a Librarian is coordinating a session it is necessary to become efficient remote managers. Coordinating a session could be for various reasons having different purpose. It could be for internal or external activities. Similarly the participants could be internal or external. The following points should be kept in mind when hosting.

- Engage people who are uncomfortable with technology and do not possess the necessary skills to participate in a virtual meeting.
- ShareURL links to all participants the day before the meeting date to give them the opportunity to familiarize themselves with the platform interface and features.
- The session must start on time.
- Communicate to participants what behaviour is expected of them during the meeting.
- Make sure everyone is paying attention to what is going on as the audience may get easily distracted.
- Keep track and review the main purpose during the meeting to ensure that everyone is on the same lines.
- Microphone & Videos
    - All participants should have their microphone muted until invited to speak and return to mute once spoken.
    - Remember to unmute when ready to speak.

- Members and Officers are also asked to switch off the camera function when not speaking as this can help connectivity, especially where a larger number of people are joining the meeting
- Keep video on when required. If the video is on don't do any movements. Preferably keep video off.

Finally, remember the host should be the last one to leave the room.

**Expert:**

Librarian's community is very active and lively not only for making their users a life-long learner but also to develop skills of other librarians. There are experts available in the profession speaking and teaching on specific areas in the library and information science.Librarians also actively engage and help with users through reference service. With lock down, organizingwebinars, faculty development programmes, training for users etc saw a revolution and soon it became so easy for everyone to hold that one had to choose from the huge list if they wish to attend while for experts it was preparing for multiple lectures on their expertise. More so the topics of discussions were on reopening of libraries post lock down, technology in libraries and research. In such a situation for an expert to share expertise and deliver the knowledge effectively to the participants, librarians must take care of these tips.

- Check audio video well beforehand. Desktop sharing is an important aspect as this ability shall help to interact and explain the points or thoughts clearly in real-time.
- Prepare topic very well depending upon the participant's background
- Communicate clearly and with a steady speed so that it is easy to understand. Remember there is clarity in speech
- Combination of speech and visuals would make a good presentation
- If there are more speakers or a panel discussion, respect others ideas. Do not exchange remarks in a humoured teasing way with other experts.
- Answer maximum questions from participants. Left out questions may be answered by email later on.
- Do not offend any remarks
- Accept if any point is added by others and be happy to add it to self-knowledge. Explain as much as possible as the participants are choosing to hear this session to learn.
- Use poll questions to engage and keep audience focussed.
- Keep watch on chats. There may be some points that are better addressed during the session than at the end.

**Dressing etiquette:**

It is necessary to dress appropriately. Though one is not moving out of the house, it does not mean one dresses or simply stays shabby when online. Resource person must dress in formals or semi formals, brush hair and look neat and tidy.

**Speaking etiquette:**

In a virtual environment one has to speak in front of the camera where there is no eye contact and the

physical environment may be disturbing. It's just voice, face and content that everyone needs to concentrate on. It is advisable to practice in front of the camera. Pick up skills like voice modulation to create emphasis and curiosity. Learn where to pause to create an effect. Find out an engaging way to bring the group attention. Engagement is difficult to achieve in virtual meetings. Audiences or participants must also follow speaking etiquette when online. First rule is to speak when asked. Don't interrupt when others are speaking. Wait for the turn. Remember virtually the focus is more on speech than visuals. Encourage participation by using chat features or raise hand that allow individuals to be highlighted when speaking.

**Dressing etiquette:**

Surrounding is very important as virtually it is visible prominently.

- See to it that the background is preferably a plain surface. If the background colour is a solid colour like green then one can display a picture of choice.
- There should be no movement of people etc at the back. It distracts others.
- Good lighting in the room is advisable.
- No scattered things on table, bed, messy rooms, dirty or peeling walls should be visible.
- No background noise of kids, dogs barking, TV, people talking etc

**Alerts / Chat / Notification / QA etiquette:**

Never distract others with common messages like good morning, hello, I am so & so, thank you, good sessions etc. Don't use chat to ask questions unless stated by the organisers. Always use the question answer tab. Ask one or two questions & let others also get a chance to raise their query. When handling question answer sessions, do some preparation beforehand. Make the session interactive. Be responsive, understanding, nod head etc. Link up questions or answers with some current situation or an experience.

**Punctuality etiquette:**

Always be punctual to join the meeting on time and respect the time of others. Be ready a few minutes before and check connectivity, microphone, speaker etc. Never leave in between, don't keep joining & leaving the session. Join only if the session is interesting. Always leave at the end. Maybe there are some important announcements at the end.

**Screen etiquette:**

Remember once login to a meeting the name & photo should be displayed on screen. The screen is very important as many a time one may not at all speak or put on video then knowing who this screen belongs to is a nice gesture. Always avoid mobile name or any other text on screen. One should be able to identify who's screen it is.

**Food / Drink:**

Do not eat / drink when online. Though one is at home these are simple manners that one must understand not to take up. It's a forum in which there is something happening and everyone is there by choice. Eating, drinking is considered a nuisance.

**Follow Instructions:**

When the organizer gives an instruction to do something online like standing for the national anthem, please do so. Otherwise keep videos off. Pay respect and follow what is being asked to do.

**Beginning, in between or end of the meeting:**

Simply never try to be over expressive before and after the meeting especially when the environment is informal. Be disciplined, make statements calmly, be positive, be assertive, state the point or just prefer to keep quiet. If something goes wrong in between, apologize and join again. It is worth lettingone's sixth sense or intuitions work at times. For example don't murmur whether audible or interrupt for a wrong reason. Be focussed throughout the meeting / session.

**Body language:**

Proper body language must be maintained. Looking somewhere else, keeping hands on or around head & neck, stretching etc is not accepted in a virtual environment. Remember for the audience it's only the audio video to concentrate on. Rest is one's own surroundings. Facial expressions play an important role in a virtual environment. Always keep a smiling face and maintain a subtle posture towards the camera.

**Avoid doing private things:**

Avoid doing private things like talking on phone or talking to the people around, using washroom, messaging or using phone.

Now, whether it is attending webinars, official programs, answering user questions online, meeting with vendors, official meetings with staff / higher authorities these are the general virtual etiquettes which one must remember when online.

**Conclusions:**

There is a poor theory and practice found in the case of virtual etiquette for librarians. However there are many short write ups available to suggest the virtual etiquettes on how one can survive, perform and conduct in an online environment. Virtual environment is a new normal as everyone is facing fundamental shifts in our way of life due to pandemic. Librarians have to concentrate more on virtual skills as very rarely online platforms have been used to address library users, discuss working with co-staff, speaking to authorities, to attend online sessions or even to be an online speaker. The tips on virtual etiquette will help librarians to be ace in the online environment

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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

# JOURNAL OF LANDSCAPE ARCHITECTURE: A BIBLIOMETRIC ANALYSIS

**Dhiraj Kiran Chogale**
Librarian
CTES College of Architecture, Mumbai
Email: dhirajchogale1791@gmail.com

**ABSTRACT:**

*This study aims to present a bibliometric analysis of the journal titled "Journal of Landscape Architecture" for the period from 2010 to 2019. The trend of publications such as the year-wise distribution of contributions towards this journal, authorship pattern, degree of collaboration with top contributing authors, bibliographical distribution of references and length of contributed articles have been studied.*

**KEYWORDS :**

**Bibliometric, Journal of Landscape Architecture, Authorship Pattern, Degree of collaboration**

**Introduction :**

'Bibliometrics' term first introduced by Alan Pritchard in 1969 to mean 'the application of mathematics and statistical methods to books and other media of communications' (as cited in Jena, 2006). Bibliometric study is quantitative description of literature. Bibliometric study was helpful in the measurement of the patterns of all forms of recorded information. This bibliometric study presents the analysis of the Journal of Landscape Architecture in its present form and its contents to gain detailed understanding about the type of publications in the journal, pattern of the content, and authorship and so on in the area of Landscape Architecture.

**About Journal of Landscape Architecture:**

Journal of Landscape Architecture was founded by two designers Brijender Singh Dua and Geeta Wahi Dua in the year 2001. This journal is a professional publication based on the subject of Landscape Architecture. This journal explores the relationship of nature and culture in the realm of design, in context of Indian subcontinent.

**Review of Literature:**

Bibliometric analysis studies of journals in various disciplines have undertaken by several authors. The

following are some reviews of the related studies worthy of examinations.

Abdi et al. (2018) carried out bibliometric analysis of IP & M Journal for the period 1980-2015. The study includes mainly year-wise distribution of papers, category-wise classification of papers, most prolific contributions of papers in IP & M Journal, Authorship pattern, analysis of citations etc.

Brahma and Verma (2018) examined the Malaysian Journal of Library and Information Science during the period 2007-2016. This study revealing that Malaysia appears to be on top with 31.17% contributions in top contributing countries. Study also reveals that majority of papers were contributed from academic institutions.

Dixit and Katare (2007) analyzed Patterns related to authorship, bibliographic forms, citations, contributing institutions published in the Journal of the Indian Society of Cotton Improvement for the period 1995-2004. They identified that number of citations per year increasing so cotton research workers are seeking a greater platform for their work.

By analyzing the number of papers published in the Indian Journal of Fibre and Textile Research from 1996-2004 Jena (2006) presented bibliometric analysis of citation pattern of articles. Study also showed the ranking of contributors and average length of articles.

Navaneetha krishnan (2014) studies authorship patterns and degree of collaboration of Sri Lankan scientific publications in Social sciences and Humanities. Analyzed data of this study was collected from SCOPUS database. This study mainly includes distribution of co-authorship and degree of collaboration.

Roy and Basak (2013) analyzed the authorship pattern, distributions of contributions, volume wise distribution of citations from journal of documentation during the year 2005 – 2010 from 36issues of journal. They identified that all the citations of the articles are with good number of citations.

Siwach (2013) examined IFLA Journal during five years from 2008 to 2012. This study includes authorship pattern, number of references in articles, length of papers, country-wise distribution of papers.

Verma, Tamrakar and Sharm (2007) analyzed the contribution in the field of Library and Information Science from Annals of Library and Information Studies Journal during the year 1999-2005. This study showed that authorship pattern of articles is two author type in majority. Study also reveals that majority of articles are contributed from New Delhi i.e. from the place of publication of Annals of Library and Information Studies Journal.

Verma and Singh (2017) studied mainly authors productivity and degree of collaboration in the Library and Information Science subject. They have studies Journal of Librarianship and Information Science during the year 2010-2016. They identified a noticeable upward trend of collaborative study in library science subject.

Vijay and Raghavan (2007) examined Journal of Food Science and Technology. They have analyzed 779 articles published in said journal. Authorship pattern of this journal, foreign and Indian authored contributions, institution wise contribution, types of publications cited, geographical distribution of contributions national and International as well as physical growth of the journal have been studied in this paper.

**Methodology:**

For this bibliometric study, the Journal of Landscape Architecture has been selected as the source journal. Thirty four issues of the journal from 2010 to 2019 have been selected for the study. Each published article was analyzed to record the details of number of authors, number of reference, type of reference of the article. The collected data was analyzed using Microsoft Excel as per the objectives of study.

**Objectives:**

The Present bibliometric study has been undertaken with following specific objectives:

- To examine year-wise distribution of contributions and authorship pattern of the journal;
- To study the types of publications cited in the contributions of the journal; and
- To examine the average length of contributed documents.

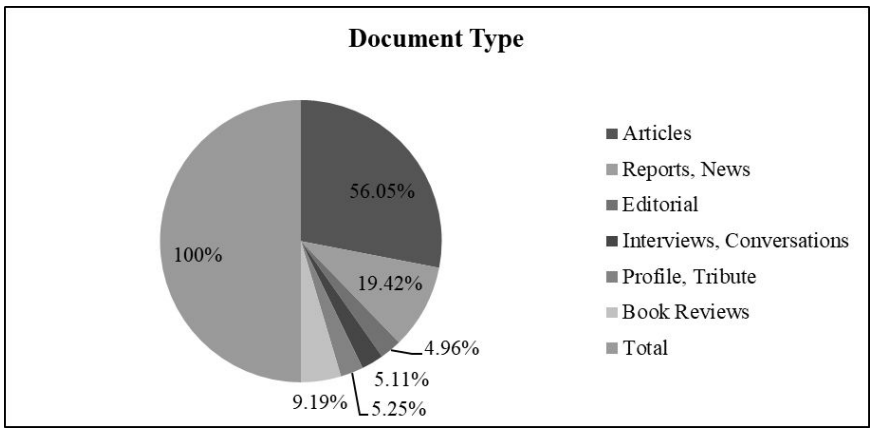
**Analysis of the study and findings:**

**Document type**

Table 1 and figure 1 presents document type wise distribution of contributions published during period from 2010 to 2019. The study shows that the maximum contributions published in articles type of documents 384 (56.05%) followed by 133(19.42%) in category of reports and news.

**Table no. 1: Document Type**

| Document Type | No. of Documents | % |
|---|---|---|
| Articles | 384 | 56.05 |
| Reports, News | 133 | 19.42 |
| Editorial | 34 | 4.96 |
| Interviews, Conversations | 35 | 5.11 |
| Profile, Tribute | 36 | 5.25 |
| Book Reviews | 63 | 9.19 |
| Total | 685 | 100 |



**Year-wise distribution of contributions:**

Table 2 gives the year-wise distribution of documents in the said period of the journal. The number of articles varies from year to year and as per the observations, out of total 685 documents the maximum contribution of 100 documents (14.59%) was seen in the year 2018. The least contribution of 43 documents (6.28%) was made in the year 2014.

**Table no. 2: Year-wise distributions of contributions**

| Year | No. of Contributions | % |
|---|---|---|
| 2010 | 54 | 7.88 |
| 2011 | 82 | 11.97 |
| 2012 | 77 | 11.24 |
| 2013 | 52 | 7.59 |
| 2014 | 43 | 6.28 |
| 2015 | 82 | 11.97 |
| 2016 | 75 | 10.95 |
| 2017 | 67 | 9.78 |
| 2018 | 100 | 14.59 |
| 2019 | 53 | 7.74 |
| Total | 685 | 100 |

**Authorship pattern of articles:**

The authorship pattern was analyzed to determine the number of articles with one, two, three and more than three authors as shown in Table 3 and Figure 2. It was revealed that majority of papers were one or single authored 88.06%, followed by two authored papers 7.09%. Only 3.87% and 0.96% papers had three and more than three authors respectively. This indicates that majority of authors have a tendency to publish in single authorship mode.

**Table no. 3: Authorship pattern of contributions (Year-wise)**

| No. of Authors | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| One Author | 25 | 28 | 33 | 15 | 23 | 26 | 27 | 22 | 50 | 24 | 273 | 88.06 |
| Two Authors | 2 | 2 | 1 | 2 | 3 | 2 | 4 | 1 | 3 | 2 | 22 | 7.09 |
| Three Authors | - | 4 | 1 | 1 | 1 | 2 | 1 | - | 1 | 1 | 12 | 3.87 |
| More than Three Authors | - | - | - | 1 | - | 1 | - | - | 1 | - | 3 | 0.96 |
| Total | 27 | 34 | 35 | 19 | 27 | 31 | 32 | 23 | 55 | 27 | 310 | 100 |

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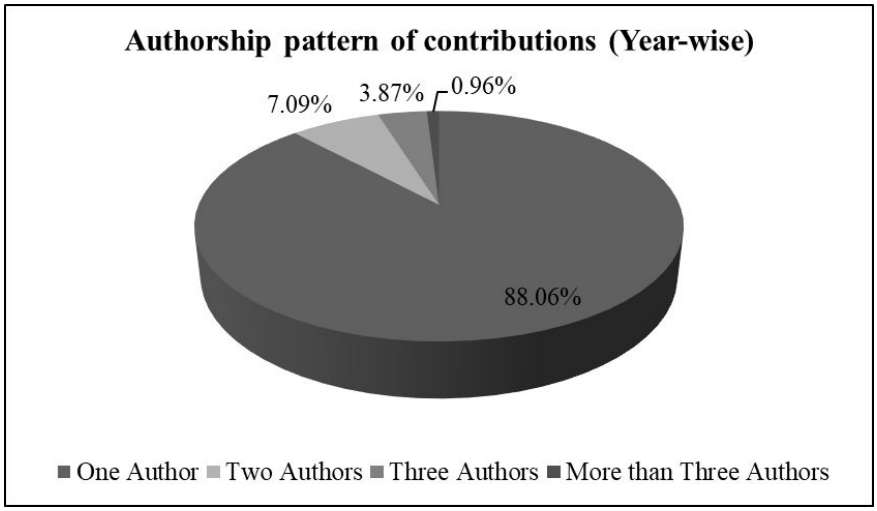
**Figure no. 2: Authorship pattern of contributions (Year-wise)**




**Degree of collaboration:**

The degree of collaboration is defined as the ratio of the number of collaborative research papers to the total number of research papers in the discipline during a certain period of time (Navneeth krishnan, 2014). To calculate the degree of collaboration in quantitative terms, Subramanyam (as cited in Siwach, 2013) proposed a formula. Formula is as follows

$$C = \frac{Nm}{Nm+Ns}$$

Where
C = Degree of collaboration
Nm = Number of multi-authored papers
Ns = Number of single-authored papers

The distribution of the degree of collaboration over the years from 2010-2019 is shown in Table 4. Using this formula, the degree of collaboration was found to be 0.12. It was observed that the degree of collaboration was highest (0.21) in 2013 and lowest (0.04) in 2017.

**Table no. 4: Degree of Collaboration (Year-wise)**

| Year | One Author | Two Authors | Three Authors | More than three | Degree of Collaboration |
|---|---|---|---|---|---|
| 2010 | 25 | 2 | - | - | 0.07 |
| 2011 | 28 | 2 | 4 | - | 0.17 |
| 2012 | 33 | 1 | 1 | - | 0.06 |
| 2013 | 15 | 2 | 1 | 1 | 0.21 |
| 2014 | 23 | 3 | 1 | - | 0.15 |
| 2015 | 26 | 2 | 2 | 1 | 0.16 |
| 2016 | 27 | 4 | 1 | - | 0.15 |
| 2017 | 22 | 1 | - | - | 0.04 |
| 2018 | 50 | 3 | 1 | 1 | 0.09 |
| 2019 | 24 | 2 | 1 | - | 0.11 |
| Total | 273 | 22 | 12 | 3 | 0.12 |

**Contribution of top authors:**

Ranking of authors / contributors of articles shown in Table 5. There are total 222 contributors for 384 articles. Geeta Wahi Dua has contributed 30 articles and followed by M Shaheer contributing 11 articles. Sriganesh Rajendran contributed 7 articles followed by Samir Mathur contributing 6 articles. Aniket Bhagwat has contributed 5 articles. Others have contributed less than 5 articles.

**Table no. 5: Ranking of Top Contributors**

| Sr. No. | Rank | Contributor | No. of Contribution |
|---|---|---|---|
| 1 | 1 | Geeta Wahi Dua | 30 |
| 2 | 2 | M Shaheer | 11 |
| 3 | 3 | Sriganesh Rajendran | 7 |
| 4 | 4 | Samir Mathur | 6 |
| 5 | 5 | Aniket Bhagwat | 5 |
| 6 | 6 | Amit Sinha | 4 |
| 7 | =6 | Ayla Khan | 4 |
| 8 | =6 | Mohan S Rao | 4 |
| 9 | =6 | Narendra Dengle | 4 |
| 10 | 7 | James L Wescoat | 3 |
| 11 | =7 | Nikhil Dhar | 3 |
| 12 | =7 | Rujuta Ranade | 3 |
| 13 | =7 | Saurabh Popali | 3 |
| 14 | =7 | Uma Sankar Sekar | 3 |

**Bibliographical distributions of References:**

Table 6 represents the bibliographic distributions of references. The bibliographical forms of references were divided into the following broad categories, journals, books, online search, proceedings, newspaper articles, reports and others. Though there are various other forms were present, but for the convenience they were merged into the above limited numbers.

Table 7 and figure 3 represents ranking of documents. From these Table 6 and Table 7 it has been seen that books are cited predominantly in all the years followed by other resources. Out of the total references books constitute 33.09% whereas other resources constitute 22.98% references. Journals constitute 19.73% references. Rest of the other forms constitutes less than 19 % of citations each. Out of the rest forms Online search 15.04%, Reports 4.69%, Newspaper articles 3.48% and Proceedings have 0.96%.

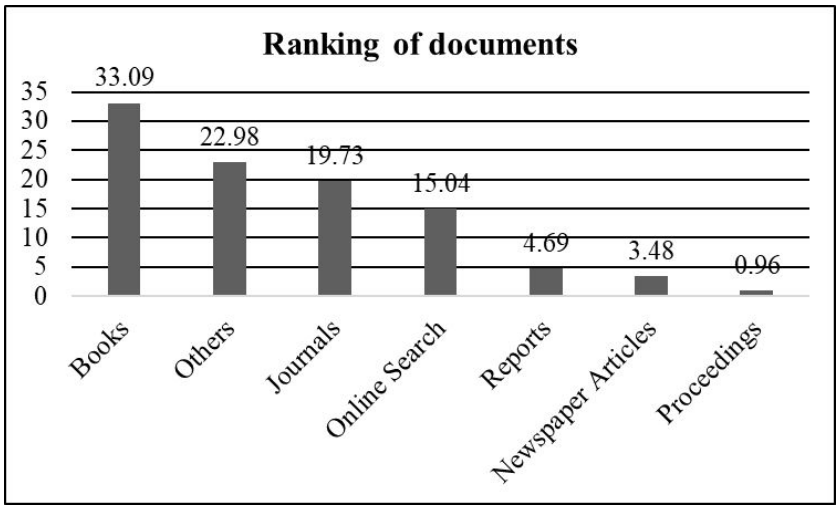
**Table no. 6: Bibliographic Distributions of References (Year-wise)**

| Year | Journals | Books | Online Search | Proceedings | Newspaper Article | Reports | Others |
|---|---|---|---|---|---|---|---|
| 2010 | 25 | 56 | 12 | 1 | 5 | 5 | 35 |
| 2011 | 18 | 45 | 11 | - | 2 | 1 | 32 |
| 2012 | 12 | 26 | 27 | - | 3 | 1 | 11 |
| 2013 | 4 | 20 | 10 | - | 3 | 1 | 9 |
| 2014 | 24 | 21 | 11 | - | 3 | - | 18 |
| 2015 | 10 | 18 | 14 | 2 | - | 2 | 10 |
| 2016 | 10 | 29 | 12 | 3 | - | 6 | 11 |
| 2017 | 1 | 7 | 5 | - | - | - | 9 |
| 2018 | 43 | 45 | 14 | 1 | 12 | 15 | 47 |
| 2019 | 17 | 8 | 9 | 1 | 1 | 8 | 9 |
| Total | 164 | 275 | 125 | 8 | 29 | 39 | 191 |

**Table no. 7: Ranking of documents**

| Sr. No. | Rank | Bibliographic form | No. of References | % |
|---|---|---|---|---|
| 1 | 1 | Books | 275 | 33.09 |
| 2 | 2 | Others | 191 | 22.98 |
| 3 | 3 | Journals | 164 | 19.73 |
| 4 | 4 | Online Search | 125 | 15.04 |
| 5 | 5 | Reports | 39 | 4.69 |
| 6 | 6 | Newspaper Articles | 29 | 3.48 |
| 7 | 7 | Proceedings | 8 | 0.96 |

**Figure no. 3: Ranking of documents**




**Length of articles:**

Table 8 shows length of articles. The number of pages of each article was counted to find out the length of the articles. It was observed that 154 articles were of 1 to 5 pages in length. 214 articles had page length from 6 to 10 and 13 articles were of 11 to 15 pages in length. Only 3 articles were of more than 15 pages in length.

**Table no. 8: Length of articles**

| Year | 1-5 | 6-10 | 11-15 | >15 |
|---|---|---|---|---|
| 2010 | 9 | 24 | 1 | - |
| 2011 | 10 | 22 | 2 | - |
| 2012 | 13 | 32 | - | - |
| 2013 | 10 | 16 | 1 | - |
| 2014 | 14 | 14 | 2 | - |
| 2015 | 17 | 20 | 2 | 1 |
| 2016 | 19 | 22 | 2 | - |
| 2017 | 14 | 20 | - | 1 |
| 2018 | 30 | 30 | - | 1 |
| 2019 | 18 | 14 | 3 | - |
| Total | 154 | 214 | 13 | 3 |

**Conclusion:**

The Journal of Landscape architecture is a prominent journal in the field of Architecture. Analysis of 34 issues of the journal shows that it covers contributions related to nearly all aspects of architectural studies. Though the journal is related to Landscape Architecture but journal looks as a multidisciplinary in nature in the field of Architecture. The journal has published 384 articles during the period of study. The study of authorship pattern reveals that majority of authors have a tendency to publish in single authorship mode. Study of references reveled that majority of the authors preferred books as the source of information providing the highest number of references. The maximum number of articles has the length of 6-10 pages.

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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

# USE AND IMPACT OF WHATSAPP AMONG LIS PROFESSIONALS IN NASHIK CITY

**Dr. Subhash Bandu Ahire**
Librarian,
MVP Samaj's
GMD Arts, BW Commerce & Science College, Sinnar Dist. Nashik
Email: subhashahire11@gmail.com

**Ms. Yogita Baburav Ahire**
Librarian,
Vishvalata College of Arts, Commerce & Science, Bhatgaon Tal.Yeola Dist.Nashik
Email: yogibabuahire@gmail.com

## ABSTRACT:

*This paper provides information regarding the use of WhatsApp by LIS professionals in Nashik city. The use of social media in the library can help to create instant communication with library users and more importantly helps to convert non-users into library users. Social media allows the presentation of news, exhibitions, etc. Libraries can send free messages to any part of the world without any charge. Libraries can share location, photos, and status with their use on mobile devices. There is no required charge for sharing information with their users at their fingertips. A descriptive research method and survey technique have been used. Data has been collected through structured online questionnaires. In Nashik city, 78 colleges are affiliated to SPPU Pune. A prepared questionnaire has circulated through the google platform to all the 78 LIS professionals. Out of that 66 (84.61%), LIS professionals replied and filled out the questionnaire. The collected data was analysed and presented in the form of charts and tables. The major finding shows that there are more female librarians than male librarians in college libraries in Nashik city. The majority of library professionals have used WhatsApp for updating their knowledge and the majority of them have used WhatsApp for one to four years. The majority of LIS professionals have used WhatsApp for developing their professional relationships, updating in professional development, updating subject knowledge and career development etc.*

## KEYWORDS :

**Social Media, Social Networking, ICT Skills, WhatsApp, Smart Phone, Library Services, LIS Professionals.**

**Introduction:**

Social media is an effective platform for making people access and share information with other people with far distance. Social media helps library professionals build the ability to make good relationships between library staff and library users. Using WhatsApp in libraries means: that librarians or library staff can send free messages to any part of the world at without charge. They can share location, photos, and status with their patrons on mobile devices.

The library does not have to spend any money to share information with its patrons at their fingertips. A study on the impact of WhatsApp on LIS professionals by (Bajpai, 2016). LIS professionals are using social media such as WhatsApp messenger for the last 2-3 years which reflects LIS professionals' awareness and enthusiasm to use new ICT tools for library services purposes. LIS professionals are sensible about using WhatsApp messenger. They read every post and share such information after checking its authenticity. There are very positive notes shown by LIS professional's WhatsApp messenger is proving its worth among LIS professionals for their professionals' growth and speedy way of communication tool.

**Review of Literature:**

Many people around the world may be doing a research on similar or same topics, the material must be enriched day today. Some of the studies are reviewed are as follows:

WhatsApp is a messaging app that uses the Internet to send messages, images, audio or video to a group or individual. WhatsApp may have played a key role in sustaining school libraries operating in African communities; Khayelitsha School Library Assistant paves the way for digital transformation in their library through WhatsApp (Bitso, 2016). WhatsApp groups are a knowledge-sharing platform among librarians in selected federal universities, in Nigeria. There are adopted a descriptive survey during five universities libraries purposively. A total of 58 librarians are involved in this study, and knowledge related to the field is shared by librarians through the WhatsApp group. The study found that WhatsApp should increase the group contents, limited from the current 256 to over 1000 members, this will enable institutions, associations etc. (Adomi and Uwakwe, 2019).

A few years ago, email had to be used to share a file or image. Today, with the help of the WhatsApp messaging app, you can share images and other files at your fingertips. On the use of WhatsApp group in the education context (Baishya and Maheshwari, 2020) stated that the main functions of this group are mainly related to education. Through the WhatsApp group, students can share information related to study materials, examinations, marks distribution, etc. However, in addition to the educational uses, the fact that students use this platform to congratulate the result shows that the presence of teachers has a significant effect on a group conversation.

Most of the respondents believe that using WhatsApp can improve alert services like CAS, virtual references, and notifications and that libraries can use their potential to provide better user services. **(Purkayastha and Chanda, 2018)** believe that WhatsApp is a major part of online communication with a considerable growth rate of users and which almost satisfies the user's need in every way like providing instant delivery of messages, multimedia sharing, real- time audio-visuals conversation and group massaging etc. A study examined by **(Ansari and Tripathi, 2017)** on the benefits and challenges of using WhatsApp for effective delivery of library and information services. It has been found that with a positive attitude towards getting services on WhatsApp, most of the respondents believe that using WhatsApp can

improve alert services such as CAS, virtual context, notification and libraries can use their potential to provide better user service.

A study on the use of online social networking services in university libraries of Karnataka, India. It is revealed that social networking services among the university libraries are showing an inclination towards the adoption and use of such services. There are differences across the libraries in using social networking services for different purposes, from marketing and promotion of library services. The university libraries in the state are catching up with these technologies but are used for elementary purposes **(Deepthi, Tadasad and Patil, 2017).**

**Scope of the study:**

The scope of the present study is primarily limited and restricted itself to the use of WhatsApp by LIS professionals for their professional communications. This study is also limited to the LIS professionals working from 78 colleges in Nashik city. At the time of the survey, there are observe that out of 85 colleges in Nashik city only 78 colleges had appointed a college librarian. All 78 colleges have affiliated to Savitribai Phule Pune University and offer UG & PG courses in the various faculties. Semi-professionals, non-professionals and technical staff of the academic libraries are not considered for this study.

**Objectives:**

- To know the purpose of using WhatsApp by library professionals
- To examine the period of using WhatsApp
- To know the impact of WhatsApp messenger on library professionals
- To know the usefulness of WhatsApp for sharing information.

**Methodology:**

The methodology adopted here is descriptive research. A survey technique was used and questionnaires as a tool to collect primary data from the respondents. A structured online questionnaire was prepared and circulated through the google platform to all 78 LIS professionals. Out of that 66 (84.61%), LIS professionals replied and filled out the online google form questionnaire. After receiving the data from respondents, the survey using google forms was a useful technique for data collection. The collected data was analysed and presented in the form of charts and tables.

**Result:**

There are various parameters taken for the data analysis. The following tables show the total ratio of sample and response of users which has received from LIS professionals in this study. The collected data has been analysed and interpreted in the following tables and charts.

**Table No. 1: Gender Wise Distribution.**

| Sr. No. | Gender wise Analysis | Respondents | Percentage |
|---|---|---|---|
| 1 | Male | 30 | 45.50% |
| 2 | Female | 36 | 54.50% |
| | **Total** | **66** | **100%** |

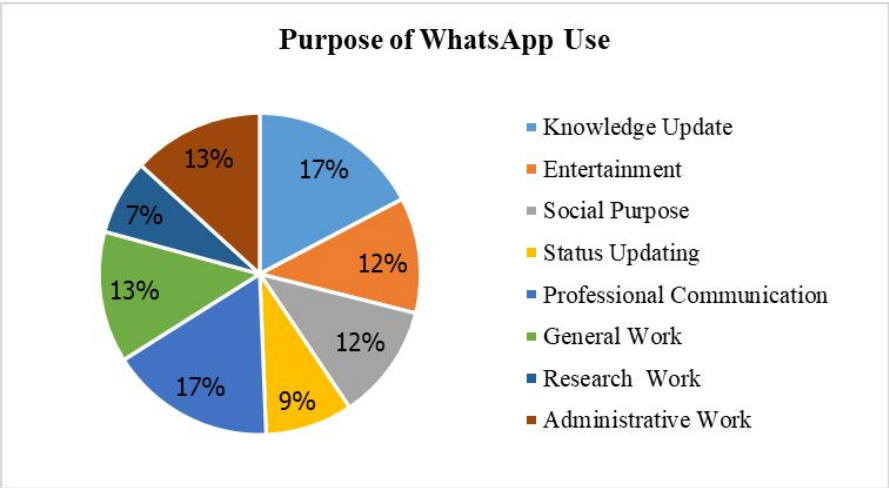
The above table indicates the gender-wise distribution of respondents. It is shown that the majority of 36 (54.50%) library professionals are female while 30 (45.50%) male library professionals working in Nashik city.

When the question asked about the use of WhatsApp for library services. Most of the library professionals have replied and they stated that they are continues to use WhatsApp for various purposes. The responses received regarding the purpose of using WhatsApp have been revealed in table 2

**Table No. 2: Purpose of WhatsApp Use**

| Sr. No | Purpose WhatsApp Use | No of Respondents | % |
|---|---|---|---|
| 1 | Knowledge Update | 55 | 17.00% |
| 2 | Entertainment | 37 | 12.00% |
| 3 | Social Purpose | 37 | 12.00% |
| 4 | Status Updating | 28 | 10.00% |
| 5 | Professional Communication | 53 | 16.00% |
| 6 | General Work | 42 | 13.00% |
| 7 | Research Work | 24 | 07.00% |
| 8 | Administrative Work | 42 | 13.00% |

**Chart No. 1: Purpose of WhatsApp Use**




The above table and chart reveal the general purpose of using WhatsApp by library professionals. It is clearly shown that the majority of 55 (17%) library professionals have used WhatsApp for updating of knowledge while 53 (16%) library professionals used WhatsApp for improving professional communication. 42 (13%) library professionals have used WhatsApp for general as well as administrative work, followed by 37 (12%) library professionals have used WhatsApp for entertainment as well as social purposes, 28 (10%) library professionals have used WhatsApp for their status updating and remaining 24 (07%) library professionals used WhatsApp for research work purposes.

**Table No. 3: Period of Using WhatsApp.**

| Sr. No | Period of Using WhatsApp | No. of Respondents | % |
|---|---|---|---|
| 1 | 1-6 Months | 02 | 03% |
| 2 | 6-12 Months | 13 | 20% |
| 3 | 1-4 Years | 34 | 51% |
| 4 | Above 5 Years | 17 | 26% |
| | **Total** | **66** | **100%** |

Table 3 indicates the period of using WhatsApp by library professionals. It is shown that the majority of i.e. 34 (51%) library professionals have used WhatsApp for one to four years, while 17 (26%) library professionals have used WhatsApp about five years ago. 13 (20%) library professionals have been using WhatsApp for six to twelve months and the remaining 02 (03%) library professionals have been using WhatsApp for about six months.

**Table No. 4: Benefits of WhatsApp**

| Sr. No. | Benefits of WhatsApp | No. of Respondents | % |
|---|---|---|---|
| 1 | Keep update in subject | 30 | 16% |
| 2 | Keep update in professional development | 40 | 21% |
| 3 | Quality professional discussion | 33 | 17% |
| 4 | To prepare for NAAC | 21 | 11% |
| 5 | Professional relationship | 42 | 22% |
| 6 | Career development | 25 | 13% |

The above table exhibits the benefits of WhatsApp. It is shown that the majority of 42 (22%) library professionals stated that WhatsApp is more beneficial for developing professional relationships followed by 40 (21%) library professionals who stated that WhatsApp has been keeping up-to-date in the profession. 33 (17%) library professionals stated that using WhatsApp keeps in touch with qualified professionals, 30 (16%) library professionals stated that the use of WhatsApp has updated our knowledge of the subject, 25 (13%) library professionals stated that WhatsApp has been useful for career development and remaining 21 (11%) library professionals have been more aware of NAAC due to WhatsApp usage.

When the question asked about the use of WhatsApp for professional development. All the library professionals have replied and the received responses have been revealed in table 5.

**Table No. 5: Impact of WhatsApp on Library Professionals on their Professional Development.**

| Sr. No | Impact of WhatsApp for Professional Development | No. of Respondents | % |
|---|---|---|---|
| 1 | Strongly agree | 08 | 12% |
| 2 | Agree | 23 | 35% |
| 3 | Somehow agree | 15 | 23% |
| 4 | Neutral | 20 | 30% |
| 5 | Disagree | 00 | 00% |
| **Total** | | **66** | **100%** |

Table 5 clearly shows the impact of WhatsApp on library professionals. 23 (35%) library professionals have agreed with the impact of WhatsApp on the professional development of library professionals, while 20 (30%) library professionals have neutral about WhatsApp impact on professional development. 15 (23%) library professionals have somehow agreed with WhatsApp impact on professional's development and the remaining 08 (12%) library professionals strongly agree with WhatsApp impact on the professional's development of library professionals.

**Findings:**

- There are more female librarians than male librarians in college libraries in Nashik city.
- Majority of 55 (83%) library professionals have used WhatsApp for updating their knowledge.
- The majority of i.e. 34 (51%) library professionals have used WhatsApp for one to four years, while 17 (26%) library professionals have been using WhatsApp since about five years ago.
- The majority of library professionals have used WhatsApp for developing their professional relationships then updating in professional development, updating subject knowledge and career development etc.
- 23 (35%) library professionals have agreed with the impact of WhatsApp on the professional development of library professionals.

**Conclusion:**

Library in this digital age has changed its nature. The traditional library is now converting into a smart library. Use of advancement of technology impacted every aspect of libraries and Information Centres. Technology has become a backbone for library services to its end-user. Libraries in this era are reaching remotely to their users.

In the context of libraries and information centres, mobile-based services are value-added services to its user. In mobile-based services, WhatsApp has become a boon for library professionals to provide multidimensional services to its users at the doorstep.

The use of WhatsApp in the LIS Community will increase the utility of libraries in this information age. The five laws of library science in this digital age will be proven by using WhatsApp. Being an effective and popular means of communication, resources will be used, every resource will reach the user community, every reader/user will get the requisite information and resource, it will save the time of the reader and even though the library is a growing organism, it can serve effectively. Hence Libraries can effectively work with WhatsApp as a tool to serve better in the user community.

**Reference:**

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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

# ASSESSMENT INFORMATION LITERACY SKILLS AMONG RESEARCH SCHOLARS IN BHARATHIAR UNIVERSITY: A STUDY

**S. Ananthi**
Research scholar
Dept of library & inf.Science, Bharathiar University, Coimbatore.
ananthijayakumar08@gmail.com

**Dr. V. Rajendran**
Assistant professor
Dept of library & inf.Science, Bharathiar University, Coimbatore.
rajbulib@gmail.com

## ABSTRACT:

*Information literacy refers to a set of skills that need people to recognize when they need information and to search, locate, analyze, and apply that information effectively and efficiently. Due to the explosion of information resources in all forms, information literacy is becoming a skill of utmost significance. The purpose of this study is to evaluate the information literacy abilities of research researchers at Bharathiar University, Coimbatore. The Slovins formulas are used to choose a sample of the population. This study used the survey approach, and data from 269 Bharathiar University research experts were gathered utilizing a standardized questionnaire. The results demonstrate that even though most respondents are aware of information literacy and information literacy, most respondents favor advanced search options, plagiarism, open resources, and awareness of several search engines. The majority of respondents think that the information literacy training programme will help research and promote lifelong learning.*

## KEYWORDS :

**Information literacy, Bharathiar University, Coimbatore, Research Scholars, Literacy Skills.**

**Introduction :**

In the digital age, information literacy refers to a collection of abilities, qualities, and behaviors that help pupils learn. Information literacy is a critical component of children's education in this information age, since they must be able to analyze information correctly. This assessment encompasses both electronic and printed information access and use. Information literacy is a set of skills that requires people to "recognize when information is needed and be able to access, analyze, and use that information effectively." In today's world of fast technological development and a plethora of information resources,

information literacy is becoming increasingly vital. Individuals are challenged with different, numerous information options in their academic pursuits, at work, and in their personal life as a result of the increasing complexity of this environment. Libraries, community resources, special interest organizations, the media, and the internet all provide access to knowledge and information increasingly flows to individuals in unfiltered formats, raising concerns about its authenticity, validity, and dependability. Furthermore, information is available in a variety of formats, including graphical, rural, and textual, posing additional issues. Furthermore, information is available in a variety of formats, including graphical, rural, and textual, posing additional obstacles for humans to evaluate and comprehend. The unpredictability of information quality and the ever-increasing quantity of data provide significant issues for society. Without the accompanying cluster of talents required to use information effectively, the sheer amount of knowledge will not result in more educated citizenry. Information is now accessible through a variety of unique channels, including libraries, local resources, interest groups, the media, and the internet. This information frequently reaches a person in unfiltered form or formats. At the same time, concerns regarding its objectivity, authenticity, validity, dependability, and credibility are being voiced. It has become extremely difficult for a person to understand and obtain information because of the complexity of information structures and the surrounding environment. Knowledge of information has changed. User orientation, user education, bibliographic instruction, and other library procedures. The amount of information is increasing every year since the development of ICT (Information and Communication Technologies) technology and its impact on information activities. A more informed people cannot simply be produced by having access to a wealth of information sources .

**Review of Literature:**

**Latha, Krishnamurthy and Vijay [2021]** conduct the study of information literacy competency among female research scholars of Karnataka University, Dharwad: A study. The study also examines the issues that female research scholars face. The study's key findings showed that 122 respondents, or 95.31 percent, preferred using electronic journals; 110 respondents, or 85.93 percent, were aware of Research Gate; 114 respondents, or 89.06 percent, used simple keywords as a search strategy; and the majority of respondents, or 114 respondents, said that there was poor network connectivity; The university restricted access, according to 104 respondents (81.25%), while time limits were cited by 78 respondents (60.93%) as a challenge respondents face when looking for information

**Manthiramoorthy, Saravanakumar and Thirumagal [2019]** carried the study of awareness of information literacy among students in Tirunelveli's arts and Science College. Data were gathered using a survey method and a question tool. 3 arts and science institution in Tirunelveli were chosen, and a sample of 300 students from those colleges received questionnaires at random. The acquired data was analyzed, evaluated and tabulate using statistical methods like simple percentage and Pearson moment correlation co-efficient. Students in both undergraduate and post graduate make up the research sample. This study can help you find access and assess the appropriate information at the appropriate moment. It assists the librarian and professors in directing the students toward the appropriate source of information, how to evaluate their needed information, and how to satisfy the information users in easy manner .

**Chanchinwala and Verma[2019]** studied the assessment of Information Literacy Skills among Research Scholars of Mizoram University structured questionnaire was created and randomly given to 232 research scholars in order to collect data; 175 completed questionnaires were obtained for data analysis. The majority of students were familiar with the library's fundamental history and could access information in print and electronically. This study urges the inclusion of an information literacy programme in the course curriculum.

**Awari and Krishnamurthy [2019]** studied the Information Literacy Competencies among Research Scholars of University of Agricultural Sciences, Dharwad: A Pilot study. The respondents were chosen by simple random sampling. 70 of the 90 distributed questionnaires were returned. The ANOVA and Turkey post hoc tests were utilized by the researcher. IL programmes should concentrate on increasing awareness of databases and consortiums because the majority of research academics are unaware of these resources in their field of study. It is discovered that the respondents' knowledge of various information sources and the nature of the information they supply is lacking. Therefore, there is a need to concentrate on raising knowledge of the various informational sources and their significance. Except for basic search and advanced search, the bulk of research academics are not familiar with other search methods. Because of this, it is essential to spread knowledge about the use of search techniques through seminars or training programmes, which will aid in making better use of electronic resources.

**Ramamurthy and Padmini [2018]** study explored information literacy among the students of Sri Venkateswara Medical College & Guntur Medical College, affiliated to NTR University of Health Sciences, Vijayawada, and Andhra Pradesh. 225 questionnaires were distributed to medical students as part of the survey method used for the study, and 195 of them were returned for analysis with an 86.66 percent response rate. Most of the respondents were able to identify their information demands, the many kinds of information resources that were available, how they were using e-resources, and how much they were aware of social networking sites. The majority of the respondents from both medical colleges needed information to keep their topic knowledge current, and they often used information sources and social networking websites, according to the survey .

**Aftab and Singh [2018]** explored the information literacy of postgraduate students and research scholars of social science faculty at Aligarh Muslim University, Aligarh. For the study, the survey method was used. Postgraduate students and research scientists in the social science faculty were given 150 questionnaires, and 125 of them were returned for study with an 83.33 percent response rate. The majority of respondents to the research visit the library to check out and return books, according to the study's findings. Among these, books are the one that people utilize the most. The majority of respondents' top-choice search engine is Google. The majority of respondents are also found to be unfamiliar with using encyclopedias and journals .

**Objectives:**

- To find out the frequency of library visits among the respondents
- To know the awareness and use of library resources among the respondents
- To find out the perception of the respondents in information, literacy and information literacy
- To measure the respondents' level of information literacy,
- To find out what respondents thought about adding information literacy to the curriculum.

**Research Methodology:**

A pre –structured questionnaire was used in the survey approach of conducting the investigation. The respondents were chosen at random. Through the use of Slovins formulas, samples were selected from the population. Out of 822 research scholars, 275 structured questionnaires were sent to the Bharathiar university research scholars. Out of them, 269 have been received which indicate that the response rate was 97.8%. The questionnaire was organized as free from vagueness with a simple language to avoid technical words.

**Analysis of data:**

**Demographic profile:**

| Attributes | Classification | No of responses | Percentage |
|---|---|---|---|
| Gender | Male | 115 | 43% |
| | Female | 154 | 57% |
| **Total** | | **269** | **100%** |
| Category | Science | 129 | 48% |
| | Social science | 95 | 35% |
| | Arts | 45 | 17% |
| **Total** | | **269** | **100%** |

**Table -1: Demographic profile**

Table 1 shows the demographic profile of the respondents. Regarding gender wise distribution, 115(43%) are male and 154(57%) are female research scholars. while seeing the category wise distribution 129 (48%) are Science research, 95(35%) are Social science research and 45(17%) are Arts and Humanities research.

**Frequency of Library visit:**

| S.No | Attributes | No of responses | Percentage |
|---|---|---|---|
| 1 | Daily | 25 | 09% |
| 2. | Weekly | 73 | 27% |
| 3. | Monthly | 59 | 22% |
| 4. | Occasionally | 112 | 42% |
| **Total** | | **269** | **100%** |

**Table -2: Frequency of Library visit**

Table 2 shows the “frequency of library visit”, 25(9%) are daily, 73 (27%) are weekly, 59 (22%) are monthly and 112 (42%) are visit the library occasionally.

**Awareness and use of library resources:**

| Awareness and use | Aware & Use | Aware & not use | Not Aware | Total |
|---|---|---|---|---|
| | Count | Count | Count | |
| Holdings / collection of the University library | 209 (78%) | 35 (13%) | 25(9%) | 269(100%) |
| Magazines and newspapers being subscribed in the library | 123 (46%) | 104 (39%) | 42(15%) | 269100%) |
| Reference collection in the Library | 168 (63%) | 82 (30%) | 19 (7%) | 269100%) |
| Classification scheme followed in the library (arrangement of books in shelves) | 138 (50%) | 79 (30%) | 52(20%) | 269100%) |
| Issue and return of library books and number of books borrowed at a time | 199 (74%) | 59 (22%) | 11(04%) | 269(100%) |
| Rules and Regulations to be followed in the library | 223 (83%) | 33 (12%) | 13 (5%) | 269 (100%) |

**Table- 3: Awareness and use of library resources**

From table 3, it is observed that more than 78% of respondents are "aware and use the holdings/collection of the university library". 74% are aware and use the issue and return of library books and the number of books borrowed at a time. 63% are aware and use the reference collection in the library. And 83 % are aware and use the rules and regulations to be followed in the library. With regard to awareness and use of magazines and newspapers being subscribed to in the library, only 46 % are aware and use them; and in classification followed in the library, 50% are aware and use them.

**Gender wise distribution: Awareness and use of Library Resources:**

| Awareness and use | | Male | Female | Count | % | $X^2$ | P Value |
|---|---|---|---|---|---|---|---|
| Holdings / collection of the University library | Aware & Use | 70 (26%) | 139(52%) | 209 | 78% | 54.266 | .000 |
| | Aware & not use | 35(13%) | - | 35 | 13% | | |
| | Not Aware | 10 (4%) | 15 (5%) | 25 | 9% | | |
| Magazines and newspapers being subscribed in the library | Aware & Use | 58(22%) | 65 (24%) | 123 | 46% | 1.817 | 0.403 |
| | Aware & not use | 41(15%) | 63(24%) | 104 | 39% | | |
| | Not Aware | 16(6%) | 26(9%) | 42 | 15% | | |
| Reference collection in the Library | Aware & Use | 72(27%) | 96(36%) | 168 | 63% | 0.564 | 0.754 |
| | Aware & not use | 33(12%) | 48(18%) | 81 | 30% | | |
| | Not Aware | 10(3.7%) | 10(3.3%) | 20 | 07% | | |
| Classification scheme followed in the library (arrangement of books in shelves) | Aware & Use | 46(16%) | 92(34%) | 138 | 50% | 10.520 | 0.005 |
| | Aware & not use | 43(16%) | 36(14%) | 79 | 30% | | |
| | Not Aware | 26(10%) | 26(10%) | 52 | 20% | | |
| Issue and return of library books and number of books borrowed at a time | Aware & Use | 80(30%) | 119(44%) | 199 | 74% | 3.023 | 0.221 |
| | Aware & not use | 28(11%) | 31(11%) | 59 | 22% | | |
| | Not Aware | 07(2.2%) | 04(1.8%) | 11 | 04% | | |
| Rules and Regulations to be followed in the library | Aware & Use | 93(34.6%) | 130(48.4%) | 223 | 83% | 1.976 | 0.372 |
| | Aware & not use | 14(05%) | 19(07%) | 33 | 12% | | |
| | Not Aware | 08 (2.9%) | 05(2.1%) | 13 | 05% | | |

**Table- 4: Gender wise distribution: Awareness and use of Library Resources**

Table 4 depicts gender-wise distribution of respondents on ‘awareness and use of library resources’. There is no significant difference found in between male and female respondents about the awareness and use of library resources. Chi-square test ($p>0.05$) shows the Magazines and newspapers being subscribed in the library is significantly high among male than female respondents. Chi-square statistics ($p>0.05$) that female respondents are more aware and use of reference collection in library. In short, regarding the awareness and use of library resources in Issue and return of library books and number of books borrowed at a time, Rules and Regulations to be followed in the library, female respondents are significantly high than that of male.

**Perception on information literacy and information literacy:**

| Information means | | | Literacy means | | | Information literacy means | | |
|---|---|---|---|---|---|---|---|---|
| **Attributes** | **No's** | **%** | **Attributes** | **No's** | **%** | **Attributes** | **No's** | **%** |
| Knowledge received from different sources | 62 | 23% | Ability to read | 55 | 20.4% | Ability to find information from different sources | 36 | 13.4% |
| Data collected from different sources | 29 | 11% | Ability to visit the library | 17 | 6.3% | Knowledge about the use of information sources | 29 | 10.7% |
| Facts learned about something | 11 | 04% | Ability to read, write and do simple arithmetic | 197 | 73.3% | Ability to evaluate the information effectively and efficiently | 45 | 16.7% |
| All of the above | 167 | 62% | | | | All of the above | 159 | 59.2% |
| **Total** | **269** | **100%** | | **269** | **100%** | | **269** | **100%** |

**Table- 5: Perception on information literacy and information literacy**

Table 5 shows that understand the knowledge of the respondents on information, literacy and information literacy.62% respondents gave the correct choice for information means, nearly 74% of the respondents gave the correct answers for what is literacy means. More than 59% of the respondents have given the correct answers to what is information literacy means. The analysis shows that majority of the respondents know what is information, literacy and information literacy.

**Information literacy skills of the respondents:**

| MEASURE | ATTRIBUTES | SA | A | N | SD | D | Total |
|---|---|---|---|---|---|---|---|
| Information needs assessment competency | I can identify the need for the information | 135 (50%) | 114 (42%) | 15 (6%) | - | 05 (2%) | 269 (100%) |
| | I can formulate questions based on information need | 121 (45%) | 114 (42%) | 31 (12%) | 01 (0.5%) | 04 (1.5%) | 269 (100%) |
| | I can identify subject or general resources based on the need | 118 (44%) | 114 (42%) | 33 (12.5%) | - | 04 (1.5%) | 269 (100%) |
| | I can use different keywords related to the information need | 106 (39%) | 127 (47.5%) | 31 (12%) | - | 04 (1.5%) | 269 (100%) |
| | I can identify different types of reference sources for getting information I need | 124 (46%) | 119 (44%) | 22 (8.6%) | 02 (0.7%) | 02 (0.7%) | 269 (100%) |
| | I can organize the information(related to the question/problem in hand | 110 (41%) | 120 (45%) | 37 (13.3%) | - | 02 (0.7%) | 269 (100%) |
| Information Search Competency | I can use keywords and alternate keywords to search for electronic information | 126 (47%) | 103 (38%) | 36 (13.6%) | 02 (0.7%) | 02 (0.7%) | 269 (100%) |
| | I know to use Boolean operators (AND, OR, NOT) for searching information | 78 (29%) | 100 (37%) | 59 (22%) | 13 (5%) | 19 (7%) | 269 (100%) |
| | I can locate the books related to the subject / topic by using classification scheme | 94 (35%) | 104 (39%) | 50 (19%) | 06 (2%) | 15 (5%) | 269 (100%) |
| | I can select among various technologies the most appropriate one for needed information | 105 (39%) | 96 (36%) | 58 (21.5%) | 04 (1.5%) | 06 (2%) | 269 (100%) |
| | I can communicate the collected information related to my purpose / study | 106 (39%) | 117 (43%) | 35 (13%) | 07 (3.5%) | 04 (1.5%) | 269 (100%) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Information Access Competency | I can access the library resources | 115 (43%) | 116 (43%) | 23 (8.5%) | 05 (1.9%) | 10 (3.6%) | 269 (100%) |
| | I can identify the information both print and electronic resources | 92 (34%) | 127 (47%) | 36 (13.4%) | 07 (2.8%) | 07 (2.8%) | 269 (100%) |
| | I can use various search techniques related to the information need | 90 (33.4%) | 132 (49.2% | 45 (16.7%) | - | 02 (0.7%) | 269 (100%) |
| | I can use web-based resources to access information | 104 (39%) | 108 (40%) | 44 (16.2%) | 07 (2.8%) | 06 (2%) | 269 (100%) |
| | I can identify key concepts and terms that describes the information needs | 98 (36%) | 119 (44% | 46 (17.1%) | 02 (1.4%) | 04 (1.5%) | 269 (100%) |
| | I can develop and use different strategies for locating the information | 94 (35%) | 119 (44%) | 51 (19%) | 01 (0.7%) | 04 (1.5%) | 269 (100%) |
| Competency of Information Literacy Evaluation | I seek opinion from the librarian and teachers for correctness of information | 96 (36%) | 113 (42%) | 41 (15%) | 08 (2.9%) | 11 (4.1%) | 269 (100%) |
| | I can understand the problems related to censorship and fake information | 75 (28%) | 121 (45%) | 62 (23%) | 06 (2%) | 05 (2%) | 269 (100%) |
| | I can determine the accuracy and relevance of the information | 102 (38%) | 112 (42%) | 50 (19%) | 02 (0.7%) | 03 (0.3%) | 269 (100%) |
| | I can identify inaccurate and misleading information | 82 (30.4%) | 118 (44%) | 55 (20.4%) | 04 (1.4%) | 10 (3.8%) | 269 (100%) |
| | I can select the information appropriate to the topic or question | 94 (34.9%) | 140 (52.3%) | 27 (10%) | 04 (1.4%) | 04 (1.4%) | 269 (100%) |
| | I can evaluate the selected information , that is related to the topic | 109 (40.6%) | 128 (47.7%) | 26 (9.6%) | 02 (0.7%) | 04 (1.4%) | 269 (100%) |
| | I regularly make use of certain websites/blogs | 98 (36.4%) | 130 (48.3%) | 32 (11.9%) | - | 09 (3.4%) | 269 (100%) |
| | I maintain my own blog and regularly contribute | 72 (26.8%) | 83 (30.8%) | 60 (22.3%) | 21 (7.8%) | 33 (12.3%) | 269 (100%) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Competency of Ethical Use of Information | I follow the instruction given by the library on access to information resources | 114 (42.4%) | 122 (45.5%) | 27 (10%) | 02 (0.7%) | 04 (1.4%) | 269 (100%) |
| | I do not misuse the information resources and other facilities | 128 (47.5%) | 121 (44.8%) | 19 (7%) | - | 02 (0.7%) | 269 (100%) |
| | I use information technology responsibly | 127 (47.4%) | 125 (46.4%) | 15 (5.5%) | - | 02 (0.7%) | 269 (100%) |
| | I know security threats and other consequences , if I go for wrong way | 114 (42.3%) | 120 (44.6%) | 30 (11.3%) | 01 (0.4%) | 04 (1.4%) | 269 (100%) |
| | I know what is plagiarism (claiming others ideas/ works as one's own) and I do not do it | 139 (51.6%) | 104 (38.6%) | 22 (8.4%) | 02 (0.7%) | 02 (0.7%) | 269 (100%) |
| | I can communicate information and ideas in appropriate format | 124 (46%) | 120 (44.6%) | 24 (8.7%) | - | 02 (0.7%) | 269 (100%) |
| | I can present the information /solution to the problem effectively and efficiently | 128 (47.6%) | 110 (40.8%) | 29 (10.9%) | - | 02 (0.7%) | 269 (100%) |

**Table- 6: Information literacy skills of the respondents**

Table 6 shows the information literacy skills and related sub skills were analyzed by five –point scale-strongly agree, Agree, Neutral, strongly Disagree, And Disagree.

The maximum number of respondents strongly agrees that able to identify the need for the information, formulate question, identify subject related resources based on the need, use different keyword, identify different types of reference sources and organize information related to problem in hand. The respondents strongly agree that the information search competency, maximum number of respondents strongly agrees are able to use keywords and alternate keywords to search electronic information. For information access competency, the maximum respondents agrees able to access library resources, access both types of resources, use various techniques, web-based resources, identify key concepts and terms and use different strategies for locating the information. Competency of information literacy evaluation, majority of the respondents agrees to able opinion from the librarian and teachers for correctness of information understand the problems related to censorship and fake information, and select the information appropriate to the topic or question, evaluate the selected information that is related to the topic,and make use of certain websites/blogs. Competency of ethical use of information, majority of respondents are strongly agrees do not misuse the information resources and other facilities, use information technology responsibly, know about plagiarism, communicate information and ideas in appropriate format and present the information /solution to the problem effectively and efficiently

ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

**Information literacy education:**

| | Attributes | | Count | | Percentage |
|---|---|---|---|---|---|
| Information literacy in university Curriculum | Yes | Male | 96 | 229 85% | 269 100% |
| | | Female | 133 | | |
| | No | Male | 19 | 40 15% | |
| | | Female | 21 | | |
| IL is to be taught as a regular subject | Yes | Male | 90 | 217 81% | 269 100% |
| | | Female | 127 | | |
| | No | Male | 25 | 52 19% | |
| | | Female | 27 | | |

**Table- 7: Information literacy education**

Table 7 shows the information literacy education, 85 % of the respondents opined add up IL in university curriculum and 81 % are IL is to be taught as a regular subject.

**Area needs to be trained up in the IL sessions:**

| Variables | Male | Female | Count | % |
|---|---|---|---|---|
| Use of advanced search options | 44 | 60 | 104 | 0.39 |
| Awareness of various search engines | 23 | 16 | 39 | 0.15 |
| Plagiarism | 15 | 39 | 54 | 0.2 |
| Open resources | 21 | 30 | 51 | 0.18 |
| Use of print reference collections | 12 | 9 | 21 | 0.08 |
| Total | 115 | 154 | 269 | 1 |

**Table- 8: Area needs to be trained up in the IL sessions**

Table 8 reveals the areas needs to trained up , the respondents first prefer use of advanced search options, followed by plagiarisms, open resources and awareness of various search engines.

**Information literacy suggestions:**

| Attributes | | IL awareness given to you will help for your research | | IL awareness motivates lifelong learning | |
|---|---|---|---|---|---|
| | | Yes | No | Yes | No |
| Gender | Male | 104 | 11 | 102 | 13 |
| | Female | 150 | 4 | 150 | 4 |
| Total | | 254 (94%) | 15 (6%) | 252 (93.6%) | 17 (6.4%) |

**Table- 9: information literacy suggestions**

Table 10 depicts that gender-wise distribution on frequency of library visit, chi- square statistics ($p<0.05$), there is no significant difference between gender and frequency of library visit.

**Findings:**

1. Assessment of information literacy skills among research scholar in Bharathiar University carried out with three factors awareness and use, perception and information literacy skills measurement.
2. The use of Slovins formulas, samples were selected from the population. Out of 822 research scholars, 275 structured questionnaires were sent to the Bharathiar university research scholars. Out of them, 269 have been received which indicate that the response rate was 97.8%.
3. Majority of the respondents are female and mostly belongs to science research.
4. Most of respondents visit library occasionally. There is no significant difference between gender and frequency of library visit.
5. Maximum number of respondents aware and use of holding collection of library, magazines and newspaper subscribed in the library, reference collection, classification scheme, issue & return and rules and regulation followed in the library.
6. There is no significant difference found in between male and female respondents about the awareness and use of library resources. Chi-square test ($p>0.05$) shows the Magazines and newspapers being subscribed in the library is significantly high among male than female respondents. Chi-square statistics ($p>0.05$) that female respondents are more aware and use of reference collection in library.
7. Most of the respondents know what are information, literacy and information literacy.
8. Majority of the respondents strongly agrees that able to information needs assessment competency, search competency, access, evaluate and competent to ethical use of information.
9. 85 % of the respondents opined add up IL in university curriculum and 81 % are IL is to be taught as a regular subject.
10. Most of the respondents area needs to be trained first prefer use of advanced search options, followed by plagiarisms, open resources and awareness of various search engines.
11. Nearly 94% of the respondents suggest IL awareness will help for research and motivates the lifelong learning.

**Conclusion:**

The skills and abilities that enable researchers to access and use the appropriate information from the appropriate source without wasting their valuable time make information literacy a crucial prerequisite for academic society in the current ICT era.While retaining Research scholars must be equipped with the many specializations available in the subject of research. With information literacy skills that will enable them to find, use, and analyze the needed data efficiently.

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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

# A STUDY OF AWARENESS OF PLAGIARISM AMONG THE RESEARCH SCHOLARS OF UNIVERSITY OF MUMBAI

**Ms. Sayam, Chhaya G**
Assistant Librarian,
KRC, University of Mumbai.
Email: chhaya.sayam@library.mu.ac.in

**Ms. Yogini Sudhakar Raorane,**
Librarian
The Modern School.
Email: yoginiraorane1@gmail.com

## ABSTRACT:

*This paper discussed the awareness of plagiarism and its tools among the PhD research scholars of Faculty of Humanities of University of Mumbai. University has access to Urkund and Turnitin antiplagiarism software since 2017 and 2019 respectively. The objectives of this study is to find out whether they are aware of the term plagiarism, its impact on researchers society and what methods they use to avoid 'Plagiarism' and to check the similarity in their research work. Structured questionnaire was distributed, among the research scholars of Humanities. Total 120 questionnaire were distributed among them 80 responded and only 60 were fully answered and well responded. The study found that regular training and workshop attended by the researchers were useful in avoiding plagiarism. It has been observed that they are well aware of the term plagiarism and they are making use of plagiarism tools provided by the University and also online freely available anti-plagiarism software.*

## KEYWORDS :

**Plagiarism, University of Mumbai, Research Scholars, Software**

**Introduction :**

University is a hub for research. To do any academic writing one has to gather information from various sources. Reading books, journal articles, conference proceedings, online available literature etc. are helpful in deciding the area of research. When researcher take help of the other sources in his research. It is ethical to give due credit to the original author of the referred information within the text and full reference at the footnote or at the end of the writing. There are various tools available for citation and reference management tools. With the help of it one can give proper citation and create reference list at the end of the writing. Some of popular reference management tools are Endnote, Mendeley, Zotero etc.

by giving proper citation to the original author into the text and at the proper position, one can avoid plagiarism. UGC has made mandatory to the Indian University to use URKUND for the checking PhD theses. UGC act "Academic Integrity Regulation 2018" provides guidelines as well as penalty, if any faculty or student found under the act of plagiarism.

**Review of Literature:**

There were various studies conducted to investigate the awareness, problems and prevention of plagiarism. (A. Kumar and Mohindra 2019) reveled that researchers are aware of plagiarism in a study conducted at Kurukshetra University. (Awasthi 2019) stated poor writing skills is the reason of occurrence of plagiarism. (Kumari, and Lakshi S 2015) found research scholars of Shri Venkateswar University are aware of the term and different citation styles after the UGCs recommendation. (Singh 2017) study conducted at Guru Angad Deo Veterinary Animal Science University, Ludhiana, revealed same level of awareness among the UG and PG students. (Bahadori, Izadi, and Hoseinpourfard 2012) suggested proper education at right time would be helpful in avoiding plagiarism. (Suseela and Uma 2017) recommended that Institutions as well as faculty should be practice in promoting ethical value among students at Hyderabad University to control the plagiarism act. (Gullifer and Tyson 2014) and (Louw 2017) studies suggested a need of systematic educative approach to academic integrity at Charles Sturt University at Australia. Louw found high level of awareness among student at North-West University Potchefstroom South Africa and in other (Oyewole and Abioye 2018) study to examine the plagiarism acts and policy at University of Ibadan, Nigeria found high level of plagiarism awareness among the students.

**Methodology:**

Structured questionnaire was designed and distributed among the research scholars of the Humanities faculty of University of Mumbai. It was prepared keeping in mind objectives of the study. Sample for the collecting information were the registered PhD scholars. Total 120 questionnaire were distributed among them 80 responded and only 60 were fully answered. Total 60 response were analyzed to draw the conclusions.

**Questionnaire response analysis**

The data collected from research scholars through questionnaire has been analyzed as under. Types for the act of plagiarism were given to check the familiarity of the terms under the plagiarism.

**Table 1**

Research scholar's awareness and act that constitute Plagiarism

| Options | Yes | | No | |
|---|---|---|---|---|
| | Responses | Percentage | Responses | Percentage |
| Copying from book | 56 | 93.33% | 4 | 6.67% |
| Copying from internet | 51 | 85.00% | 9 | 15.00% |
| cut and paste | 54 | 90.00% | 6 | 10.00% |
| Self-plagiarism | 49 | 81.67% | 11 | 18.33% |
| Quoting without acknowledgement | 52 | 88.14% | 7 | 11.86% |
| Paraphrasing other's work | 54 | 90.00% | 6 | 10.00% |

It is found from table that out of the total respondents 93.37% agreed that Copying from book constitute plagiarism. 85% agreed that Copying from internet is plagiarism, 90% considered cut and paste and Paraphrasing other's work comes under plagiarism, 81.67% knows Self-Plagiarism Act, 88.14% were aware of quoting without acknowledgement is also a plagiarism.

All the above option has multiple choices, so the respondents ticked more than one option s from the table which they are familiar with. Remaining having more or less awareness about the concepts.

**Table 2**

Research scholar's awareness and act that constitute Plagiarism

| Options | Respondent Distribution | Percentage |
|---|---|---|
| Yes | 11 | 18.33% |
| No | 49 | 81.67% |
| **Total** | **60** | **100.00%** |

Further they had been asked whether they still use one of the option type mentioned in table 1. As per the table 2, 11 responded agreed that they use either of the mentioned option type in their research whereas remaining 49 are not using any of them.

**Table 3**

Table 3 shows that among 11 researchers who are using either of the type in their research work as under.

| Options | Response Distribution |
|---|---|
| Copying from a book without crediting the source | 2 |
| Copying from the internet | 4 |
| Using previous own work without acknowledgement | 3 |
| Paraphrasing others work | 1 |
| No Response | 1 |
| **Total** | **11** |

**Further they were asked**

Are you aware about various Anti-Plagiarism Software?

**Table 4**:

Awareness about Anti-Plagiarism Software

| Options | Response Distribution | Percentage |
|---|---|---|
| Yes | 46 | 76.67% |
| No | 14 | 23.33% |
| **Total** | **60** | **100.00%** |

In order to find out whether research scholars are aware about Anti-plagiarism software or not. 46 responded they are aware what 14 researcher were not aware of the software.

**Table 5**: Free Anti-Plagiarism Tools /Software

| Options | **Yes** | **No** | **No Response** | **Total** |
|---|---|---|---|---|
| DupliChecker | 13 | 21 | 26 | 60 |
| Plagiarism Detector | 13 | 23 | 24 | 60 |
| Paper Rater | 3 | 29 | 28 | 60 |
| Plagiarism | 5 | 26 | 29 | 60 |
| Plagiarism Checker | 21 | 21 | 18 | 60 |

There is some free online software, which are available with limited word count and login options. When they were asked if they are making use of it. It was observed that there are mixed group of using free anti-plagiarism software, but they are few. Some of them are not using any software and remaining has not responded to the question. The 'No Response' indicates that awareness of open access anti-plagiarism software needs to be created among researchers and scholars.

**Are you aware about availability of plagiarism Check software facility at your university?**

To identify whether research scholars are aware about plagiarism check facility available with University of Mumbai. Following responses were recorded.

**Table 6: Plagiarism Check Facility in University**

| **Plagiarism Checker Facility** | **Response Distribution** | **Percentage** |
|---|---|---|
| Yes | 34 | 56.67% |
| No | 26 | 43.33% |
| **Total** | **60** | **100.00%** |

Out of the total 60 respondents, 56.67% of the research scholars are aware about Anti-plagiarism software facility available at the University of Mumbai. Whereas 43.33% of the research scholars are not aware about this facility. The reason might be that access to Turnitin and Urkund software is given to the guides for checking the research work of the researchers. But when question asked about the facility they are aware about. Response got as under.

**Table 7**: Software University of Mumbai use for checking plagiarism

| **Option** | **Response Distribution** | **Percentage** |
|---|---|---|
| Urkund | 21 | 61.80% |
| Turnitin | 8 | 23.50% |
| Turnitin & Urkund | 5 | 14.70% |
| **Total** | **33** | 100% |

**University of Mumbai plagiarism Checker Software**

Out of the total 60 respondents, in that 34 respondents who said "Yes" that Mumbai University has plagiarism checker facility. 61.8% of the respondents said that Mumbai university use "Urkund" for checking plagiarism. Whereas 23.5% of the respondents, said that Mumbai University use "Turnitin" for

checking plagiarism. It is observed form the table 8 that 14.7% of the research scholars, said that Mumbai University use both i.e. “Turnitin & Urkund” for checking plagiarism.

**Suggestion from Research Scholars**

During the study, research scholars expressed their views and suggestion regarding plagiarism. The sorted suggestion is listed below:

- Regular awareness training, orientation, and demonstrations should be conducted in the university.
- Plagiarism should be included in the course work of all the research programs.
- Training on technical writing and different citation styles should be organized.
- Anti-plagiarism software should be compatible with the other Indian languages.

**Conclusion and Recommendation:**

It is found from the study that most of the research scholars are aware about plagiarism term, types and tool to check the similarity. They are also aware about its occurrence. Sometimes they do not consider self-plagiarism also constitute plagiarism. As a researcher they are not provided the access to anti-plagiarism software directly but through the guide. They can have student access to the software. The solution to the problem found by the researchers to use freely available online anti-plagiarism tools to check their research work time to time. Most of them are aware that if someone being caught in this act they might be disqualified from the research and other benefits as per the UGC guidelines applicable to guide and researchers. University Knowledge Resource Centre is conducting regular workshops and training on anti-plagiarism software and citation style which is helpful to them. Further, it is recommended to include the plagiarism in the syllabus. Which might be helpful in producing plagiarism free research work in the University

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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

# SENTIMENT ANALYSIS: AN OVERVIEW

**Dr. Anjali Sandesh Kale**
Assistant Librarian,
Knowledge Resource Centre, Rajabai Tower Library,
University of Mumbai, Fort, Mumbai – 400 032
Email: anjali.sandesh@gmail.com

## ABSTRACT:

*Sentiment Analysis is a new research area which analyse the data available in different social media. It determines whether the expressions of the readers are positive, negative or neutral. These expressions of the users provide different organisations with important data regarding their products, services, initiatives, and policies. It has been widely used across varied disciplines. The aim of this article is to present the overview of the field of sentiment analysis. Definitions, Levels, Approaches and different data sources for collecting data for sentiment analysis is discussed. Process of conducting sentiment analysis is also discussed in brief. Researches which are conducted in India in the field of Library and Information using sentiment analysis as technique are also outlined.*

## KEYWORDS :

**Sentiment Analysis, Social Media, Research Trends, Data sources, Levels of Sentiment Analysis**

**Introduction :**

Advances in Information and communication technologies have made it possible for users to express their views, opinions, sentiments, etc immediately and quickly through the use of various social media. Twitter, Facebook, websites, and forums are some of the social mediums popularly used by users. These expressions of the users provide different organizations/institutions/companies/businesses with important data regarding their products, services, initiatives, and policies. This helps the organization in quick decision-making, problem-solving, and improving its products. Thus it can be said that it not only helps in enhancing brand perception but also initiates innovation.

The amount of data generated by the users is so vast that there is a need for a mechanism that helps in extracting the relevant information from these expressions.

Sentiment analysis is a method that automates the process of extracting relevant information from user expression.

**Theoretical Background:**

Social networking tools and the internet have transformed the world into a virtual world. In this virtual world, individuals discuss different things like daily activities, news, events, opinions, and feedback which are spread immediately. This valuable data from different social media tools have presented unprecedented opportunities for an organization to know the sentiments of a user towards their products and services. It has also revolutionized the marketing process, as traditional one-way communication between business and consumers have become outdated. As this user-generated data is unstructured and available in large volume, subjecting them to manual analysis methods has become obsolete. Sentiment analysis which makes use of natural language processing can help to analyze the vast unstructured user data into useful information.

***Definitions of Sentiment Analysis:***

Sentiment analysis was developed for political analysis of public opinion during the Second World War. (Mantyla, Grazotin, & Kuutila, 2018)

(Pang, Lee, & Vaithyanathan, 2002) published a seminal paper on sentiment analysis. In this paper, they discussed the methodology of classifying documents not by topic but by the overall sentiment of a document.

(Liu, 2009) defines sentiment analysis "as a series of methods, techniques, and tools about detecting and extracting subjective information like opinions and attitudes from language. It is used to identify the polarity of an opinion usually in the form of positive, negative, or neutral polarity".

According to (Liu B. , 2012) "Sentiment analysis also called opinion mining, is the field of study that analyses people's opinions, sentiments, evaluations, appraisals, attitudes, and emotions towards entities such as products, services, organizations, individuals, issues, events, topics, and their attributes." Sentiment analysis or opinion mining is a process where the text or groups of text are analyzed using tools.

Natural Language Processing (NLP), computational linguistics, and text mining are applied to extract people's opinions or emotions towards an event, product, or others (Ravi, 2015)((Pang B. a., 2008) (Liu B. Z., 2012). Extracted opinions can be classified as either objective or subjective text. The subject text is also classified into positive or negative sentiments (Abbasi, Salem, & Chen, 2008) (Abdullatif, Abdulqader, & Yousef)(Abdullatif, Abdulqader, and Yousef 2020)

***Terminologies of Sentiment Analysis:***

To understand the concept of sentiment analysis, it is necessary to know the terminologies associated with it. While doing sentiment analysis words like views, beliefs and opinions are often used as synonym but there is a minor difference between them. In sentiment analysis

Opinion: a judgment, viewpoint, or statement
View: is an opinion or judgment of its holder
Belief: is an acceptance that something exists or is true
Sentiment is a view or opinion that is held or expressed.
The above elements of the sentiment analysis can be illustrated as follows.
The **burger** at the **Sai restaurant** was tasteless tweeted by **Rashmi Thakur**

Opinion holder: a person who is expressing his/her opinions **(Rashmi Thakur)**
Object/Subject: is a person, event, product, organization, or topic on which the author is expressing his opinions **(Sai Restaurant)**
Feature: it is part or attribute or aspect of the object on which the evaluation is made (Burger)
Polarity: refers to the overall sentiment conveyed by a particular text, phrase, or word. It determines if the expression is positive, negative, or neutral. **(tasteless- negative)**

***Levels of Sentiment Analysis:***

Sentiment analysis of user data is generally done at three levels

***Document Level Sentiment Analysis:***

Complete document is analyzed and single polarity is given to the whole document as positive, negative, or neutral. Document-level sentiment analysis is done when the document describes a single topic/ product.

E.g. if a document mentions all the data related to the review of a product, it describes whether the document has a positive, negative or neutral opinion about the product.

***Sentence Level Sentiment Analysis:***

Each sentence is analyzed and the polarity of each sentence is determined.

***Aspect Level Sentiment Analysis:***

It is also known as a feature or entity-level sentiment analysis. Sometimes the user may like or dislike some features of a product. This analysis helps to extract the product feature and opinions expressed by the users about that feature.

Approaches to Sentiment Analysis

Once the polarity of the user expression is identified, the sentiment strength and score of the expression are determined by using different approaches. Two approaches are mostly used, the lexicon-based approach and the machine-learning approach.

*Lexicon-based Approach:*

This approach makes use of a lexicon which is a dictionary of opinion words. It is known as a sentiment dictionary. It has a collection of known and precompiled sentiment terms. As this dictionary needs to be compiled manually it requires considerable effort and time. In addition to this different automatic, semi-automatic, and manual sentiment dictionaries are available like SentiwordNet, WordNET, etc.

***Machine learning Approach:***

This approach utilizes a machine learning algorithm. As per this approach, an algorithm is trained on manually classified data. Then this algorithm is applied to the rest of the data to determine its polarity. The most popular machine algorithm used is the Naive Bayes and Support vector machine algorithm. The machine learning approach is further divided into supervised and unsupervised learning techniques. Supervised learning makes use of large training datasets for training and testing. Unsupervised learning techniques are used when labelled training data is not available.

ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

**Data Sources for Sentiment Analysis*:***

An expression that is user generated is collected from a variety of sources for conducting sentiment analysis - Some of the data sources which provide rich user data are as follows

***Social Networking tools/sites:***

Social networking services or social networking sites are online platforms that are used to build social networks with people having a common interest. These sites allow users to share and posts different types of data like photo, video, audio, and message and inform people within their networks about their activities and events. Some of the most common networking sites used are Twitter and Facebook.

***Twitter:***

Due to its simplicity, Twitter is widely used by people to spread textual information in the form of a tweet. It is also widely used by people to give their opinion about some specific product, service, event, etc. this information then can easily be used by other people who need information about the particular product.

***Facebook:***

Facebook allows people to share a message, post status updates, and share photos and links. Information shared on Facebook is more public compared to other social media tools and so can be seen by many other people.

***Review Sites:***

On review sites, reviews are posted about business products and services. Thus these sites are extremely important for consumers and manufacturers of products and services. These review sites are important for consumers because it impacts their purchasing decision whereas for manufacturers it helps build brand trust and expand their reach. Google reviews and Amazon reviews are examples of review sites.

***Blogs:***

In blogs, bloggers express their views and opinions in the form of Blogspot or comments which are arranged in reverse chronological order. Blogs help to create online communities of like-minded individuals known as blogsphere. Blogs can be single-author blogs or community blogs. Single-author blogs are like personal diaries whereas community blogs are more like discussion forums.

***Forum:***

Online web forums are important for social communication and discussion. Forums are usually dedicated to a single subject so sentiment analysis of a single domain can be conducted very easily.

***Process of Sentiment Analysis:***

Once the data is collected from different data sources, the process of sentiment analysis is undertaken. Following is the process of conducting sentiment analysis

***Data Collection and Extraction:***

The first step in sentiment analysis is to have user-generated data. This user-generated data is collected

***Data Pre-processing:***

User-generated data obtained from different data sources is usually unstructured. This raw data may contain a lot of noise and all kinds of spelling and grammatical errors. Therefore, it is necessary to clean and pre-process this data before any analysis. Pre-processing of data is done in three steps as stop word removal, stemming, and blank space removal. Stop word removal helps in removing conjunctions and pronouns which do not have any meaning. Stemming helps to eliminate the suffixes from the words. This helps in reducing the total number of words. Blank space removal removes the tab space and whitespaces from the text and these are replaced by single space.

***Feature Extraction and Selection:***

The purpose of this task is to extract valuable information from the text. To do the feature extraction appropriate approaches like the machine learning approach or lexicon-based approach are used and polarity is assigned to the text.

***Validation and Evaluation:***

The results obtained are then finally evaluated for their quality and then interpreted, visualized, and presented.

To understand the application of the sentiment analysis technique in the field of library and information science, a review of selected studies in India was done.

**Research Conducted in Library and Information Science in India Using Sentiment Analysis:**

(Patra, 2019) Twitter activities of selected Indian Libraries were mapped using word frequency and sentiment analysis. The data was collected from Twitter using Twitter API. It was found that out of the total 8854 tweets, 5540 tweets were used for the analysis. It was found that selected Indian Libraries are less active on Twitter. Tweets that were done were found to be positive. The study recommended that Indian Libraries should use Twitter to promote their collection and services.

(Kadiresan, Singson, & Thiyagarajan, 2020) The author examined the role of social media's impact on academic books. Highly cited books from Scopus were identified and their citations were taken and it was compared to the ratings and reviews on Goodreads. The authors used the bag of words approach. It was found that social science books received the highest number of user ratings, reviews, and citations. The study finds that there was no relationship between citation counts and Goodreads ratings and reviews count in social science books.

(Kaur & Chakravarthy, 2021)The study was conducted to assess the usage and satisfaction among the users of Mendeley's Android app and the IOS app. Appbot analytics software which uses artificial intelligence algorithms tools was used. It was found that students prefer android apps compared to IOS apps.

(Deori, Kumar, & Verma, 2021)The study was conducted with the dual purpose of evaluating certain characteristics of the videos of the software KOHA and Dspace posted on YouTube. In addition to this conducting the sentiment analysis of the viewers' opinion of the video was also done. YouTube API was used for extracting the dataset related to the study. For doing sentiment analysis the parallel dots API web service was used in google sheets as an add-on function for both KOHA and Dspace videos.

(Garg & Kanjilal, 2022) This study was conducted to identify the polarity of the discussion posted on LIS links. The present study used a lexicon-based approach and the R software was used for analysis. It was found that the majority of the posts on LIS links were discussed with positive sentiments. There were only a few words of negative sentiments on the discussion forum of LIS links.

(Sharma, Gulati, Kaur, & Chakravarthy, 2022) The study was conducted for gaining insights into user reviews of the National Digital Library of India (NDLI) mobile app (Android and IOS). App bot and app follow analytics software were used to extract and collect user review information as raw data. The dataset extracted for the study included 4560 reviews in which IOS and Android apps have received 33 and 4527 reviews respectively. The results of the sentiment analysis show that android users are more satisfied compared to IOS users.

(Parabhoi, 2018) The study analyzed the comments on YouTube videos about KOHA ILS videos. The dataset for the study was received using webometrics Analyst Software. The sentiment analysis was done using parallel DOTS API and Google spreadsheet using Aylien text analysis API.

(Lamba & Madhusudan, 2018) This study used sentiment analysis in a economics discipline of productivity as an experimental study to interview new service for library users. Data was retrieved from twitter on 20 different queries related productivity using RapidMiner platform and analysis was performed using AYlien text analysis software.

**Conclusion:**

Sentiment analysis is an emerging field that has wide applications in different disciplines. Nowadays many organizations are using social media tools to update users about ongoing activities, events, etc. It is also necessary for the organization to understand how users perceive their products and services and sentiment analysis can be of great help to them. This study aimed to give an overview of sentiment analysis to enhance the understanding of the sentiment analysis concept. The study was conducted to identify the researches applying the techniques of sentiment analysis in the field of library and information science. It was found that a wide range of studies has been conducted like analyzing tweets of Indian Libraries, comments on YouTube videos of KOHA, and mobile apps related to NDLI and Mendeley. Thus it can be concluded that sentiment analysis is an emerging field and is useful for librarians to identify the views, and opinions of the readers to enable librarians to make a faster and better decisions regarding any new initiative.

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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

# THE IMPORTANCE OF E-RESOURCE UTILIZED BY SCHOLARS AND ACADEMIC PEOPLE FROM BHARATHIAR UNIVERSITY

**Krishnakumari**
Research Scholar,
Dept of Library and Information Science, Coimbatore, Tamil Nadu 641046
Email: kumari.bscct@gmail.com

**Sarangapani**
University Librarian & Head i/c, Dept of Library and Information Science,
Bharathiar University, Coimbatore, Tamilnadu 641046
rajbulib@gmail.com

## ABSTRACT:

*The study similarly investigated the demographic profile of students and their e-resources awareness. The descriptive survey design was used for this study. The purposeful sampling technique was adopted for this study. The sample consists of 120 respondents. The questionnaire was used as an instrument for data collection and 120 questionnaires were distributed. The study has revealed that students use e-resources on a daily basis with the internet topping 98.4% followed by e-Books at 85.6%. As for the purpose of use, it has been found that they use e-resources, mainly for assignments, class work, and entertainment purposes with research scholars having an upper hand in their use.*

## KEYWORDS :

**Importance, e-resource, utilized, scholars, academic people, Bharathiar University**

**Introduction :**

An electronic resource is defined as a resource which require computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim to being marketed. These may be delivered on CD ROM, on tape, via internet and so on. Over the past few years, a numbers of techniques and related standards have been developed which allow documents to be created and distributed in electronic form. Hence to cope with the present situation, librarians are shifting towards new media, namely electronic resources for their collection developments that the documents of users are better fulfilled. The digitization of information in print media has brought a new concept altogether in all the fields of human life and hence the creation and use of electronic resources commonly known as e-resources (Kenchakkanavar, 2014).

Print-based information resources are dynamically clearing a path for information in electronic form (Sharma, 2009). According to International Federation of Libraries Association (2012) e-resources refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the internet or locally.

**Review of literature:**

**Yebowaah and Plockey (2017)** found that there are different ways to get to know about the e-resources some students got to know about the e-resources by getting their information through internal memo from the librarian, through personal interaction with librarians, through friends in the library and through the library.

**Shaqour and Daher (2010)** reported that most first degree students who participated in the research had medium or high use of electronic resources. The research findings indicate that more than one half of the participants had high level of electronic media use and more than one third had moderate level of electronic media use.

**Tripathi *et al* (2016)** revealed that the respondents even though were aware of the different types of electronic resources available in the university library; their use rate of these resources is low. It was also discovered that a large proportion of the respondents made use of the electronic resources mostly for research, assignment, current awareness, information acquisition, and e-mail and news acquisition.

**Objectives of the Study:**

1. To examine the level of awareness of available e-resources in the university.
2. To find out the frequency and purpose of use of e-resources by the students.

**Research methodology:**

Descriptive survey design was used for this study. The purposeful sampling technique was adopted for this study. The sample consisted of 120 respondents. The questionnaire was used as an instrument for data collection and 120 questionnaires were distributed.

**Analysis of Data:**

**Characteristics of Respondents**

| | Frequency | % | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| **Male** | 32 | 26.7 | 26.7 | 26.7 |
| **female** | 88 | 73.3 | 73.3 | 100.0 |
| **Total** | 120 | 100.00 | 100.0 | |

**Table -1: Gender wise Respondents**

According to the responses given in the table 5.1 the frequency of female 88(73.3%) is more than those male 32(26.7%).

**Age wise Respondents:**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| **18-25** | 57 | 47.5 | 47.5 | 47.5 |
| **25-35** | 38 | 31.7 | 31.7 | 79.2 |
| **35-55** | 25 | 20.8 | 20.8 | 100.0 |
| **Total** | 120 | 100.0 | 100.0 | |

**Table -2: Age wise Respondents**

Those scholars between age ranges of 18-25 years are more and the percentage is 47.5% are more and the 20.8% percentage of 35-55 years and above is less.

**Occupation of Respondents:**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| **Student** | 29 | 24.2 | 24.2 | 24.2 |
| **Assistant Professor** | 17 | 14.2 | 14.2 | 38.3 |
| **professor** | 2 | 1.7 | 1.7 | 40 |
| **Research scholar** | 72 | 60 | 60 | 100 |
| **Total** | 120 | 100 | 100 | |

**Table -3: Occupation of Respondents**

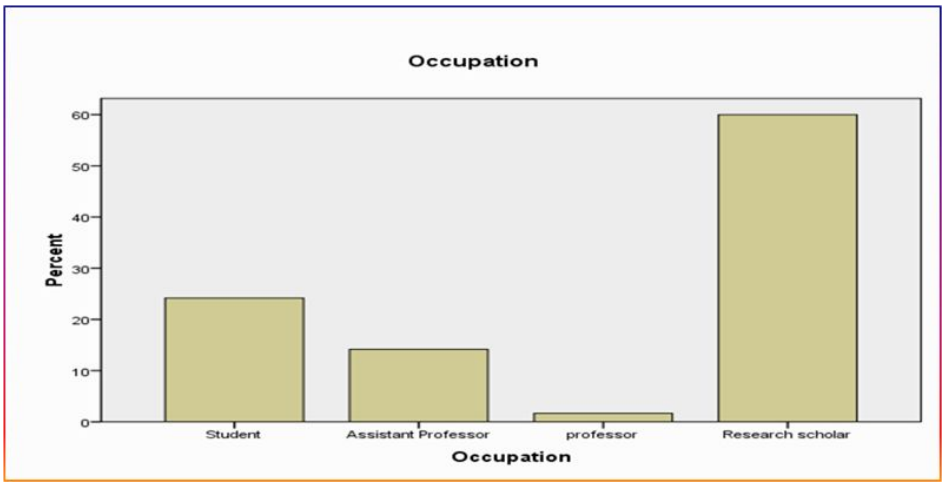


**Chart 1: Occupation of Respondents**

In terms of below chart and occupation table shows were the majority of 60% of research scholar and least one is professor.

**Gender and Responses from academic people:**

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Gender * Response from | 120 | 100.00% | 0 | .0% | 120 | 100.00% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| **Pearson Chi-Square** | 5.913a | 3 | 0.116 |
| **Likelihood Ratio** | 5.161 | 3 | 0.16 |
| **Linear-by-Linear Association** | 3.167 | 1 | 0.075 |
| **N of Valid Cases** | 120 | | |
| a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.60. | | | |

**Table -4: Chisquare Tests for Gender and Responses from Academic people**

Chi-square test is applied to compare variables such as Gender and Responses from academic People the degree of freedom is 3 and p value is.116 is greater 0.005.so it is null hypothesis is rejected.

**Source of awareness:**

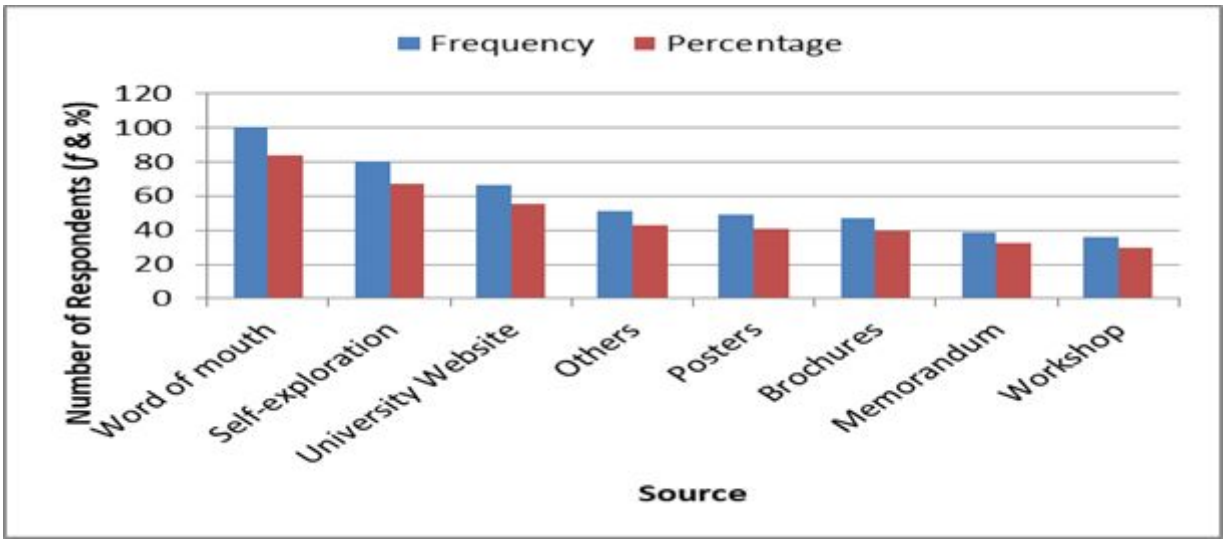


**Chart -2: Source of awareness**

The chart2 show the sources of e- resource through which the respondents came to know about the e-resources. 83 per cent of the respondents got to know about e-resources through Word of mouth (from lecturers, friends, family), followed by 66.7 per cent through self-exploration, 55 per cent through university website, 42.5 per cent through other means, 40.8 per cent through posters, 39.2 per cent through brochures, 32.5 per cent through memorandum and 30 per cent through workshop. From the above information majority (83.3%) of the respondents came to know about e-resources through word of mouth followed by Self exploration.

**Availability of e- resource:**

| S. No. | E-resource | Daily | Once a Week | Twice a Week | Once Monthly | Twice Monthly | Never |
|---|---|---|---|---|---|---|---|
| **1** | Internet | 113 (94.2%) | 02 (1.7%) | 01 (0.8%) | 02 (1.7%) | 00 (00.0%) | 02 (1.7%) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2 | Online Database | 34 (28.3%) | 23 (19.2%) | 20 (16.7%) | 14 (11.7%) | 08 (6.7%) | 21 (17.5%) |
| 3 | e-Book | 23 (19.2%) | 24 (20.0%) | 22 (18.3%) | 28 (23.3%) | 06 (5.0%) | 17 (14.2%) |
| 4 | e-Journal | 13 (10.8%) | 27 (22.5%) | 11 (9.2%) | 29 (24.2%) | 04 (3.3%) | 36 (30.0%) |
| 5 | CD-ROM | 00 (00.0%) | 09 (7.5%) | 03 (2.5%) | 17 (14.2%) | 03 (2.5%) | 88 (73.3%) |

**Table -5: Availability of e- resource**

The use Internet is used by 94.2 per cent of respondents daily, 1.7 per cent once a Week, 0.8 per cent Twice a Week, 1.7 per cent Once a Month, and 1.7 per cent never use it. Online Database is used daily by 28.3 per cent, once a week by 19.2 per cent, Twice a Week by 16.7 per cent, Twice a Month by 6.7 per cent and 17.5 per cent never use it. E-Book is used by 19.2 per cent of respondents daily, once a week by 20 per cent, Twice a Week by 18.3 per cent, once a month by 23.3 per cent, twice a month by 5 per cent and 14.2 per cent never use it. E-journals is used daily by 10.8 per cent of respondents, once a week by 22.5 per cent, twice a week by 9.2 per cent, once a month by 24.2 per cent, twice a month by3.3 per cent whereas 30.0 per cent never use it.

**Conclusions:**

The study reveals that males represent the majority (55.5%) whereas females represent the minority (44.2%) of the respondents. In that regard it has been revealed that the respondents are aware of the e-resources especially the internet and e-Books. It also has been concluded that students prefer accessing the e-resources from the comfort of their hostels, using primarily smart phones seconded by laptop computers. With regard to purpose of use it has been found out that students mostly use e-resources for assignments, research purposes and entertainment. The respondents use e-resources mostly on daily basis followed by once a week, once a month, twice a week, and twice a month. The internet is the mostly used e-resource followed by e-Book.

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# OER DATASET REPOSITORIES AND THEIR USE IN HIGHER EDUCATION

**Sagar Londhe**
Tata Management Training Centre

**Dr. C. D. Wani**
DES's M.D.Palesha Commerce College, Dhule

**ABSTRACT:**

*Open educational resources (OERs) are materials for research, teaching, and learning that are made freely available to the public with little or no limitations in order to promote access to information. OERs are becoming a reality thanks to librarians, who promote their creation, use, and distribution while making them open and accessible.*

**KEYWORDS :**

**Open Educational Resources, Datasets, Education, Knowledge.**

**Introduction to OER:**

In a knowledge-based global economy, each nation's social growth and economic competitiveness are significantly influenced by its higher education institutions. In order to provide their students with a much more convenient option financially and to prepare them for the real-world practice after they graduate from school, some educational institutions have integrated information and communication technologies into their management, administration, and educational programmes. Our goal is to demonstrate the critical role that open resources play in society's advancement, particularly in the area of education. This essay presents a number of concepts on contemporary educational approaches and their significance for all parties concerned—students, teachers, researchers, consultants, etc.

Open educational resources (OERs) are materials for research, teaching, and learning that are made freely available to the public with little or no limitations in order to promote access to information. The importance of OERs in the educational field is rising. By facilitating lifelong and informal learning, enabling democratic and equal access to knowledge, and offering a variety of knowledge sources, they have demonstrated their value.

OERs are becoming a reality thanks to librarians, who promote their creation, use, and distribution while making them open and accessible.

**"UNESCO's definition of OERs":** "Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions".

**Data Research Repositories: Definition:**

Large database infrastructures designed to manage, exchange, access, and store research datasets are known as online research data repositories. Repositories might be wider, gathering across broader knowledge domains like the sciences or social sciences, or more specialized, limited to aggregating disciplinary data.A university or group of universities researcher's data may be collected for mutual benefit by online repositories, which may also aggregate experts' data globally or locally. The fundamental tenet is that sharing data advances research anddiscovery and improves outcomes.Beyond the published refereed academic work, a repository enables inspection, proof, review, transparency, and validation of a researcher's results by other specialists. A group of researchers that are geographically dispersed can instantly access research data online and exchange, comprehend, and synthesise findings. This collection and synthesis offers a chance for enlightenment, advancement, and that distinctly human yearning for deeper comprehension. Data archives also permit the publishing of previously suppressed negative data, or more precisely, results of failed trials. This makes it possible for future researchers to navigate to more fruitful ground by avoiding prior dead ends of people who explored a path before them.Online collaboration and the collection of research data are advantageous to an international community of professionals.

**Objectives:**

- **To study the availability of datasets available in open access form.**
- **To study the advantages and challenges of OER**
- **To know the use of OER in Higher Education**

**“Open Educational Resources and Their Use in Higher Education”**

Open educational resources (OERs) are any materials, whether online or not, that are freely accessible to instructors and students without the need for a licence or payment. In the digital age, sharing information between teachers and students has become more and more commonplace through the usage of open educational resources (OERs).

“Why Should Higher Ed Institutions Adopt an OER Strategy?”

1. Student Costs Are Reduced: The entire cost of a degree for students will drastically fall by prioritising the usage of OERs and eliminating all commercial media from a programme. This information can help institutions stand out in their marketing to prospective students.
2. Enhanced Universal Access:Finding resources that use a variety of modalities and are usable by students with varying degrees of physical ability is a challenge for instructors. A robust OER policy, on the other hand, encourages educators to use a range of media, which helps to accommodate more learning styles and disabilities. OERs are offered in a variety of formats (text, video, audio, multimedia, and adaptive).
3. Promotion of Lifelong Learning:Although students have the option to keep their printed or electronic textbooks, research indicates that at least 55% of them will return them after the semester is over and that at least 66% have chosen not to purchase at least one textbook because of the expense at some point in their academic careers (Meyer, 2016). Since many OERs come from outside sources, students who utilise them in class will not only have access to those materials during the time they are published, but they will also become familiar with information sources in their fields that they can use indefinitely.

4. Safety From Copyright Concerns:Faculty members must request permission from textbook publishers in order to use their content, which (depending on the publisher's interests) may make it more difficult to choose content. OERs are public resources by definition, so this problem is entirely avoided by linking to them from a course shell or syllabus.

**Datasets Repositories:**

- **re3data.org:**Research data repositories from many different academic fields are included in Re3data, a global register of research data repositories. It includes repositories that provide access to data sets and long-term preservation of those data sets for researchers, funding agencies, publishers, and academic institutions. Re3data encourages the sharing of knowledge and works to make research data more accessible and visible. The registry launched in the fall of 2012 with funding from the German Research Foundation (DFG).
- **ScholeXplorer**:Aggregate and search service for linkages between publications and data or data and publications from reliable sources. Scholexplorer makes a graph of links between datasets and literature objects as well as between datasets and dataset objects.Data sources owned by publishers, data centres, or other organisations, such as CrossRef, DataCite, and OpenAIRE, establish links between data sets and articles.Scholexplorer gathers link metadata that has been extracted from the data sources and from this creates a network of academic items that is unified and free of duplicates. With the help of search REST APIs that provide links in Scholix format, the graph is freely available (CC-0).
- **Harvard Dataverse**: Harvard University developed an open-source web tool to exchange, store, cite, examine, and analyse research dataTheAll academics, both inside and outside the Harvard community, can access the open data repository known as the Harvard Dataverse. You can use it to access, distribute, store, cite, and research research data. For managing, displaying, and organising datasets, each Dataverse collection is a distinct, customizable grouping of datasets (or virtual repository).
- **Mendeley Data**:Elsevier hosts an open, free-to-use repository for research data that enables researchers to make their data available to the public. Each dataset can be annotated with a wide range of information elements, such as the title, a general description, a description of each file, instructions on how to repeat the analysis, the licence, and administrative metadata like institution and category.

  Institutions may offer additional custom metadata fields for researchers to fill out. Links can be made to other research outputs, such as datasets, programmes, or publications.

  Dataset metadata is accessible in the Dublin Core format and Schema.org format, both of which adhere to the Google Dataset standard, to make it easier for users to discover and reuse data. Through OAI-PMH endpoints, dataset metadata is also made accessible for harvesting.
- **Figshare**: Research outputs, such as figures, datasets, photos, and videos, can be stored and shared in an open access repository. Users can upload all of their research outputs to figshare to make them citable, shareable, and discoverable. For more than ten years, Figshare has assisted researchers in making their data publicly accessible. We wish to present a strategy for increasing support for the distribution of bigger datasets in a reliable generalist repository.
- **Dryad**:international database for research information, particularly the information supporting scientific and medical papers. Authorship lists at Dryad should accurately reflect the contributions to the data deposited for publication as datasets are independent publications. The relevant author will be contacted in the event of any disagreements or issues over authorship during or after the publication process. An update to the data record may be used to reflect any changes in

authorship discovered after publication. If the authors are unable to agree on a solution, the matter may be forwarded to the authors' institution(s).

- **Zenodo**:open-access general-purpose repository created by CERN under the European OpenAIREprogramme. The European Commission (EC) commissioned the OpenAIRE project, at the forefront of the In order to promote the growing Open Data policy in Europe, the open access and open data movements have created a catch-all archive for EC-funded research. CERN, a partner in OpenAIRE and a pioneer in open source, open access, and open data, contributed this capability, and Zenodo was launched in May 2013.CERN has created tools for managing Big Data and expanded the open data capabilities of its digital library in support of its research agenda. These Big Science techniques could be efficiently distributed throughout the long-tail of research thanks to Zenodo.
- **OSF**: A free, public platform that supports collaboration in research. As a tool for collaboration, OSF enables research teams to work on projects secretly or make the entire project accessible to the public for wide distribution. As a workflow system, OSF makes it possible to link to the numerous products already in use by researchers, improving their procedure and boosting productivity.
- **Google Dataset Search**:A dataset search engine is called Dataset Search. Through the use of a simple keyword search, users are able to locate datasets that are kept in thousands of different repositories all over the World Wide Web.

**Advantages of OER:**

OER are viewed as an effective replacement for traditional textbooks, or at the very least a solid complement to them, for a number of reasons:

1. If there are no technological obstacles, OER can offer democratic and equal access to knowledge, allowing anybody to use the resources regardless of their financial situation. OER provides a solution for persons with financial constraints due to the occasionally high and unsustainable costs of textbooks7. The issue of the high cost of textbooks, which prohibits some students from having access to a necessary component of their educational process, has been brought up by several people as an argument why a public education should not overlook this problem.
2. Open educational resources (OER) have the potential to support learning that is both lifelong and non-formal because they are available to anyone regardless of age or level of education received previously.
3. OER can provide a wider range of knowledge than conventional textbooks. OER makes content accessible in a wide variety of languages and from a wide variety of sources, geographies, and views.
4. 4. In addition, OER can give the learner a more active experience by allowing them to participate in the creation of the educational resources rather than just passively reading or listening.
5. Another way to raise the standard and applicability of the materials is to give others the chance to study it and suggest changes or enhancements. Furthermore, considering that their exposure would be greater when something is shared online, its creators also typically invest a greater effort into guaranteeing its quality.
6. OER typically permits reuse, allowing others to modify outstanding ideas for their own circumstances. Other educators can access it, adapt it using local examples and references, use it themselves, and share it.

**Challenges with OER:**

OER is not without special difficulties 11. OER is intended to be widely shared, but for a number of legal

reasons, this may not be as simple as it first appears. Understanding licencing conditions is still necessary to use open educational resources, which may prevent some sorts of reuses. Knowing what is possible and then knowing how to apply the correct licence and communicate this to developers and users is also necessary when producing OER, particularly when this includes drawing on pre-existing copyrighted works like newspaper articles or images.

Additionally, there can be legal repercussions for OER hosting platforms, who in some cases might be held responsible for the conduct of uploaders. Users may also need to be informed that using some OER could result in data collecting, which raises privacy issues.

The amount of legal and copyright literacy among developers, librarians, and others is a concern given the difficulties. Where this is lacking, there could be errors or a lack of clarity regarding what is possible.

Regarding the perceived quality of OER, there is a different issue. Some argue that it adheres to a lower standard because it occasionally deviates from the conventional editorial procedure. However, OER may be peer evaluated using transparent procedures, and there is a wealth of excellent content available. However, there is a need to refute the notion that OER are inferior to traditional materials and sources in terms of quality.

This is related to the possibility that teachers and other educators who create OER won't be given credit for their efforts. Authoring a standard textbook may lead to promotion or good evaluation, but this is not always the case for individuals who create and distribute OER.

Discoverability is a subject of debate as well. Even though there are many OERs, teachers and students could have trouble finding them. Platforms and curation can play a big role in this area and offer a potential method of addressing issues about quality because they make it easier to evaluate and discover products.

Barriers due to technology can also occur. ICTs are not available to everyone, and many people lack the knowledge or self-assurance needed to use them. Due to the abundance of OER content made available online, efforts must be taken to increase access to digital technology as well as digital literacy. Access to knowledge may also be hampered by unresolved accessibility difficulties (such as failing to adapt resources to the needs of users with print disabilities).

**Conclusion:**

The creation of knowledge benefits the entire community. Every piece of scholarly work makes a contribution to the field it is in. Scholarly works constrained by financial and copyright restrictions, however, have less interaction with readers.

The use and awareness of OARs are essential to bringing the fundamental strength in academic research and higher education. The use and knowledge of OARs are essential for achieving the goals of higher education and scholarly research.

Global educational institutions are rapidly releasing their online open educational resources (OER) on the internet.OER is playing a vital role in research and in teaching learning process. There are numerous advantages of OER in today’s era but at the same time there are quite few challenges to use them. However availability of datasets as OER providing researchers, teachers and students a new direction for further study.

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33rd AIMS Annual Management Education Convention 2022
Certificate of Merit
This is to certify that Dr. Kuljeet G. Kahlon
of GNIMS Business School, Mumbai has been awarded / Silver Medal
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at the 33rd AIMS Annual Management Education Convention 2022
organized by Guru Nanak Institute of Management Studies & GNIMS
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ISSN No. 2319-992X, is indexed in ProQuest (LISA - Library and Information Science Abstracts) Impact Factor PIF 4.650 (2019) and 7.237 by Scientific Journal Impact Factor for the year (2021)

## : Accreditation :



## : Journal Listed in :

Indexed in ProQuest (LISA - Library and Information Science Astacts)

## : Published By :

Shiromani Gurudwara Prabandhak Committee's
Guru Nanak Institute of Management Studies
Kings Circle, Matunga East, Mumbai-400019.
E-mail : editor.elibrary@gnims.com | Website: www.gnims.edu.in / www.lib.gnims.com

## : Designed and Printed at :

PRAVIN XEROX CENTRE, Guru Nanak Khalsa College - 9920614521