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# Information Seeking Behaviour Among Distance Education Learners in Relation to Gender, Location and Education

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## **Abstract**

The part of self-efficacy in diverse tasks and learning environment has mainly been emphasized, exclusively in searching for information by the distance learners. The study conducted survey with the distance students of Bangalore University forms the subject matter of this research. Questionnaires were distributed personally during the contact classes at the study centers and postgraduate departments of the university and was able to retrieve maximum quantity i.e., 1445 (93.22%) of the filled in questionnaires from the distributed 1550 questionnaires of the sample population. The Major objective of the study is to identify the needs and address the behavioural pattern of distance learners of this university in connection with information searching, locating and using relevant information from institutional libraries and on the internet for their specific learning and educational needs. Formal and informal sources of information including electronic resources which were utilized by distance learners, the preferred format and also the barriers in seeking required information etc., are identified and examined and the factors that influence seeking information, such as gender, course of study and place of residence are analyzed in this study. It is observed from the study that there were more males i.e., 829 (57.40%) of the 1445 respondents and 616 (42.6%) were females. The results of the survey showed that 1166 (80.7%) of the respondents lived in the urban areas and 279 (19.3%) residing in the rural areas. It is found out from the study that majority of these students are occasional library users and visited the libraries more often during the contact classes. Accordingly, access to information was very much limited, public libraries had considerable impact on the achievement of such students as the results showed that 600 (41.50%) students strongly agree that public library is very much important. Internet was also used as one of the chief information sources as 1318 (91.20%) students daily used it for educational and other related

activities. Distance learners' age, educational qualification and the location of residence seem to have an influence on their information seeking behaviour given that first year undergraduate students have a tendency to start with the study materials provided by the university, while older students depend more on library than on the study materials provided by the university.

**Keywords:** Information Seeking Behaviour; Distance Learners; Academic Library; Information Needs; Information Barriers; Information Services; Self Efficacy

## **Introduction**

Changing social, educational and occupation patterns in the last two decades has given a momentum to the distance learning program. Across India and analyzing Karnataka specifically, the percentage of students passing secondary education to the students taking admission into professional courses or higher education is dismal. Distance Education has come out and got acknowledged as an alternative stream of formal education to take educational benefits to the unreached and the marginalized people of the society.

Library and Information Science professionals have traditionally been responsible for organizing and managing the wisdom of acquaintance, and for certifying information literateness amongst student learning community. Many of the library professionals do not have adequate information about the distance learners and behavioral aspects of distance learners registered in distance education programs. The major objective of this study is to acquaint knowledge about the information seeking behavior and preferences of information sources/formats among distance education students. Majority of the distance learners live away from the educational institutions, having the lack of opportunities and services when compared to regular on-campus students. Consequently, these off campus students need more care, concern that may require facilitated information services from the nearby public libraries as well as from other accessible information centers.

Various issues pursue to assist distant learners from their education facilitator and to deliver two-way interaction. Library assistance of these students such as need for library resources and conveniences that includes information assistance. To address all this information and library needs, the distance education universities essentially offer the significant basics of knowledge of bibliography and learning instructions from library professionals. In the direction of supporting the instructors and librarians to support their

learners to fulfill the need, an approach has to be made to explore the information behavior of distance learners in the dynamic academic setting. The arrangements that these learners take towards the networks of information they utilize, the information resources they choose to content their needs of information, the quest of information procedures they go through when they look for resources, and the gratification that the needy experiences through their interface with information resources are very much significant tools of self-efficacy of seeking information behavior that need to be investigated. Thus, an all-inclusive investigative study that discovers the self-efficacy of the distance learners is vital and it is ever more imperative for library professionals to endure to acquire knowledge about distance students' information resource predilections. Research findings from this study will increase library professional's capabilities in serving all distance education learning community.

Directorate of Correspondence Courses and Distance Education (D.C.C & D.E), of Bangalore University was established in the year 1976 to serve all faculties and take university education beyond the full-time, on-campus students to the grassroots, particularly to adult members and working professionals of the community. The Directorate offers various courses of study such as Under Graduate, Post Graduate, Diploma, P.G. diploma and Certificate courses. such as B. A (with more than 15 combinations), B. Com, and B.B.M, twelve post graduate programs M. A, M. Com, M.Sc. and three PGDC's.

### **Need for the Study**

Swift advances and the development of information resources made accessible to learning community through the last decades has supplemented and accentuated their dependency, self-efficacy on information searching and fulfilling the need. In this context distance education system is gaining momentum because of its practical implications and information accessibility.

Students' self-efficacy and information behavior in distance education would completely vary when compared to on-campus students. Few of them may aware of their information need, few are not and some of the students may know how to find information, few may do not be aware of what their needs are and may fulfill their information in dissimilar ways. Distance learners who don't have acquaintance and experiences with search skills results in behavioral change through the seeking process, and are often exaggerated by apprehension. The primary purpose of the present study is to investigate the

information seeking behavior of distance education learners of Bangalore University, Bangalore. The study addresses the issues of how distance learners of this university search, locate and use required relevant information, both print and electronic resources, for their educational needs. Formal and informal sources of information (print and electronic) resources used by them, role of public library and internet, as well as barriers to information seeking that are affecting their information behavior are identified. The study is very much relevant because it reveals how a disadvantaged learner's group relates with library and information system in order to keep up to date and satisfy their information need, findings of the research provide a source for restructuring libraries and information centers and reshaping their information support activities. Moreover, the findings from this study can afford library and information science professionals with an enhanced perceptive of the way in which they can support these students.

### **Objectives of the Study**

The main objective of the study is to study the information seeking behaviour of distance education learners of Bangalore University. The specific objectives of the study are as follows:

1. To identify and understand the information needs and seeking behaviour of distance education learners in D.C.C & D.E, Bangalore University
2. To identify the information sources and services used by distance education learners of D.C.C & D.E, Bangalore University.
3. To determine the purpose of using the library and to investigate whether distance education learners possess the relevant information searching and retrieval skills.
4. To identify the challenges faced by the distance education learners while seeking, accessing and using information sources and services during the course of their studies.

### **Hypotheses**

The following hypotheses have been formulated, based on the study on related literature and objectives set for the study:

1. Location of the university library obstruct the distance learners in seeking information

2. There is under-utilization of libraries by the Bangalore University distance learners
3. There is an increasing knowledge, usage and usability of Internet information resources by the distance learners in seeking information
4. Distance learners' access and use public libraries in seeking information
5. Distance learners are aware of information seeking tools such as indexes and abstracts, OPAC, Publisher's catalogue and academic library websites

### **Methodology**

The investigator has made a detailed literature survey on the research topic. The primary source for literature search was the Library and Information Science Abstracts (LISA), Library and Information Science and Technology Abstracts (LISTA). The investigator also used other sources such as bibliographies and other indexing and abstracting journals. Researcher has consulted the primary sources such as journals, reports and conference proceedings. The study is mainly based on primary data that was collected from the distance education students registered at Bangalore University. The study has been confined to study centers of Bangalore city. For the present study survey method is used to collect the data. Structured questionnaire was designed for the sample of thousand five hundred fifty distance learners which was drawn from the university departments offering distance education programs functioning under the Directorate of the university by a stratified random sampling procedure.

After receiving the filled in questionnaires from distance students at various study centers and departments, data is analyzed in the light of the objectives stated. The hypotheses have been tested with the data obtained from the analysis. Data obtained from the research had been analyzed with the help of Statistical techniques, methods and also with the help of S.P.S.S. This descriptive statistics procedure provides us summary statistics for variables employed in the study. Frequencies and percentage of descriptive statistics have been employed for the study. Chi-square test has been used to formulate generalizations for samples of population selected for the study.

### **Review of Literature**

The study of Silas M. Oliveira & Norma Greenidge (2020) comprised of examination of the frequency of library use by off-campus students, students' level of awareness, students' seeking assistance strategies, students' use of services and sources, and success in meeting students' needs and satisfaction. The data findings from this study investigations specify that, students at a distance are comparatively satisfied with the information services and resources their university library is offering, though the majority of the students choose to utilize other sources of information before they seek assistance from a librarian or venture into searching the library's website. Visiting the library could be a key factor positively influencing students' learning experience, which might contribute to the libraries, and thus the university's, reaching its goals and ultimately, its mission. Challenges for meeting student's needs and satisfaction level are also described in this literature review<sup>1</sup>.

“Fasasi (2004) emphasized the challenges of distance education in Nigeria. He observed some of the factors like poor infrastructure, which obstruct the use of knowledge acquisition requirement, lack of skilled library and administrative personnel and human resources, outdated curriculum which does not fulfill the educational needs, teachers' poor attitudes, poor attendance and poor handling of students”. He also points out the poor administration, supervision of programme, motivation of teachers and supply of course materials on the part of the administrators that could lead to failure of the programme<sup>2</sup>.

Gopakumar, V. & A. Baradol (2009) “claims for equivalent services to distance students based upon WWW platform applications”. “In Indian libraries, the library website is viewed as a primary service point and the Online Public Access Catalogue (OPAC) is viewed as the electronic version of the library card catalog”. Many of the research information are now accessible in digital format within article databases obtainable on the website, and those articles not available electronically may be requested via document delivery services and emailed to the students. Print books may be demanded online and are available for pickup and return at the local study centers. The authors allow that basic reference services are available via email, although the traditional reference interview is not possible via email<sup>3</sup>.

Tury, S., Robinson, L. & Bawden, D. (2015) observed the Information Seeking Behaviour of Distance Learners of the University of London International Programmes. The study survey collected responses from 649 students, in 81 countries and following diverse study programmes. A variety of interrelated factors were found to influence information behaviour, level and subject of study being most significant<sup>4</sup>.

## Major Findings of the Study

The results of the research are based on the data collected from distance education learners of Bangalore University (1445 Respondents) using a questionnaire, informal interview with the respondents, partial observation of the university libraries during the contact classes and also from the discussions with the University library personnel.

## Demographic Characteristics of the Distance Education Learners

### Gender-wise Distribution of Distance Learners

Males are in larger group representing 829 (57.40%) students compared to 616 (42.60%) female respondents from 1445 respondents. The results of the study show that both male and female respondents pursuing their higher education through distance education and also affirm that the distance education provides an equal opportunity to all learning aspirants as seen in the literature analyzed during the study.

**Table: 1 - Demographic Profiles of the Respondents**

| Variables                 | Description               |   | Gender |        | Total |
|---------------------------|---------------------------|---|--------|--------|-------|
|                           |                           |   | Male   | Female |       |
| Age Groups                | 20 - 30 years             | F | 623    | 442    | 1065  |
|                           |                           | % | 75.2%  | 71.8%  | 73.7% |
|                           | 31 - 40 years             | F | 146    | 130    | 276   |
|                           |                           | % | 17.6%  | 21.1%  | 19.1% |
|                           | 41 - 50 years             | F | 53     | 38     | 91    |
|                           |                           | % | 6.4%   | 6.2%   | 6.3%  |
|                           | More than 50 years        | F | 7      | 6      | 13    |
|                           |                           | % | 0.8%   | 1.0%   | 0.9%  |
| Educational qualification | UG (B.A. B.Com. & B.B.M.) | F | 309    | 261    | 570   |
|                           |                           | % | 37.3%  | 42.4%  | 39.4% |
|                           | PG (M.A. M.Sc. M.Com.)    | F | 520    | 355    | 875   |
|                           |                           | % | 62.7%  | 57.6%  | 60.6% |
| Location                  | Urban                     | F | 678    | 488    | 1166  |
|                           |                           | % | 81.8%  | 79.2%  | 80.7% |
|                           | Rural                     | F | 151    | 128    | 279   |
|                           |                           | % | 18.2%  | 20.8%  | 19.3% |
| Distance                  | 0-10 Km's                 | F | 530    | 370    | 900   |
|                           |                           | % | 63.9%  | 60.1%  | 62.3% |
|                           | 11-20 Km's                | F | 91     | 72     | 163   |
|                           |                           | % | 11.0%  | 11.7%  | 11.3% |
|                           | 21-30 Km's                | F | 92     | 72     | 164   |
|                           |                           | % |        |        |       |



|  |                   |   |       |       |       |
|--|-------------------|---|-------|-------|-------|
|  |                   | % | 11.1% | 11.7% | 11.3% |
|  | More than 30 Km's | F | 116   | 102   | 218   |
|  |                   | % | 14.0% | 16.6% | 15.1% |

### **Age-wise Distribution of Distance Learners**

Majority of the respondents i.e., 1065 (73.7%) are between the age group of 20-30 years of age followed by 276 (19.1%) are between 31-40 years of age, 91 (6.3%) between 41-50 and remaining 13 (0.9%) are more than 50 years of age.

### **Area and Residence-wise Distribution of Distance Learners**

The findings of the survey showed that 1166 (80.7%) respondents live in the urban areas and 279 (19.3%) are reside in the rural areas. The study revealed that majority of the distance learners i.e., 900 (62.3%) are residing between 1-20 Kms from the main university library, 163 (11.3%) respondents' residence was located between 21-30 Kms, similarly 164 (11.3%) respondents were located between 31-40 Kms and remaining 218 (15.1%) respondents' residences are located more than 40 Km's away from the university library.

Majority of the respondents i.e., 803 (55.60%) respondents felt that it is not easy and comfortable travelling to university library as it was time consuming and they found more traffic during their journey and also transportation facility was not that much good. But undergraduate students felt it easy and comfortable travelling to the university library when compared to post graduate students.

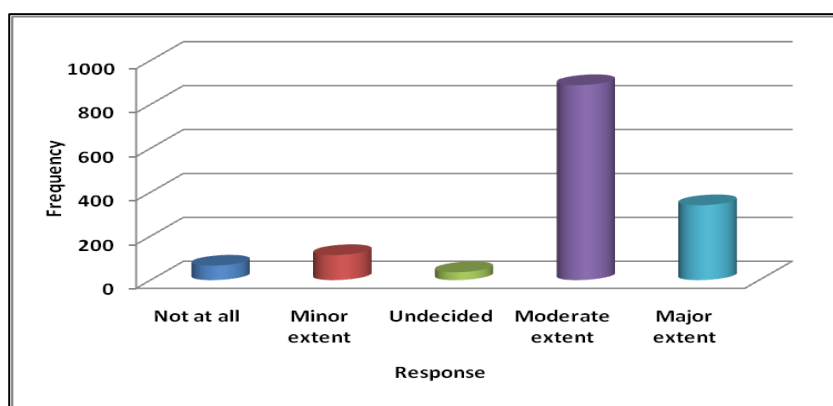
### **Study wise Distribution of respondents**

The findings of the survey showed that out of 570 undergraduates, 35 (6.1%) respondents are first year B A students, 75 (13.2%) are second year BA students, 150 (26.3%) are final year BA students, 10 (1.8%) are first year BBM students, 10 (1.8%) are second year BBM students 16 (2.8%) are final year BBM students 50 (8.8%) are first year B. Com students, 99 (17.4%) are second year B. Com students and remaining 125 (21.9%) final year B. Com students. Among postgraduate students, 162 (18.55%) are MA first year students, 356 (40.7%) are MA second year students, 32 (3.7%) are M.Sc. first year students, 36 (4.1%) are M.Sc. second year students 115 (13.1%) are M. Com first year students and 174 (19.9%) are final year M. Com students.

### **Information Needs of Distance Education Learners**

**Table 2 - Distance Learner's Information Need on Library and Information Resources**

| Responses       | Gender          |                | Area            |                | Course          |                | Total                            |
|-----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|----------------------------------|
|                 | Male            | Female         | Urban           | Rural          | UG              | PG             |                                  |
| Not at all      | 41              | 25             | 48              | 18             | 0               | 66             | <b>66</b>                        |
|                 | 4.90%           | 4.10%          | 4.10%           | 6.50%          | 0.00%           | 7.50%          | <b>4.60%</b>                     |
| Minor extent    | 59              | 55             | 93              | 21             | 41              | 73             | <b>114</b>                       |
|                 | 7.10%           | 8.90%          | 8.00%           | 7.50%          | 7.20%           | 8.30%          | <b>7.90%</b>                     |
| Undecided       | 21              | 15             | 29              | 7              | 0               | 36             | <b>36</b>                        |
|                 | 2.50%           | 2.40%          | 2.50%           | 2.50%          | 0.00%           | 4.10%          | <b>2.50%</b>                     |
| Moderate extent | 529             | 359            | 723             | 165            | 304             | 584            | <b>888</b>                       |
|                 | 63.80%          | 58.30%         | 62.00%          | 59.10%         | 53.30%          | 66.70%         | <b>61.50%</b>                    |
| Major extent    | 179             | 162            | 273             | 68             | 225             | 116            | <b>341</b>                       |
|                 | 21.60%          | 26.30%         | 23.40%          | 24.40%         | 39.50%          | 13.30%         | <b>23.60%</b>                    |
| Total           | <b>829</b>      | <b>616</b>     | <b>1166</b>     | <b>279</b>     | <b>570</b>      | <b>875</b>     | <b>1445</b>                      |
|                 | <b>100.00%</b>  | <b>100.00%</b> | <b>100.00%</b>  | <b>100.00%</b> | <b>100.00%</b>  | <b>100.00%</b> | <b>100.00%</b>                   |
| Test Statistics | CV=.070; p=.127 |                | CV=.047; p=.536 |                | CV=.351; p=.000 |                | X <sup>2</sup> =1750.408; p=.000 |



**Figure 1**

**Information Need about Library Resources and Its Services**

The table 2 and figure 1 shows data about extent of information need for library resources such as books, magazines, journals, assignments etc. There are 888 (61.50%) distance learners who opined that their need for these resources is to be moderate extent, followed by 341 (23.60%) opined major extent, 114 (7.90%) opined minor extent, 66 (4.60%) do not have this information need and 36 (2.5%) are not decided. Chi-square test revealed a significant value ( $X^2=1750.408$ ;  $p=.000$ ), further, conforming that the need is on the higher extent for books, magazines, journals and assignments. Further, associations between the responses and gender, area and course revealed that only course had significant association

(CV=.351; p=.000), it was found that UG students indicated more of 'major extent, and PG students indicated more of 'moderate extent. In other words, UG students stressed more need for books, magazines and journals and assignments. However, no significant associations were observed for responses and area and gender, indicating that the pattern of responses is statistically same.

As far as the distance learners' opinion about their need of information about the library resources such as books, magazines, journals and assignments are concerned, 888 (61.50%) respondents needed them to moderate extent and 341 (23.60%) respondents need them to major extent. There are 792 (54.80%) respondents need information to support their current learning to a moderate extent and 432 (29.90%) need it to major extent, 1039 (71.90%) need it always. When we see the students regarding keeping updating themselves 571 (39.50%) students moderately need information to keep update themselves, 523 (36.20%) need it for major extent, majority of the students also always need information and 862 (59.70%) to keep up date.

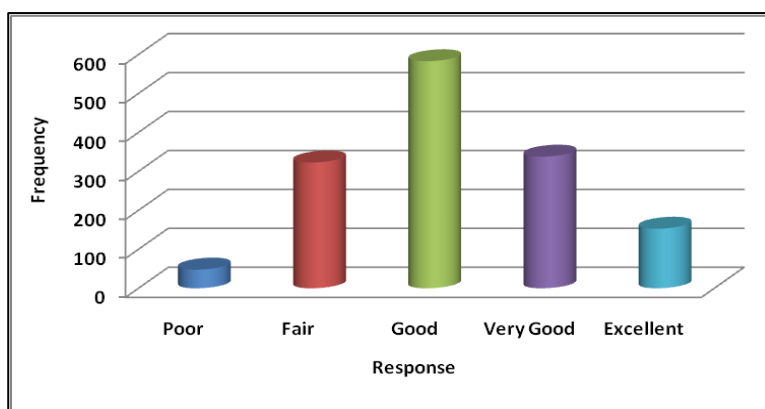
Further 760 (52.60%) students need information to a major extent to prepare for the examination of their course of study, followed by 495 (34.30%) need it to a moderate extent. About 839 (58.10%) of the respondents need it always. And to a moderate extent 577 (39.90%) respondents need information to prepare for competitive examinations, only a 422 (29.20%) of them need it very often. Most of the students i.e., 733 (50.70%) need information to continue their education to a moderate extent. Further 652 (45.10%) respondents need information on contact classes to a moderate extent and 395 (27.30%) need it to a major extent. To a major extent i.e., 635 (43.90%) respondents need job related information about how and where to get an employment. Majority of the respondents i.e., 1010 (69.90%) need information on previous years question papers as they wanted to understand the question pattern and the scheme of marks. There are 866 (59.90%) respondents who always need information for the purpose of general reading.

### **Role of Library in Meeting Information Need of the Distance Learners**

Majority of the distance students used all the three libraries only during contact classes i.e., 634 (43.90%) respondents used college libraries, 786 (54.40%) respondents used the university library during contact classes and 1309 (90.60%) respondents used public library during the contact classes.

### **Table 3 - Opinion about the Role of the Libraries**

| Responses       | Gender          |         | Area            |         | Course          |         | Total                  |
|-----------------|-----------------|---------|-----------------|---------|-----------------|---------|------------------------|
|                 | Male            | Female  | Urban           | Rural   | UG              | PG      |                        |
| Poor            | 23              | 25      | 35              | 13      | 27              | 21      | 48                     |
|                 | 2.80%           | 4.10%   | 3.00%           | 4.70%   | 4.70%           | 2.40%   | 3.30%                  |
| Fair            | 196             | 127     | 260             | 63      | 156             | 167     | 323                    |
|                 | 23.60%          | 20.60%  | 22.30%          | 22.60%  | 27.40%          | 19.10%  | 22.40%                 |
| Good            | 322             | 261     | 472             | 111     | 288             | 295     | 583                    |
|                 | 38.80%          | 42.40%  | 40.50%          | 39.80%  | 50.50%          | 33.70%  | 40.30%                 |
| Very Good       | 198             | 140     | 274             | 64      | 57              | 281     | 338                    |
|                 | 23.90%          | 22.70%  | 23.50%          | 22.90%  | 10.00%          | 32.10%  | 23.40%                 |
| Excellent       | 90              | 63      | 125             | 28      | 42              | 111     | 153                    |
|                 | 10.90%          | 10.20%  | 10.70%          | 10.00%  | 7.40%           | 12.70%  | 10.60%                 |
| Total           | 829             | 616     | 1166            | 279     | 570             | 875     | 1445                   |
|                 | 100.00%         | 100.00% | 100.00%         | 100.00% | 100.00%         | 100.00% | 100.00%                |
| Test Statistics | CV=.057; p=.328 |         | CV=.037; p=.731 |         | CV=.290; p=.000 |         | $X^2=576.367$ ; p=.000 |



**Figure 2 - Role of the Libraries**

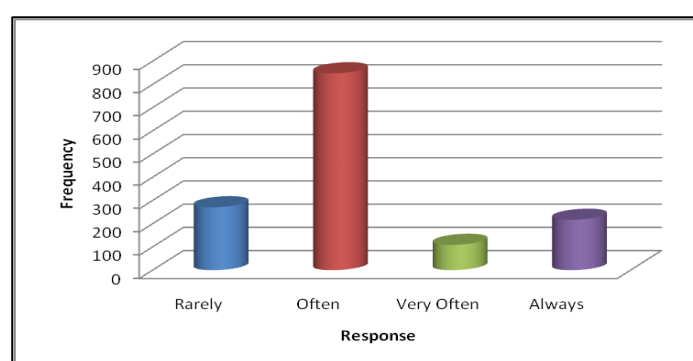
The table 3 and figure 2 reveals data about the role of library in meeting their information requirements. There are 583 (40.30%) students opined that the role of library is good in meeting their information requirements followed by 338 (23.40%) students opined very good, 323 (22.40%) opined fair, 153 (10.60%) opined excellent and only 48 (3.30%) opined poor. Chi-square test revealed a significant value ( $X^2=576.367$ ; p=.000), further conforming that the role of libraries is on the higher extent in meeting the information needs. Further, associations between the responses and gender, area and course revealed that course has significant associations (CV=.290; p=.000), where it was found that PG students indicated more of excellent and very good responses than UG students who indicated more of good responses. However, no significant associations were observed for responses and gender and area, indicating that the pattern of responses is statistically same. Majority of the respondents

i.e., 1311 (90.70%) spent less than an hour in the college library, followed by 809 (56%) in the university library and 786 (54.40%) in the public library. And these results shows that libraries are underutilized.

### Distance Learners' Information Seeking

**Table 4 - Information Seeking by Browsing the Library**

| Responses       | Gender                 |                | Area                   |                | Course                 |                | Total                                |
|-----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|--------------------------------------|
|                 | Male                   | Female         | Urban                  | Rural          | UG                     | PG             |                                      |
| Rarely          | 115                    | 156            | 205                    | 66             | 271                    | 0              | <b>271</b>                           |
|                 | 13.90%                 | 25.30%         | 17.60%                 | 23.70%         | 47.50%                 | 0.00%          | <b>18.80%</b>                        |
| Often           | 525                    | 323            | 702                    | 146            | 288                    | 560            | <b>848</b>                           |
|                 | 63.30%                 | 52.40%         | 60.20%                 | 52.30%         | 50.50%                 | 64.00%         | <b>58.70%</b>                        |
| Very Often      | 56                     | 53             | 90                     | 19             | 5                      | 104            | <b>109</b>                           |
|                 | 6.80%                  | 8.60%          | 7.70%                  | 6.80%          | 0.90%                  | 11.90%         | <b>7.50%</b>                         |
| Always          | 133                    | 84             | 169                    | 48             | 6                      | 211            | <b>217</b>                           |
|                 | 16.00%                 | 13.60%         | 14.50%                 | 17.20%         | 1.10%                  | 24.10%         | <b>15.00%</b>                        |
| Total           | <b>829</b>             | <b>616</b>     | <b>1166</b>            | <b>279</b>     | <b>570</b>             | <b>875</b>     | <b>1445</b>                          |
|                 | <b>100.00%</b>         | <b>100.00%</b> | <b>100.00%</b>         | <b>100.00%</b> | <b>100.00%</b>         | <b>100.00%</b> | <b>100.00%</b>                       |
| Test Statistics | <b>CV=.155; p=.000</b> |                | <b>CV=.075; p=.043</b> |                | <b>CV=.647; p=.000</b> |                | <b>X<sup>2</sup>=912.135; p=.000</b> |



**Figure 3 - Information Seeking By Browsing the Library**

Table 4 and figure 3 gives data related to frequency of seeking information by browsing the library. There are 848 (58.70%) respondents often browse the library for the information seeking, followed by 271 (18.80%) who rarely browse the library, 217 (15.00%) who always browse the library and 109 (7.5%) who very often browse library for seeking information. Chi-square test revealed a significant value ( $X^2=912.135$ ;  $p=.000$ ), further conforming the seeking of information seeking by browsing library is more of often and always. When the

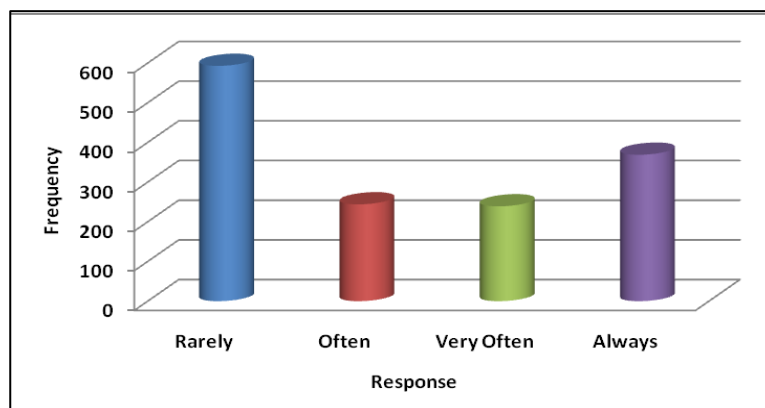
association between responses and gender, area and course are studied, it is revealed that gender and course have significant associations (CV=.155; p=.000 and CV=.647; p=.000 respectively). Gender-wise it was found that male respondents used more than female respondents. Area wise comparison revealed that urban respondents used more than rural respondents. We can see that PG students are seeking more information by browsing library compared to UG students who rarely or often seek information by browsing the library.

When the students were asked about seeking information through friends, it is found that 359 (24.8%) respondents always seek information through friends, 338 (23.40%) seek very often, 184 (12.70%) consult often, 564 (39%) seek rarely among friends. The study also revealed that majority of respondents i.e., 1423 (98.50%) replied that they rarely or never attended any conferences/workshops/seminars in support of seeking information as they were unaware or they did not have any information. They hardly ever attend any such events. The study found that 311 (21.50%) respondents always seek information through the colleagues at their work place followed by 344 (23.80%) respondents seek often, 201 (13.90%) seek very often and 589 (40.80%) respondents seek rarely with their colleagues. Distance learners also depend on their own experience in seeking information. It is found that 381 (26.40%) respondents always depend on their own experience, 301 (20.80%) very often and 243 (16.80%) often used their own experience in fulfilling their information needs.

### Information Seeking through Social Networks

**Table 5 - Information Seeking through Social Networks**

| Responses       | Gender                 |                | Area                   |                | Course                 |                | Total                                |
|-----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|--------------------------------------|
|                 | Male                   | Female         | Urban                  | Rural          | UG                     | PG             |                                      |
| Rarely          | 356                    | 237            | 489                    | 104            | 163                    | 430            | <b>593</b>                           |
|                 | 42.90%                 | 38.50%         | 41.90%                 | 37.30%         | 28.60%                 | 49.10%         | <b>41.00%</b>                        |
| Often           | 155                    | 89             | 194                    | 50             | 154                    | 90             | <b>244</b>                           |
|                 | 18.70%                 | 14.40%         | 16.60%                 | 17.90%         | 27.00%                 | 10.30%         | <b>16.90%</b>                        |
| Very Often      | 129                    | 110            | 199                    | 40             | 60                     | 179            | <b>239</b>                           |
|                 | 15.60%                 | 17.90%         | 17.10%                 | 14.30%         | 10.50%                 | 20.50%         | <b>16.50%</b>                        |
| Always          | 189                    | 180            | 284                    | 85             | 193                    | 176            | <b>369</b>                           |
|                 | 22.80%                 | 29.20%         | 24.40%                 | 30.50%         | 33.90%                 | 20.10%         | <b>25.50%</b>                        |
| Total           | <b>829</b>             | <b>616</b>     | <b>1166</b>            | <b>279</b>     | <b>570</b>             | <b>875</b>     | <b>1445</b>                          |
|                 | <b>100.00%</b>         | <b>100.00%</b> | <b>100.00%</b>         | <b>100.00%</b> | <b>100.00%</b>         | <b>100.00%</b> | <b>100.00%</b>                       |
| Test Statistics | <b>CV=.092; p=.006</b> |                | <b>CV=.063; p=.126</b> |                | <b>CV=.310; p=.000</b> |                | <b>X<sup>2</sup>=228.265; p=.000</b> |



**Figure 4 - Information Seeking Through Social Networks**

Table 5 and figure 4 shows the data of information seeking by gathering information through social networks and it is found that 593 (41.00%) of them opined rarely, and next highest being always 369 (25.50%), 244 (16.90%) indicated often remaining 239 (16.50%) indicated very often. Chi-square revealed a significant value ( $X^2=228.265$ ;  $p=.000$ ) revealing as gathering information through social networks for information seeking in meeting information needs is very less. Study of association between responses and gender, area and course revealed that gender and course show significant associations ( $CV=.092$ ;  $p=.006$  and  $CV=.310$ ;  $p=.000$  respectively). Gender-wise it is found that female respondents indicated more information seeking than male respondents. UG students 193 (33.9%) compared to PG students 176 (20.10%) find it more relevant to always seek information by browsing social networks. Lastly, area of the students did not have a good association statistically as per the analysis.

### **Frequency and Purpose of Visiting University Library**

When students were asked to respond for the purpose of visiting the university library, 444 (30.70%) students opined that they often visit to refer books, 336 (23.30%) responded very often, 88 (6.10%) opined always and 577 (39.90%) respondents rarely visit the university library to refer books. When distance students asked about visiting the university library to read reference materials, it is found that 548 (37.90%) opined often, 240 (16.60%) very often, 62 (4.30%) always visit the university library for reading and using reference materials. 595 (41.20%) respondents hardly ever visited the library for reference. The study revealed that majority of the students i.e., 1117 (77.30%) rarely or never used journals during the visit to the library. The result shows that distance learners hardly used the

journals/magazines for their study purpose.

When students asked about the frequency of visiting the university library to read newspapers, it is found that 480 (33.20%) respondents opined always and 307 (21.20%) very often for reading the newspapers in the university library. Photocopying of the materials available in the library was one of the main purposes of visiting the university library by the distance learners, as it is found from the study that there was a dearth of information sources. Due to this reason 553 (38.30%) respondents visited the library very often, 275 (19%) often and 135 (9.3%) always for photocopying the materials. To improve the competency level and general knowledge 374 (25.90%) students visit library very often, 508 (35.20%) often and 136 (9.4%) always visit the library. And preparing for the examination 410 (28.40%) respondents opined very often, 409 (28.3%) often, 160 (11.1%) respondents always visited the library preparing for the examination purpose.

### **Information Format Preference by the Distance Learners**

The study found that majority of the respondents i.e., 788 (54.50%) distance students preferred the print format of information resources, as this was the easiest, convenient and most available format in terms of using, handling and of cost involved in it. The researcher found that 484 (84.90%) undergraduate students preferred print format when compared to postgraduate students 304 (34.70%). It is found from the study that, particularly in urban areas 642 (55.10%) students prefer print format. 572 (39.6%) respondents just preferred the print format in support of their education. The study revealed that only 608 (42.10%) respondents preferred electronic format.

### **Information Sources Used by Distance Learners**

#### **Use of Formal Sources**

With regard to books as a formal source of information, it is found that 727 (50.30%) respondents frequently used and 527 (36.50%) highly used for their education purpose. Journals and magazines were underutilized as 746 (51.60%) respondents rarely used and 380 (26.30%) respondents occasionally used. As far as the use of newspapers as an information source is concerned there are 832 (57.60%) respondents frequently used newspapers and 211 (14.60%) highly used it. The use of Internet and other e-resources as an information source shows that 638 (44.20%) respondents occasionally use this and 513 (35.55%) respondents highly used. As Thesis/Dissertations and Reports were of least importance to distance learners, majority of them i.e., 1398 (96.7%) respondents rarely or never used them during



their course of education. It is observed from the study that many of the distance students i.e., 742 (51.3%) replied that they use course materials very frequently.

### **Use of Informal Sources**

Bangalore University Distance Learners effectively used informal sources of information such as subject specialists and experts. It is found that 780 (54%) respondents opined effectively, 483 (33.4%) opined very effectively in the concerned field of study and also 541 (37.40%) distance learners opined effectively in discussing with seniors, classmates and friends and 318 (22%) opined very effectively. But discussion with librarian and library staff was not that much effective as it was only 155 (10.70%) respondents approached the library personnel just for enquiring about the information resources and services available for them. Further it was interesting to know from the respondents that they were guided and referred by the library personnel to other helpful information sources. Attending Seminars, Conferences and Workshops didn't get that much response from the respondents, as only 196 (13.60%) respondents felt it somewhat effective, 40 (2.8%) respondents felt it effective. Majority of the respondents i.e., 1198 (82.90%) responded ineffective in attending such Seminars, Conferences and Workshops. Lack of information and awareness about the importance of attending such Seminars/Conferences/Workshops resulted in the poor response rate among distance learners. Regarding TV and radio 672 (46.50%) respondents responded with somewhat effective response.

### **Seeking Information Using University Library Services**

Further in supplementing the research, the study carried out to determine the usage frequency of university library services by the distance learners. It is found that 207 (14.30%) respondents used the reference services occasionally, 524 (36.30%) rarely used, 70 (4.80%) frequently used and remaining 53 (3.70%) highly used the reference service, 385 (26.60%) used the periodical services occasionally, 351 (24.30%) rarely used, 135 (9.30%) frequently used and the remaining 26 (1.80%) of the respondents highly used periodical services. With regard to internet and other e-resources, it is observed that 519 (35.90%) respondents not used this service followed by 427 (29.60%) occasionally used, 333 (23.00%) rarely used, 109 (7.50%) frequently used and the remaining 57 (3.90%) respondents highly used the internet and other e-resource services. 411 (28.40%) respondents occasionally used the current awareness services and 310 (21.50%) rarely used and when the photocopying services is seen it is found that 1142 (79%) students responded it is highly used, followed by 235 (16.30%) rarely used, 45 (3.10%) occasionally used, 13

(0.90%) not used at all and 10 (0.70%) responded that they used it frequently.

### **Awareness of the Information Seeking Tools by the Distance Learners**

The study revealed that majority of the respondents was unaware of the information seeking tools. Only 224 (15.50%) respondents were aware of Indexes & Abstracts, 409 (28.30%) were aware of OPAC and 330 (22.80%) were aware of publisher's catalogue followed by 435 (30.10%) respondents were aware of academic library websites. Majority of the respondents i.e., 1089 (75.40%) students opined that they know how to search and appraise information, 1129 (78.10%) responded that they know how to search but would like better skills in appraising information and again most of the students i.e., 1321 (91.40%) respondents would like to have better skills in both searching and appraising information. This shows that the distance learners are much in need of information literacy programmes to enrich their information seeking and retrieving skills.

### **Information Searching**

When the respondents are asked about how they search information in the library by providing the basic search options such as author, title, publisher, subject, and on specific topic related to their syllabus, 647 (44.80%) respondents always search by author, 558 (38.60%) students always search by title, 439 (30.40%) respondents seek by the publisher, 588 (40.70%) by subject, lastly 840 (58.10%) respondents always able to search on specific topic related to their syllabus when they visited the libraries in search of information.

### **Barriers of Information Seeking**

With regard to barriers of information seeking absence of information literacy program, very high deposit amount, few students felt language as a major barrier and students also expressed that library location is a barrier for them in accessing library and information. And lack of knowledge in using the library was also a major barrier. Lack of time and inconvenient library working hours was one of the major challenges and barrier to majority of the respondents,

### **Adequacy of University Library Resources and Services**

It is found that majority of the distance learners i.e., 1285 (88.90%) students demanded exclusive library resources and services instead of just providing the course materials. It was observed that 948 (65.60%) respondents were partially satisfied with the course materials provided to them. Regarding the performance of the library staff is analyzed, 645 (44.60%)

respondents opined good, followed by 436 (30.2%) fair and only 145 (10%) replied poor. As far as the adequacy of university library's collections is analyzed for books, 543 (37.60%) opined 'somewhat adequate' and 241 (16.7%) opined 'adequate'. With regard to collection of journals and magazines, 625 (43.30%) responded 'adequate', 457 (31.6%) responded 'somewhat adequate'. User opinion about adequacy of e- resources shows that 495 (34.30%) respondents felt 'somewhat adequate' followed by 233 (16.1%) expressed 'adequate'. There are 515 (35.60%) respondents replied 'somewhat adequate' for newspapers and 219 (15.2%) expressed 'adequate'. Again 536 (37.10%) responded 'adequate' for thesis/dissertations/reports and lastly for the collection of dictionaries & encyclopedias, 715 (49.50%) respondents responded 'somewhat adequate'. When the distance learners are asked about the satisfaction towards university library, 639 (44.20%) respondents opined 'partially satisfied', 165 (11.4%) felt 'satisfied', 135 (9.3%) were 'very satisfied', 192 (13.30%) were 'dissatisfied' and remaining 314 (21.7%) were 'undecided'.

### **Verification of Hypothesis**

#### **H1: Location of the University library obstruct the distance learners in seeking information**

H1 stated "Location of the University library obstruct the distance learners in seeking information" as residing far away from the university library is a major obstruction in terms of distance for distance learners in seeking information is partially accepted as the test statistics revealed that 803 (55.60%) distance learners did not feel easy and comfort of travelling from the place of residence to the university library. It is found that 803 (91.8%) postgraduate students felt it very difficult in commuting to university library from their place of residence. The difficulty in travelling from a long distance to the library is a major obstruction for distance learners. The finding substantiates with study of Boadi and Letsolo (2004) who observed that long distance confines the distance students' usage and access to library and information sources and services, consequently pushing them to depend on friends, colleagues and other informal sources which were not necessarily be the best sources of information in satisfying their information need. Distance students who are living in faraway places were facing problems in commuting and accessing university library services. This was reported by one of the distance students during an informal interview while collecting the data.

Many of the students reported about the traffic problem in Bangalore city, some of

them didn't feel travelling a long distance, few reported that the library was inconveniently located from their place of residence and also some students opined about the lack of sufficient transport facility. Distance students felt uncomfortable about using the library after travelling, as they were exhausted of travelling from such a far distance and it is found that 545 (38%) students were residing in the areas which is more than 20 Km's away from the University library. Respondents who are residing within 20 kms also felt uncomfortable travelling. 1050 (72.7%) respondents opined the library location as a barrier from major extent to moderate extent. It is found from the study that 122 (43.70%) rural students expressed their view that library location is the barrier for major extent.

## **H2: There is under-utilization of University library by the Bangalore University distance learners**

H2 stated "There is under-utilization of University library by the Bangalore University distance learners" is partially accepted as the study found that 786 (54.40%) distance students used the University library only during contact classes. Libraries and information centers are very essential and important for all distance learning students to access a variety of information resources in order to support their learning. The respondents were asked to indicate the amount of time they spend in the library during the visits. The findings revealed that 809 (56.00%) respondents spent less than one hour in the library.

Some of the main reasons for under-utilization of the library given as multi-response are as follows: long distance to the library as it was far away from their place of residence, 560 (38.80%) respondents felt that library location was one of the barriers to major extent, for lack of time 1076 (74.50%) respondents felt it as a barrier, to access the library, some of the students were working professionals, inconvenient library service hours, as said by some of the respondents, which can be clarified by the fact that most of the distance learners are generally employed and so library working hours may be in conflict or fail to commute with the library working hours. So, in this, the available free time which is the late evening for the working student is also the time when the library is closed. The findings of the study on lack of time to visit the library substantiate with the findings of Mabawonku (2004) study, who reported that lack of time to use the library and lack of library use instructions hampered its effective use by distance learners in Nigerian universities.

Some students stressed on the lack of required reading materials in the library, to

such an extent that distance learners find themselves decided to use other informal sources of information for information and some students not concerned to use libraries. Majority of the distance learners were unaware of the information seeking tools in utilizing the libraries to fuller extent. Further libraries were under-utilized due to absence of information literacy program and it is found that 626 (43.30%) respondents opined major extent as absence of information literacy programme in the university library as a barrier in information seeking, lack of knowledge in using the library and fear of using the library automated system for minor extent contributed for distance learner's underutilization of the library in seeking information.

### **H3: There is an increasing knowledge, usage and usability of Internet information resources by the distance learners in seeking information**

H3 stated "There is an increasing knowledge, usage and usability of Internet information resources by the distance learners in seeking information" is fully accepted as the test statistics revealed that 1318 (91.2%) distance learners use the internet and it is observed that there is an increasing awareness of internet as 531 (36.70%) respondents indicated good, 305 (21.10%) indicated very good and 210 (14.50%) indicated excellent in using internet that shows distance learners are proficient in using the internet, with regard to usage of internet information resources most of the distance learners use internet daily for online resources, e-books & e-journals, e-mail & chatting, social networking, education & job opportunities and for entertainment effectively.

Internet has happened to be an easy source of getting information and relevant e-resources as is evident from the current study. Technology has grown in an ever-large foothold in the domain of distance education, the internet resources seem to have a considerable impact on information seeking behaviour of the most of the distance learners. Majority of distance students frequently seeks information from the internet. The current study showed that the use of the Internet has produced a great impact upon the distance students of Bangalore University in their academic environment and it is very clear from the study that the younger generation has acknowledged the Internet as a means for accessing to the relevant information for academic and educational work. The study also established that internet plays a significant role in distance education.

### **H4: Distance learner's access and use public libraries in seeking information**

H4 stated "distance learners access and use public libraries in seeking information"

is accepted as the study discovered and the test statistics revealed that majority i.e., 913 (63.20%) students agreed that public library is serving its education purpose, 831(57.50%) agreed that the public library services serving for the entertainment purpose, 838 (58.00%) students agreed on government services as a public library service being a part of library resources and also majority of respondents i.e., 906 (62.70%) agreed for providing local/national news as a public library service, 571 (39.50%) agreed for conducting a job search. Again majority i.e., 600 (41.50%) respondents strongly agree that it is essential and 651 (45.10%) agreed that it is very important in supplementing their education. Further it was observed that majority of the distance learners agreed and opined that the public libraries serve for educational and entertainment purpose, provides information on health, agriculture and information on Government services, local/national news and helps in conducting a job search. Majority i.e., 1309 (90.60%) distance learners use the public library during the contact classes and most of the distance learners spend time about an hour in seeking information confirming that they use the public libraries for borrowing, utilizing reference service, employment information service, to prepare for competitive examinations and for reading newspapers.

#### **H5: Distance learners are aware of information seeking tools such as indexes and abstracts, OPAC, publisher's catalogue and academic library websites**

H5 stated “distance learners are aware of information seeking tools such as indexes and abstracts, OPAC, publisher's catalogue and academic library websites” is not accepted based on the study result. 1221 (84.50%) students are unaware of indexes and abstracting tools, 1036 (71.70%) distance learners are unaware of OPAC, 1115 (77.20%) have not used Publishers Catalogues and 1010 (69.90%) students do not know much about academic library websites. Many of the distance learners were drop outs and were having long gap from the educational environments, so far, the reason much of the distance learners were unaware of the information seeking tools and the aforesaid hypothesis cannot be accepted.

#### **Conclusion**

The current study has explored the information needs and information seeking behavior of distance learners at Bangalore University and established the use of relevant information sources for their academic needs, particularly from university, public and college libraries including electronic resources and other internet technologies. The study

has acknowledged the use of formal sources of information such as books, journals, newspapers, thesis, dissertations and reports etc., and informal sources of information such as the knowledge and expertise of their colleagues and other professional contacts and internet resources employed by distance learners in this university, despite the fact that distance learners increased use of Internet and other electronic resources they also gave preference and relied on printed format of resources. At the same time the perceived and actual barriers to their successful information seeking during the course of their study. University library services provision offered to distance learners was also discussed in the context and the satisfaction level in fulfilling their information needs. Suggestions and recommendations were sought from them on the possible planning strategies that the university libraries could implement in meeting their information needs.

The outcome of the study will also provide library personnel with a better understanding of the way in which they can support distance learners from a service perspective. For instance, library staff could develop a comprehensive library use program aiming distance learners specifically in utilizing the library and information systems and services, identifying the information gap, searching, locating, evaluating and satisfying the need and completing the information search process. With such an understanding, libraries may implement instruction programs, increase promotion of library and information resources, and organize orientation programmes to distance students that address the needs of the information in distance education.

Based on the findings, the study strongly recommends developing an information services model for distance learners which takes into account the information needs and seeking behaviour serving them in a better and efficient way. Following the findings, the study also suggests strategies which the university has to devise to reach out to the needs of distance learners so that they make the best use of the library. Imperative recommendations with which the research concludes is that distance learners must be provided with facilities to access current information relevant to their learning and may be disseminated in their preferred format of resource and communicated through their favoured channels.

## Bibliography

1. Silas M. Oliveira & Norma Greenidge. (2020) Information Seeking Behavior of Distance Learners: What has Changed in Twenty Years?, *Journal of Library & Information Services in Distance Learning*, 14 (1), 2-27.
2. Fasasi, V.A. (2004) Open and Distance Learning; a strategy for development of human resources in Nigeria. In Fagbamiigbe, E.O et al (eds). *Management of Primary and Secondary Education in Nigeria*. Ibadan, Nigeria.
3. Gopakumar, V. and A. Baradol. (2009) Assuring Quality in Distance Education for Library & Information Science: The Role of the Library. *Library Philosophy & Practice*, 11(1), 1-6
4. Tury, S., Robinson, L. and Bawden, D. (2015) The Information Seeking Behaviour of Distance Learners: A Case Study of the University of London International Programmes, *Journal of Academic Librarianship*, 41(3)
5. American Library Association. Guidelines for Distance Learning Library Services. (2006) Retrieved August 25, 2021 Available at: <http://www.ala.org/ala/mgrps/divs/acrl/standards/guidelinesdistancelearning.cfm>
6. Case, D.O, (2007). *Looking for information: a survey of research on information seeking, needs, and behavior*. Amsterdam; Oxford University Press.
7. Indian Library Association (2001). *Guidelines for Library Services to Distance Learners*.
8. Wilson, T. D. Human Information behavior, *Information Sciences*, (2000), 3(2), 49-55.