



## **Assessment of Digital Literacy Skills in Acquisition of Electronic Information Sources among Government First Grade College Librarians in Karnataka: A study**

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### **ABSTRACT**

*The present study is considered to discover the extent of digital literacy skills in acquiring information sources. A survey method was used for this study, and a questionnaire was distributed among 240 permanent working librarians of Government grade colleges in Karnataka state through WhatsApp, Email and also via personal communication and contact. 194(80.83%) were received back, and the same used for analysis. It was found that, major respondents are male and 127(65.46%) respondents aged between 41-50. The majority, i.e. 61.34% of the respondents, have 11-15 years of service. 53(27.31%) of the respondents were excellent in acquiring E-Journals. Most of them follow the subscription method for acquiring electronic information sources. N-list is the most subscribed database compared to other paid databases. In government first-grade colleges, most librarians use catalogue/OPAC to manage the acquisition section. The cost of E-resources is the primary constraint faced by the respondents.*

**Keywords:** Digital Literacy Skills, Acquisition of Information Sources, Government First Grade College, Librarians, Karnataka

### **1. Introduction**

Libraries are essential organisations for attaining global literacy because they are committed to providing fair and unrestricted access to knowledge (Mulat & Natarajan, n.d.). Librarians play a pivotal role in facilitating the acquisition and dissemination of library resources. In the digital age, possessing robust digital literacy skills is crucial for navigating, managing, and effectively utilising the evolving landscape of information. These skills are essential for acquiring information resources and for effective research and learning.

Proficiency in digital literacy is crucial for librarians to effectively access, assess, and utilize digital resources. This enables informed decision-making, continuous learning, and active participation in the global information ecosystem. Today's librarians must improve their digital literacy to utilise digital resources effectively and efficiently (Munshi et al., 2023). 21st-century libraries are rapidly digitising, offering ICT-integrated services like online information retrieval, automated cataloguing, CD-ROM databases, electronic document distribution, and circulation systems.

Digital literacy skills enable librarians to integrate technology into library services and provide patrons with training and support for using these tools for their research and learning needs. Proficient information retrieval skills enable librarians to guide patrons in effectively navigating the library's digital resources.

## **2. Review of related Literature**

The researchers have examined a sizable body of recent research on the proficiency in digital literacy that academic librarians possess.

Shidi and Nwachukwu (2015) conducted a study to examine digital library skills in Benue state and the training methods used by academic libraries. A total of 248 library staff were studied using a descriptive survey design. The findings showed that staff acquired basic skills through self-efforts and library sponsorship. However, the study recommended improving these competencies and increased involvement from libraries and mother institutions.

To evaluate the digital literacy skills of 214 working library and information workers, Baro et al. (2019) performed a survey. Data was gathered and distributed through the online questionnaire. The study found that, with variations between Nigeria and South Africa, university librarians in Africa possess high proficiency in database search, online document uploading, social media usage, digital library construction, and open-source software use but only moderate proficiency in metadata and website development. This study supports curriculum changes and competency building in developing country library schools.

In 2019, Hiremath & Bankapur investigated how age affects first-grade degree college librarians' digital literacy abilities in the Bagalkot District. A study by Mulat and Natarajan (2020) looked at the level of digital literacy among library staff members at Ethiopia's Jimma University libraries. According to the report, the primary digital literacy abilities include using a mobile phone, social networking, email, and the internet. Additionally, it was discovered that librarians obtained these abilities through workshops, formal instruction, YouTube, Web OPAC, digital libraries, and institutional repositories. It is advised that librarians participate in conferences, seminars, workshops, and training to improve their digital competencies and remain current in the digital era.

However, librarians faced challenges such as insufficient financing, a dearth of resources for professional development, poor ICT infrastructure, negative attitudes toward staff development, and the lack of digital library courses in the Library and Information Science curriculum.

Research by Friday and Onuh (2022) examined how 66 librarians at five public university libraries in the Nigerian states of Bayelsa and Rivers acquired 21st-century librarianship abilities. The study conducted by Sambo et al., (2022) highlights the need for Nigerian certified librarians to adopt digital literacy as a compulsory skill. The report recommends that librarians step up their efforts to stay current to preserve the profession's future and contribute significantly to Nigeria's digital technology renaissance. The SPSS research found that most librarians have digital literacy skills through self-training or trial and error. The study recommends university library management organise digital training programs and collaborate with LIS departments to improve the curriculum.

Osinulu (2022) evaluates the digital literacy skills of paraprofessionals in South-West Nigeria's academic library environment. The study recommends continuous training for paraprofessionals and Effective policies for the training and development of library managers to improve quality

services and job performance in the digital age. Munshi et al., (2023) assessed the digital literacy skills of 176 academic librarians in West Ben, India. They were proficient in technological adaptations like email conversations, online document uploading, Social networking, self-archiving, and digital collections. Results revealed that most respondents use digital technology and devices for personal and official activities. The results could help create plans for LIS personnel to gain proficient digital abilities.

### **3. Need for the Study**

In the digital age, librarians must play a crucial role in acquiring library information sources. Their digital literacy skills are essential in navigating and effectively utilising the vast array of online resources because, in the digital environment, all the information resources are available in digital format. Libraries and information centres worldwide have noticed a shift in the administration of their information resources from paper to electronic resources. The main role of librarians is to effectively utilize digital resources, navigate online databases, evaluate the credibility of information, provide accurate and reliable resources to their patrons and also critically evaluate the quality and reliability of online information sources. Digital literacy skills enable librarians to locate and access various online resources, including digital databases and online catalogues, which provide extensive information. These skills are very important for librarians to effectively search, evaluate, and select relevant information sources for their libraries. This ensures that librarians can confidently choose and provide accurate and trustworthy information to their patrons. The current study was carried out to respond to these questions, and it seeks to accomplish the following research goals.

### **4. Objectives of the Study**

The purpose of this research is to determine the level of digital literacy of librarians in acquiring information sources and the skills they use to acquire resources.

1. To determine what kinds of digital collections are housed in their organisations.
2. To know the methods used for the acquisition of different Electronic Information Sources
3. To recognise the master records/databases used in managing the acquisition section
4. To discover the status of online databases subscribed
5. To find out the Challenges faced in selecting and acquiring E-resources

### **5. Methodology**

The investigators have examined a considerable amount of current research on the digital literacy abilities of working librarians. From this literature, researchers surveyed permanent working librarians of Government first grade colleges in Karnataka state. The questionnaire has been designed online using Google Forms to collect the data. The questionnaire was distributed among 240 permanent working librarians through WhatsApp, Email and personal communication and contact. 194(80.83%) were received back, and the same was utilised for analysis with Microsoft Excel and the Statistics Package for Social Sciences (SPSS) version 22.

### **6. Data Analysis**

The collected questionnaires from 194 working librarians are analysed using tables and graphs.

Table 1 presents the demographic data, with male respondents accounting for the majority at n = 137 (70%) and female respondents at n = 57 (29.38%). The age group between 41 and 50 (n=127) is the largest. Among the age groups of 25-30 (14), 31-40 (35), 41-50 (127), and over 50 years old (18). 18 people (9.27%) held a master's degree in library and information science, 103 people (53.19%) held a master's degree in library and information

Demographic variables		No. of respondents (n = 194)	Percentage (80%)
Gender	Male	137	70%
	Female	57	29.38%
Age	25–30 years	14	7.21%
	31–40 years	35	18.04%
	41–50 years	127	65.46%
	Above 50 years	18	9.27%
Qualifications	Master of Library and Information Science	18	9.27%
	Master of Library and Information Science + MPhil /National Eligibility Test	103	53.09%
	PhD degree in Library and Information Science	73	37.62%
Professional Experience	1-5 years	18	9.27%
	6-10 years	8	4.12%
	11-15 years	119	61.34%
	16-20 years	14	7.21%
	Above 20 years	35	18.04%

**Table 1. Respondents’ demographic profile**

science plus an MPhil or National Eligibility Test, and 73 people (36.62%) held a PhD in the field. 18 (9.27%) had between one and five years experience, 8 (4.12%) had between six and ten years experience, 119 (61.34%) had between eleven and fifteen years experience, 14 (7.21%) had between sixteen and twenty years experience, and 35 (18.04%) had between twenty years and above. The survey participants’ employment experiences are displayed in Table 1. The survey participants’ employment experiences are displayed in Table 1. Considering the lowest and maximum age group in service, the survey comprised those aged 25 to 50 and beyond.

Does your library have a digital collection	Yes	No
	131(67.52%)	63(32.47%)

**Table 2. Status of digital collection**

Table 2 shows that among 194 responses, 131(67.52%) libraries had a digital collection, and 63(32.47%) libraries didn't.

SN	Type of Digital Resources	Availability of Collection				
		Excellent	Good	average	Poor	Not available
a.	E-Books	51(26.28%)	47(24.22%)	24(12.37%)	5(2.57%)	29(14.94%)
b.	E-journals	53(27.31%)	60(30.92%)	23(11.85%)	6(3.09%)	26(13.40%)
c.	E-thesis/dissertations	24(12.37%)	36(18.55%)	24(12.37%)	14(7.21%)	51(26.28%)
d.	Bibliographic databases	15(7.73%)	14(7.21%)	33(17.01%)	17(8.76%)	62(31.95%)
e.	E-reports	14(7.21%)	24(12.37%)	13(6.70%)	19(9.79%)	66(34.02%)
f.	E-conference proceedings	10(5.15%)	14(7.21%)	26(13.40%)	20(10.30%)	69(35.56%)
g.	Indexing & abstracting databases	6(3.09%)	17(8.76%)	31(15.97%)	16(8.24%)	66(34.02%)
h.	Full-text database	16(8.24%)	21(10.82%)	30(15.46%)	16(8.24%)	58(29.89%)
i.	Open access databases	31(15.97%)	28(14.43%)	43(22.16%)	11(5.67%)	41(21.13%)
j.	Streaming videos	16(8.24%)	22(11.34%)	25(12.88%)	19(9.79%)	61(31.44%)

**Table 3. Availability of Collection**

This table shows that e-books and e-journals are excellent digital resources in government first-grade colleges. E-reports and streaming videos are very poor, and the majority of the government first-grade colleges do not hold Bibliographic databases and Indexing & abstracting databases,

Sl no	Method	Usage	Percentage
1	Subscription method	117	60.30%
2	Consortia method	30	15.22%
3	Open access resources	104	53.60%

**Table 4. Methods following for the acquisition of different Electronic Information Sources**

Table 4 reveals that the majority of the respondents, 117(60.30%), use subscription methods to acquire different **Electronic Information Sources**, followed by 30(15.22%) consortia methods and 104(53.60%) open-access resources.

SN	Online databases	Status Subscribed
a.	NLIST	130(67.01%)
b.	Scopus	11(5.67%)
c.	Web of Science	12(6.18%)
d.	Emerald	05(2.57%)

e.	JSTOR	17(8.76%)
f.	Science Direct	11(5.67%)
g.	ERIC	07(3.60%)

Table 5 shows that majority of the replier i.e. 130(67.01%) subscribed NLIST database followed by Scopus 11(5.67%), Web of science 12(6.18%), Emerald 05(2.57%), JSTOR 17(8.76%), Science direct 11(5.67%) and ERIC 07(3.60%).

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d.	Emerald	05(2.57%)
e.	JSTOR	17(8.76%)
f.	Science Direct	11(5.67%)
g.	ERIC	07(3.60%)

**Table 5. subscription to online databases**

SN	Master	Records/database
a	Catalogue (OPAC)	136(70.10%)
b	Vendor database	33(17.01%)
c	Publisher database	55(28.35%)
d	Subject expert database	36(18.55%)
e	Indents approval database	20(10.30%)
f	Book Request/recommendation from users	109(56.18)

**Table 6. Master records/databases are used in managing the acquisition section**

SN	Challenges	
a	Cost of E-resources	<b>101(52.06%)</b>
b	Poor network facility	<b>59(30.41%)</b>
c	Difficult to check e-resources on a regular basis	<b>42(21.64%)</b>
d	Lack of technical staff	<b>73(37.62%)</b>
e	Difficult digital preservation	<b>50(25.77%)</b>

**Table 7. Challenges faced in selecting and acquiring of E-resources**

Table 6 shows that 136(70.10%) respondents use catalogues (OPAC) to manage the acquisition of different resources, followed by Book Requests/recommendations from users 109(56.18), Publisher database 55(28.35%), Subject expert database 36(18.55%), Vendor database 33(17.01%), and Indents approval database 20(10.30%).

Table 7 reveals the challenges faced in the selection and acquisition of E-resources. Most of them, 101(52.06%) respondents, faced a constraint on the cost of E-resources, followed by a Lack of technical staff 73(37.62%), a Poor network facility 59(30.41%), a Difficulty with digital preservation 50(25.77%), and a Difficulty checking e-resources regularly 42(21.64%).

### **Findings**

The analysis mentioned above revealed the following conclusions.

1. This demonstrates that the majority of working librarians are male in government first-grade colleges, with the age range of 41 to 50 being the highest.
2. This shows that there are more male librarians in government first-grade colleges than female librarians, and the maximum age groups are 41–50. The majority of the respondents had their Master of Library and Information Science + MPhil /National Eligibility Test, and the majority of the respondents had 11-15 years of experience.
3. Still, 63(32.47%) respondents don't have digital collections in their institutions.
4. E-books and E-journals are the main Digital resources available in Government First Grade colleges.
5. Most librarians have adapted the subscription method to the acquisition of different electronic information sources. NLIST is the major online database subscribed to in government first-grade colleges, unlike other databases.
6. Most librarians use catalogue (OPAC) to manage the acquisition section.
7. Cost of E-resources is the main constraint/challenge librarians face in selecting and acquiring E-resources compared to other challenges.

### **Suggestions**

1. Concerned authorities should ensure the acquisition of digital collections in all government first-grade colleges by providing the required facilities to achieve the goal in the digital environment.
2. Other digital resources like E-Theses/dissertations, Bibliographic databases, E-reports, E-conference proceedings, Full-text databases, open-access databases, etc., are also encouraged.
3. Librarians can use open access E-resources apart from subscribed E-resources.
4. Concerned authorities can consider reducing the cost of E-resources so that all the government first-grade colleges of Karnataka state can access them.

### **Conclusion**

The study's findings indicate that in today's digital world, digital literacy abilities are crucial for librarians working in educational institutions to attain high-quality career advancement and engage in social activities. In the era of digitalisation, all necessary resources are accessible online. As a result, librarians should take the initiative to help their clients in every way possible. On the other hand, it is important to choose the necessary online resources from abundant accessible materials. To provide those needing knowledge with access to various formats, libraries and librarians have emerged as crucial conduits. As a result, in the current

environment, librarians need to be proficient in digital literacy to obtain various resources.

## References

- [1] Baro, E. E., Obaro, O. G., Aduba, E. D. (2019). An assessment of digital literacy skills and knowledge-based competencies among librarians working in university libraries in Africa. *Digital Library Perspectives*, 35 (3/4) 172–192. <https://doi.org/10.1108/DLP-04-2019-0013>
- [2] Friday, J. E. M., Onuh, N. S. M. (2022). Acquisition of 21st century librarianship skills by librarians in public university libraries in Bayelsa and Rivers States of Nigeria. *Library Philosophy and Practice (e-journal)*, 7265.
- [3] Hiremath, M. S. S., Bankapur, D. V. M. (2019). Awareness and proficiency in digital literacy skills among librarians of first grade degree colleges of Bagalkot District with respect to age group.
- [4] Mulat, T., Natarajan, M. (2020). Digital literacy skills among library professionals in Jimma University libraries. *Library Philosophy and Practice (e-journal)*, 4629. <https://digitalcommons.unl.edu/libphilprac/4629>
- [5] Munshi, S. A., Biswas, A., Barsha, S. (2023). Librarians' self-efficacy in digital literacy skills: An investigation of librarians working in libraries of government-aided colleges in West Bengal. *Science & Technology Libraries*, 1–15. <https://doi.org/10.1080/0194262X.2023.2286650>
- [6] Osinulu, L. (2022). An evaluation of staff digital literacy skills in an academic library in South-West, Nigeria. *Ghana Library Journal*, 27 (2) 242–249. <https://doi.org/10.4314/glj.v27i2.10>
- [7] Sambo, A. S., Imran, A. A., Akanbi, M. L. A. (2022). Digital literacy skills among certified librarians in Nigerian libraries: Library overview. *Journal of Digital Learning and Education*, 2 (2) 70–79.
- [8] Shidi, H., Nwachukwu, V. (2015). Acquisition of digital library skills by library staff in Benue State, Nigeria. <https://doi.org/10.52562/jdle.v2i2.316>