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Level of knowledge on digital literacy among rural people of Assam

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Abstract

The Information and Communication Technology (ICT) revolution of the twenty-first century has led to the digitalization of everything. Everyone has to have sufficient expertise to carry out various tasks in digital format in order to take full advantage of such technological advancements. The study was conducted on 120 members of Jorhat and Golaghat District of Assam to assess the knowledge of the respondents on digital literacy and to find out the difference of knowledge of male respondents with female respondents on digital literacy. It was found that majority of the male respondents (51.66%) and 60.00 percent of the female respondents had medium level of knowledge, whereas 26.67 percent of the male respondents and 21.67 percent females had high level of knowledge and 21.67 percent of the male and 18.33 percent of the female respondents had low level of knowledge regarding the digital devices and services and there was no significant difference in knowledge of male and female respondents on digital literacy.

Keywords: Knowledge, digital literacy, ICT, rural people

Introduction

Information and Communication Technologies (ICT) has brought remarkable change in the lives of people in every aspect which enabling government to deliver better services even at remotest areas of the country. Information and communication technologies have brought a revolution in the way information is produced, processed, stored and distributed. Due to much advancement in ICT everything has been digitalized where everyone can easily access any information at any point of time. People's ability to access data sites such as social networking sites, online sports, according to recent data, is made possible by the internet (Yebowaah, 2018) [15]. In order to avail the full benefits of such technological advancements, everyone must be digitally. Relevancy of information available or disseminated in social media was good and optimum to adapt to their situation (Sandeep *et al.*, 2022) [14]. Only having the digital devices simply does not imply that people are digitally literate. Digital literacy is defined as a person's knowledge, attitude and practice skills to use the digital devices or technologies in an effective way to perform different activities of life through digital mode and keeps them updated with latest information. Many researchers found that digital literacy among women living in the villages have been almost non-existent. One out of ten internet users in rural India was a woman (Ganjoo 2022) [5].

The increasing use of digital media in society has increased the demand for digital literacy among pupils. The benefits of the internet have been widely researched and include keeping in touch with friends, transferring funds, engaging with entertainment and assisting with educational needs (Akhter, 2013) [3]. The acceptance and maintenance of proper, mature, and responsible behaviour is required while utilizing digital tools and technology. ICT provides major opportunities to rural livelihoods through improving digital literacy and helping in reduction of poverty by increasing productivity of rural areas (Bhatia and Kiran 2016) [4].

The digital literacy for agripreneurs, good power supply, and digital access facilities, which could help raise the sustainability of agribusinesses (Kaur *et al.*, 2022) [8].

With a good knowledge and positive attitude towards digital technologies people can easily access online resources including online lecture, webinar, online training, videoconferencing, searching videos, social media, online banking, paying bills, applying for jobs, transfer money, online shopping by the use of online platform. Internet use will continue to grow if users are no longer denied accessibility (Olatokun, 2013) [9]. Thus, people's knowledge level is very important to be very effective in this digital world. There is a need for improving the awareness and infrastructure of ICT tools in rural areas (Mishra *et al.*, 2020) [11].

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In order to meet the people's needs and to meet the country's benefits, it is necessary to find ways to increase the digital literacy level among the rural people. All of these will contribute to India's rural growth. Therefore, evaluation of rural people's knowledge level on digital literacy is important which will help the policy makers to plan different policies and strategies for the development of knowledge on digital literacy among the rural people which will help them to empower themselves in this technological era.

Methodology

The present study was conducted in the Jorhat and Golaghat District of Assam. From these two districts, The Krishi Vigyan Kendra Jorhat, Kaliapani, and Krishi Vigyan Kendra Golaghat, Khumtai were selected with the purpose that these two institutions are situated near to Assam Agricultural University. From these two Krishi Vigyan Kendras all the adopted villages were enlisted and then three numbers of villages from each Krishi Vigyan Kendras i.e 6 numbers of villages were randomly selected. From each selected village twenty respondents were selected randomly where ten were men and ten were women. So, the total number of respondents was 120 numbers among which 60 were male and 60 were female. The research design adopted for the present study is exploratory and descriptive. Following a review of the relevant literature, a structured interview schedule was prepared to assess the knowledge of the respondents on digital literacy and to find out the difference of knowledge of male respondents with female respondents on digital literacy. The schedule was consisting of 30 knowledge statements and the responses were scored as '1=Known' and '0=Unknown'. On the basis of the responses, the data were tabulated and analyzed with the help of appropriate statistical tools such as frequencies, percentage, mean, category interval method and Independent t-test.

Results and Discussion

1. Knowledge statements known and unknown by respondents on digital literacy:

The Table 1 indicated that 100 percent of the male respondents and 98.33 percent knows that digital devices make it easy to stay in touch with friends and family even if you are in another part of the world and followed by the

statement "With access to the internet huge proportion of the world's knowledge can be access instantly" was known by 98.33 percent male respondents and 96.66 percent of female respondents. The statement "Digital devices help to save lots of time in our personal lives by automating tasks" was known by 90.00 percent male respondents and 86.66 percent of female respondents. Majority of the male respondents (88.33%) knows about the statement "Online shopping is possible through different mobile apps", while majority of the female respondents (91.66%) cent of female members knows about that statement. "Digital mediums like websites, apps, and other digital platforms keep people updated with latest information" was known by 86.66 percent of male and 83.33 percent of the female respondents. The statement "With the help of computer and laptop people can do many jobs from hundreds, or even thousands of miles away without difficulty" was known by 86.66 percent of female and 85.00 percent of male respondents. For the statement "Addiction to social media, computer games, messaging, and dating websites can be hazardous" was known by 83.33 percent male and 68.33 percent female respondents. From these statements it can be concluded that people have the basic knowledge about the basic digital activities related to the digital literacy. But they have low knowledge regarding the advanced technology related activities related to information and communication technologies like "People can read e-book in mobile or laptop" was known by male (41.66%) and female (43.33%). The statement "With the help of smart phone and computers, a patient can consult their doctor who is far away from them" was known by male (36.66%) and female (38.33%). "Smart phones can be used for assessing weather related information" was known by 36.66 percent females and 35.00 percent male respondents. The statement "Call conferencing facilities are available in smart phones" was known by only 31.66 percent male and 33.33 percent female respondents. The statement "GPS and mapping in smart phones helps during travel" was known by 28.33 percent of the male respondents and 30.00 percent of the female respondents.

So, adequate awareness on these aspects can help the respondents to increase their knowledge regarding digital literacy which will ultimately help in performing different activities through digital mode.

Table 1: The percentage distribution of respondents according to the statements known and unknown by respondents on digital literacy

Sl. No	Statements	Male (n=60)		Female (n=60)	
		Known (%)	Unknown (%)	Known (%)	Unknown (%)
1.	Digital devices make it easy to stay in touch with friends and family even if you are in another part of the world.	100	0	98.33	1.67
2.	With access to the internet huge proportion of the world's knowledge can be access instantly.	98.33	1.67	96.66	3.34
3.	Digital devices help to save lots of time in our personal lives by automating tasks.	90.00	10.00	86.66	13.34
4.	Online shopping is possible through different mobile apps	88.33	11.67	91.66	8.34
5.	Digital mediums like websites, apps, and other digital platforms keep people updated with latest information	86.66	13.34	88.33	11.67
6.	With the help of computer and laptop people can do many jobs from hundreds, or even thousands of miles away without difficulty.	85.00	15.00	86.66	13.34
7.	Addiction to social media, computer games, messaging, and dating websites can be hazardous	83.33	11.67	68.33	31.67
8.	Negative impact of digital devices are also there	78.33	21.67	85.00	15.00
9.	Financial details, personal photos, videos, internet account access can severely harm someone's reputation and individual identities with the wrong intention.	63.33	33.67	70.00	30.00
10.	Online gaming and movie streaming is possible with the help of Smartphone	76.66	23.34	81.66	18.34
11.	Radio broadcasts programmes in many language	76.66	23.34	70.00	30.00
12.	Any event can be recorded as a video in a smart phone	75.00	25.00	71.66	28.34

13.	Booking tickets for bus, train, plane is easier through smart phones	66.66	33.34	65.00	35.00
14.	Online business can be done with the help of different apps like Facebook, WhatsApp, Instagram	63.33	33.67	70.00	30.00
15.	Social networking sites have made cheaper and easier contact with our friends and family.	65.00	35.00	63.33	33.67
16.	With the help of digital devices, people can connect to the people who are in abroad.	68.33	31.67	65.00	35.00
17.	Internet can provide the latest information	63.33	33.67	58.33	41.67
18.	Different bills (electricity bill, mobile bill, DTH bill) can be paid through digital devices.	53.33	46.67	51.66	48.34
19.	Voice recording is available in mobile phones.	51.66	48.34	53.33	46.67
20.	Smart phone provides transaction facilities.	55.00	45.00	53.33	46.67
21.	Now different lessons and courses can be completed virtually with the help of digital devices	46.66	53.34	48.33	51.67
22.	Agriculture related information can be received through digital devices like smart phones.	53.33	46.67	46.66	53.34
23.	People can leave a WhatsApp group ones he/ she added to the group.	45.00	55.00	46.66	53.34
24.	Digital devices like smart phones, computers and laptops can be used for attending meetings, webinars, Videoconferencing	43.33	56.67	48.33	51.67
25.	Kishan Call Centre of government of India has free call facilities	50.00	50.00	51.66	48.34
26.	People can read e-book in mobile or laptop.	41.66	58.34	43.33	56.67
27.	With the help of Smartphone and computers, a patient can consult their doctor who is far away from them	36.66	63.34	38.33	61.67
28.	Smart phones can be used for assessing weather related information	35.00	65.00	36.66	63.34
29.	Call conferencing facilities are available in smart phones.	31.66	68.34	33.33	66.67
30.	GPS and mapping in smart phones helps during travel.	28.33	71.67	30.00	70.00

2. Knowledge level of the respondents on digital literacy

The data in the Table 2 indicate that majority (51.66%) of the male respondents and 60.00 percent of the female respondents had medium level of knowledge regarding the available digital activities and services whereas 26.67 percent of the male and 21.67 percent of the female respondents had high level of knowledge and 21.67 percent of the male and female

(18.33%) had low level of knowledge on digital literacy. From the findings it was clear that the respondents had medium level of knowledge on digital literacy. It might be due to their low exposure to mass media, low extension contact, low extension participation. Similar findings were also observed by Malakar P. (2021) [10] and Raviya *et al.* (2020) [13].

Table 2: Distribution of the respondents according to the knowledge level of the respondents on digital devices and services n=120

Category	Male (n=60)		Female (n=60)	
	(f)	(%)	(f)	(%)
Low level of knowledge	13	21.67	11	18.33
Medium level of knowledge	31	51.66	36	60.00
High level of knowledge	16	26.67	13	21.67

3. Difference of knowledge of male respondents with female respondents on digital literacy:

From the Table 3 it can be concluded that there was no significant difference in knowledge of male respondents with the knowledge of female respondents on digital literacy. As there was not found much difference in the knowledge scores between male and female respondents. Hence, they were not significantly differing in possessing knowledge on digital literacy.

Table 3: Difference of knowledge of male respondents with female respondents on digital literacy

Variables	Knowledge Mean Score	't' value	Sig.
Knowledge of male respondents	22.83	1.424	0.157 NS
Knowledge of female respondents	21.39		

NS= Non Significant

4. Factors related to the knowledge of the respondents:

The data in the Table 4 revealed that age, educational qualification, digital media possessions as socio economic variables were found to have positive and significant correlation with the knowledge of the respondents on digital literacy.

Table 4: Factors related to the knowledge of the respondents

Independent variables	"r" value
Age	0.22*
Educational qualification	0.27*
Family size	0.09
Land holdings	0.11
Monthly income	0.13
Digital media possessions	0.23*
Number of trainings attended	0.12

*Significant

Conclusion

Based on the findings of the present study it can be concluded that a large percent of the male and female respondents had medium level of knowledge on digital literacy. Also they have low knowledge regarding the advanced technology related activities related to information and communication technologies. It was also found that there was no significant difference between male and female regarding knowledge on digital literacy. In order to improve the level of digital literacy among the people, it is essential to improve to level of knowledge among the people which can be achieved by conducting different trainings and awareness programmes regarding the benefits of using digital device and performing activities through digital mode. As digital technology is effective in bridging regional gaps, lowering transaction costs, enabling real-time events, and providing precise information,

people can get lot of opportunities for their development and of these will contribute to India's rural growth.

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