

GENDER DIFFERENCE IN USAGE AND AWARENESS OF DIGITAL INFORMATION RESOURCES IN TEACHER TRAINING COLLEGES: A STUDY OF ANANTNAG DISTRICT-J&K (INDIA)

Shabir Ahmad

Research Scholar

Department of Library and Information Science, Mangalore University

Mangalagangothri, Mangalore-574199, Karnataka, India

E-mail:shabirnaikoo@gmail.com

Khan Khaisar Muneebulla

Professor

Department of Library and Information Science, Mangalore University

Mangalagangothri, Mangalore-574199, Karnataka, India

E-mail:khaisarmk@gmail.com

Abstract

The study investigated the gender differences in usage and awareness of digital information resources in teacher training colleges in Anantnag district of J&K state of India. Present age is the age of Information Communication Technology (ICT) where each and every sector of our life is being influenced and revolutionized by it. Whether it be economic sector, health, politics, education, research, every sector is now ICT based. But among all other sectors the most important one is the education. ICT has got tremendous scope in education. In this regards, this study was undertaken to determine if there are gender differences in the usage and awareness of these ICT based Information resources among the B.Ed. students of the colleges under study. This was evaluated by assessing the differences in internet access, frequencies in digital resources utilization, reasons for utilization and problems faced when using the digital resources. The study was a descriptive cross sectional survey involving the use of a self-structured/pretested questionnaire. 300 students were sampled including 129 male and 171 female students using appropriate statistical technique for the purpose of data collection and analysis. The results showed male students have better computer experience than female students, as 33.33% males and only 12.28% females have more than 4 years of computer experience. Both male and female students prefer search engines like google for fulfilling their information need 40.31% and 44.45% being the ratio in males and females respectively. 37.99% male and 42.69% female students lack proper IT training to go for the digital information resource as only 10.85% male and 10.53% female students have gone for a proper course for using IT sources and search strategies involved there. .

KEYWORDS: Gender difference, Teacher Training Colleges, digital resources, internet, ICT

1. INTRODUCTION

The scope of the present study is geographically limited to the Kashmir Valley, one of the major provinces of the Jammu & Kashmir (J&K) state. The Jammu & Kashmir is the northern most state of India and covers a total area of 22,22,236 sq. kms. The J&K state comprises three natural provinces, namely Jammu, Kashmir, and Ladakh comprising of 10,10 and 2 districts respectively. The Kashmir region is commonly known as the Kashmir Valley. Known to its inhabitants as *Kashir*, the Kashmir Valley is perched among the Himalayas at an average altitude of about 6,000 feet above sea level. Due to the prevailing political tensions in the Valley, the development in all sectors including education is slow. However, the Internet services were introduced in the Valley during 1994-95 by Bharat Sanchar Nigam Limited (BSNL). With the passage of time, three more privately owned internet service providers (ISPs) - IPEAKS, SLICNET, and INFONET were registered, but only IPEAKS was operational. Presently, six ISPs (namely BSNL, AIRTEL, AIRCEL, Reliance and Vodafone) are operational in the Valley. Commercial cyber cafes are also available in all the major towns of the valley, in addition to that 57 Community Information Centres (CICs) are available in Kashmir to access online information. These facilities provide opportunities to the public in general and the academic community in particular to stay connected with the global village. Anantnag district is one of the southern and historical districts of J&K state and has always been known for its education and culture.

2. BACKGROUND OF THE STUDY

Anantnag district is one among the three southern districts of J&K state. The district has 5 teacher training colleges catering to the needs of the students of the district and other districts of the state as well as other states of India. All the 5 colleges are affiliated with University of Kashmir and registered with the Government of J&K. All the 5 colleges run B.Ed course only. The colleges are well equipped with all the required facilities and services like ICT lab, library, internet connectivity etc are available for the users. The year of establishment and the intake capacity of the colleges under study is given as under:

S.No.	Name of the college	Year of establishment	Intake capacity	No. of male st.	No. of female st.
01	Al-Ahad College of Education	2006	195	81	114
02	Jamia College of Education	2007	195	92	103
03	Rehmat-e-Alam College of Education	1994	445	172	273
04	Shah-i-Hamdani College of Education	2005	258	123	135
05	WEETA College of Education	2004	258	116	142
	Total		1351	584	767

3. REVIEW OF RELATED LITERATURE

In a study of college students' attitudes toward technology, Smith and Necessary (1996) found that males had significantly more positive attitudes toward computers than females did. However, Shaw & Gant (2002) contradicts these findings. They conducted a similar study and reported that gender had no significant effect on any of the dimensions of computer attitude studied. However, with the advancement of technology, there is possibility of greater adoption of technology by women. Ono and Zovodny (2003) also found women to be less frequent and less intense users of the Internet. Concern about gender inequality has now shifted from access to intensity. Mishra, Yadav and Bisht (2005) conducted a research study to learn the Internet utilization patterns of undergraduate students at the G B Pant University of Agriculture and Technology, Pantnagar. The findings of the study revealed that a majority of the students (85.7%) used the Internet in which male students use Internet in greater numbers than females. In short, all these studies reported that females are less intensive Internet users than males. While most scholars agree that the gender gap in Internet use has narrowed significantly in the college age group Goodson, McCormick, & Evans (2001), some gender differences have been found in attitudes toward technology, intensity of Internet use, online applications preferred, and experience in cyberspace.

4. OBJECTIVES OF THE STUDY

The objectives of this study in respect of the B.Ed. students at the colleges under study are:

1. Determine gender difference in digital information resources useage between male and female students.
2. Establish gender differences in the usage of different digital information sources
3. Find out if there are gender differences in usage of different software and computer applications.
4. Investigate how the level of information literacy affects use of digital library resources.

5. METHODOLOGY

The data was collected using the questionnaire method. The relevant literature was reviewed and analyzed to provide some direction in drafting questionnaire, later the statistical sampling formula was used to obtain the sample.

$$n = \frac{Z^2 N p q}{N e^2 + Z^2 p q}$$

Where,

Z = Probability given under 95% reliability

N = Population or universe

E = Sampling error

pq = Proportion of the total population

The population of the students under study was 1546. Further, to ensure an optimal sample size, the 95% confidence level was pre-assigned and a small sampling error (0.05) was fixed. Let the population distribution be 50%, and then the sample size was calculated as:

$$n = Z^2 Npq / Ne^2 + Z^2 pq$$

$$n = (1.96)^2 (1351)(0.50)(0.50) / (1351)(0.05)(0.05) + (1.96)^2 (50)(50)$$

$$n = 299.52 = \mathbf{300}$$

Using the stratified sampling technique, students were selected from the teacher training colleges of Bandipora district of J&K state. The data was collected from both genders using population allocation method as:

$$n_i = n(N_i/N)$$

Where,

$$i = 1, 2, 3, 4$$

$$n = 308 \text{ (Total sample size)}$$

$$N_i = \text{Total number of students in the Category}$$

$$N = \text{Total population from which sample is taken.}$$

Category	No. of students (N_i)	Proportion (N_i/N)	Sample size $n_i = n(N_i/N)$
Male	584	$584/1351 = 0.43$	$300 \times 0.43 = 129$
Female	767	$767/1351 = 0.57$	$300 \times 0.57 = 171$
Total	1351	100%	308

5. DATA ANALYSIS AND INTERPRETATION

5.1 Compute knowledge and Experience

Table -5.1 Showing gender difference in computer experience among the students under study

Computer experience (in years)	Male	Female
0-1	18(13.95%)	42(24.56%)
1-2	21(16.28%)	39(22.81%)

2-3	15(11.63%)	31(18.13%)
3-4	32(24.81%)	38(22.22%)
4+	43(33.33%)	21(12.28%)
Total	129(100%)	171(100%)

As the table displays there is a significant difference in the experience of computer use between male and female students under study. 33.33% males have more than 4 years of experience in computer use while as in females it is only 12.28% which is significantly on the lower side. On the other hand 13.95% male and 24.56% female students under study have less than one year of experience in computer use which need to attention to be paid at priority.

5.2 Different types of Digital resources of information used by the students.

Table -5.2 Different types of digital sources of information used by the students

Type of digital information source	Male	Rank	Female	Rank
CDs/DVDs	25(19.38%)	2	38(22.22%)	2
Online journals/magazines	14(10.85%)	5	15(8.77%)	4
Digital repositories	21(16.28%)	3	28(16.37%)	3
Search engines like google	52(40.31%)	1	76(44.45%)	1
Specific educational websites	17(13.18%)	4	14(8.19%)	5
Total	129(100%)		171(100%)	

As is evident from the table above that only 10.85% males and 8.77% females use online journals and magazines for their information need and is ranked 5th and 4th respectively. 40.31% males and 44.45% females go for search engines like google to satisfy their information need and is thus ranked 1st in both sexes. Special educational sites are used by only 13.18% males and 8.19% females and are thus ranked 4th and 5th respectively in males and females.

5.3 Computer applications usage

Table-5.3 shows the usage and purpose of different computer applications by the students

Computer application usage	Male	Female
Internet browsing	32(24.81%)	45(26.31%)
Word processing	21(16.28%)	28(16.37%)
Social networking/chatting	28(21.70%)	53(31%)
Games/entertainment	29(22.48%)	14(8.19%)
e-mail	19(14.73%)	31(18.13%)
Total	129(100%)	171(100%)

As the table depicts that in terms of application usage, 24.81% males and 26.31% females use internet browsing, the figures are quite collateral. In terms of games/entertainment there is a significant difference as 22.48% male and 8.19% females, use these applications which signal lower use of the application by the females. However on social

networking and chatting females (31%) surpass males (21.70%) with a significant difference.

5.4 Search skills

Table-5.5 shows the ways students acquire the search skills to get information

Ways students acquire search skills	Male	Female
Trial and error	69(53.49%)	88(51.46%)
Friend, colleagues and family	31(24.03%)	38(22.22%)
Library staff	08(06.20%)	16(09.36%)
Teaching staff	07(05.43%)	11(06.43%)
Formal course	14(10.85%)	18(10.53%)
Total	129(100%)	171(100%)

As the table depicts most of the students in both the sexes lack proper searching skills, 53.49% male and 51.46% females adopt trial and error method for searching information on internet. 24.03% males and 22.22% females are guided by friends, colleagues and family, while as only 06.20% males and 09.36% females are guided by the library staff, which is a miserable condition to have in any educational institute.

5.5 Barriers in using Digital Information Resources

Table5.5 shows the different barriers students feel in accessing digital sources of information

Barriers	Male	Female
Lack of proper IT skills	49(37.99%)	73(42.69%)
Lack of IT infrastructure	37(28.68%)	44(25.73%)
Lack of knowledge about digital resources	18(13.95%)	26(15.21%)
Too much information retrieved	21(16.28%)	21(12.28%)
Lack of time	04(03.10%)	07(04.09%)
Total	129(100%)	171(100%)

The table suggests that major barrier in the use of digital sources of information is lack of proper IT skills in the students as, as 37.99% male and 42.69% females lack proper IT training. 28.68% male and 25.73% females suggest the lack of IT infrastructure in the colleges. While as 16.28% male and 12.28% females feel retrieving too much informational on the web is a barrier. Only 03.10% male and 04.09% females lack time for access of digital information resources.

CONCLUSION

Internet connectivity has allowed access to many digital resources of information on a range of subjects. With this connectivity, both male and female students can access e-resources the libraries provide within and outside the library. The findings of the study

through light on the usage and preference given to different digital sources of information by the B.Ed. students in Teacher Training Colleges. This effort facilitates more use of the library and information centers by the students. The study showed that female students spend less time on internet as compared to male students. The study also showed that female students less experienced in the computer use, which needs to be addressed with immediate effect to bring female student folk at par with their male counterparts. Also it was observed that library staff is lagging far behind in guiding the students in search skills which is a miserable condition to have in any educational institution. The library staff needs to address this issue at priority and the management also need to go for more professional and motivative library staff. It is also advisable that library staff may be given refresher and orientation courses at regular intervals to keep them up to date with the latest developments in the ICT sector. It was also observed that most of the students lack skills to search information on web, so it is suggested that lectures and workshops be organized by the college managements and invite professional information scientists to help students use online and digital information resources in proper way.

REFERENCES

- Bhat, M., Iqbal. and Mudhol, Mahesh,V. 2014. "Knowledge and use of Digital Resources by Medical College Students of Government Medical College Jammu, J&K (India)." *International Research: Journal of Library & Information Science* 4(2): 376-390.
- Bhat, M. Iqbal. and Mudhol, Mahesh,V. 2014. "Dental Medical Students Approach towards Web Resources and Internet Use: A Survey of Dental Medical Colleges of Jammu." *International Research: Journal of Library & Information Science* 4(3): 376-390.
- Daramola, C.F. 2013. "Gender differences in the use of academic resources: the case of FUTA library." *International Journal of Library and Information Science* 5(8): 256-261.
- Goodson, P., McCormick, D., and Evans, A. 2001. "Searching for sexually explicit materials on the Internet: An exploratory study of college students." *Archives of Sexual Behavior* 30(2): 101-118.
- Ono, H. and Zavodny, M. 2003. "Gender and the Internet." *Social Science Quarterly* 84 (1): 111-121.
- Manda, P.A. and Mulkangara, F. 2007. "Gender analysis of electronic information resources use: A case of the university of Dares Salaam Tanzania." *University of Dares Salaam Library Journal* 9(1): 31-52
- Mishra, O.P., Yadava, N., and Bisht, K. 2005. "Internet utilization pattern of undergraduate students." *University News* 43(13): 8-12.
- Shaw, L. H., and Gant, L. M. 2002. "Users divided? Exploring the gender gap in Internet use." *Cyberpsychology & Behavior* 5 (6): 517-527.
- Shanahan, M.C. 2006. Information literacy skills of undergraduate medical radiation students. *Radiography* 13(3). Available: [http://www.radiographyonline.com/article/S1078-8174\(06\)00013-7/abstract](http://www.radiographyonline.com/article/S1078-8174(06)00013-7/abstract)
- Smith, B. N., and Necessary, J. R. 1996. "Assessing the computer literacy of undergraduate college students." *Education* 117 (2): 188-193.