

# A Study on Usage of ICT in Arts and Science College Libraries of Madurai and Tirunelveli Districts, Tamilnadu.

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**Abstract :** This research paper analysed the facilities information products and services of Information and Communication Technologies(ICT) implemented in the Arts and Science College Libraries, Madurai and Tirunelveli Districts of Tamilnadu State. The study focuses on the gender & age wise usage of ICT Media. The study aimed at finding of the usage of ICT by the faculties in Arts and Science Colleges of Madurai and Tirunelveli Districts. For this purpose a survey method was carried out using the stratified random sampling techniques. Nearly 210 questionnaires were distributed among the faculty members in Madurai District. The respondents were 200 (95%). The findings indicated the mostly used Information and communication technologies(ICT)Media is Mobile Phone by 166 (83%) of Internet and E-Mail 160 (80%). The results of the study show that majority ICT.

**IndexTerms - ICT, Internet, E – Resources, Arts College Libraries, Madurai Tamilnadu, Information Needs, ICT Tools.**

## I. INTRODUCTION

The technological advancement in information transfer and communication process have brought a radical change in searching, utilizing and maintaining the information resources and services. In academic institution the main role of electronic form of Information and communication technologies(ICT) is significant. The ICT comprises internet, network services, library automation, digital library, institutional repository and security system. Each one of us requires information for our day-to-day activities. The Information and communication technologies(ICT) also helps to increase the usage of library resources and services. ICT is very important for technological improvement in the present and future. Therefore, the colleges of Arts and Science around Madurai and Tirunelveli Districts must modernize the libraries with ICT infrastructure.

**A.Information and Communication Technology:** Information and communication technologies(ICT) is based on technology internet for information and communication services. It is availed to the large number of users. It provides access to information through telecommunication. It is the composite of electronic devices such as software applications converting, creating, storing, analyzing, organizing, retrieving, protecting, processing, and transmitting with audio-video systems with the help of telecommunication and satellite. It is essential to assess Information and communication technologies(ICT) infrastructure in library and information centers as to the changing needs of the users.

## B. Area Study

Madurai has been an academic centre of learning of Tamil culture, literature, art, music and dance for centuries. The American College in Madurai is the oldest college in the city and second oldest college in Tamil Nadu, established in 1881 by American Christian missionaries. The Lady Doak college, established in 1948, is the oldest women's college in Madurai. The Madura College (established in 1889), Fatima College (established in 1953) and M.S.S. Wakf Board College (established in 1964) are among the oldest educational institutions of the city. Vivekananda College, Tiruvedakam West, established in 1971, is the only residential college run in the gurukula pattern of education. Madurai Kamaraj University (originally called Madurai University), established in 1966, is the state run university that has 109 affiliated arts and science colleges in Madurai and neighbouring districts. The following Arts & Science Colleges is located in the Madurai and Tirunelveli Districts.

## C. Madurai District

(1)Sourashtra College, (2)Sourashtra College for Women, (3)The American College (Autonomous), (4)E.M.G. Yadava Women's College, (5)Govt. Arts College, (6)M.S.S. Wakf Board College, (7)Madurai Institute of Social Sciences, (8)Madurai Kamaraj University Evening College, (9)Mannar Tirumalai Naicker College, (10)N.M.S.S. Vellachami Nadar College, (11)Pasumpon Muthuramalinga Thevar College, (12)Saraswathy Narayanan College, (13)Senthamil College, (14)Sri Meenakshi Govt. College for Women (Autonomous), (15)Yadava College, (16)Ambiga College of Arts and Science, (17)Annai Fathima College of Arts and Science, (18)Arul Anandar College (Autonomous), (20)C.S.I. Darling Selvabai Thavaraj David College of Arts and Science for Women, (21)Fatima College (Autonomous), (22)Lady Doak College (Autonomous), (23)M.A.V.M.M. Ayira Vysiar College, (24)M.K. University College, (25)Madura College (Autonomous), (26)Mangayarkarasi Arts and Science College for Women, (27)N.M.S. Sermathai Vasan College for Women, (28)P.K.N. Arts and Science College, (29)S.P. College of Science and Arts, (30)Sri Nagalakshmi Ammal Arts and Science College,(31)St. George's Jayaraj Chelladurai College for Women, (32) Subbalakshmi Lakshmipathi College of Science, (33)Thiagarajar College (Autonomous), and (34)Vivekanandha College (Autonomous).

**D.Tirunelveli District**

(1)Govt. Arts College for Women, (2)Sarah Tucker College, (3)Ambai Arts College, (4)Annai Hajira Women's College, (5)C.S.I. Jeyaraj Annapackiam College, (6)Pasumbon Muthuramalinga Thevar College, (7)Perarignar Anna College, (8)Rose Mary Arts and Science College, (9)Sadakathullah Appa College, (10)Sardar Raja Arts College, (11)Sattanatha Karaiyalar College, (12)Sri Paramakalyani College, (13)Sri Parasakthi Women's College, (14)Sri Saradha Women's College, (15)St. John's College, (16)St. Xavier's College, (17)T.D.M.N.S. College, (18)The M.D.T. Hindu College, and (19)Thiruvalluvar College.

**2. LITERATURE REVIEW**

**S.Dhanavandan, et al., (2008)** conducted a survey of Library Professional of Tamil Nadu and they found that the majority of users are aware about the availability of Information and communication technologies(ICT). And also they observed that (92%) of Library Professionals used the Mobile Phones as a ICT Tool. And (83%) of respondents us of the Internet facilities.

**R. Hema, et al (2013)** conducted a research study to investigate the Information and communication technologies(ICT) users of College Teachers, Students and Researchers and found that the ICT resources are useful.

**Krubu et al, (2011)**study found out that 29 female (60.4%) and 19 (39.6%) male aware of Information and communication technologies(ICT).

**Paulson C. et al.,(2013)** aimed to access and evaluate the exposure of Information and communication technologies(ICT) facilities in Arts and Science College Libraries and his study reveals the selected libraries have multimedia (27.27%), Internet (50%), Network (36.36%) OPAC Services (54.55).

**Rattan P. et al.,(2013)** conducted a survey in six government engineering colleges of Punjab and he found that the Information and communication technologies(ICT) Usage for information content.

**Saleem, A., et al.(2013)** conducted a study on the application of Information and communication technologies(ICT) skills and its usage in LIS Professionals.

**Senthur Velmurugan et al.,(2014)** conducted a study among the users and found that majority of respondents (49.08%) have excellent awareness of ICT resources. The (49.58%) users are based on Google Search Engine for Information and communication technologies(ICT) resources.

**3. OBJECTIVES**

- i. To study and survey the usage of Information and communication technologies(ICT) Tools among Arts and Science College Faculty Members of Madurai and Tirunelveli Districts.
- ii. To understand and find out how far the Information and communication technologies(ICT) Tools applied by departmental wise.
- iii. To compare and differentiate the usage of Information and communication technologies(ICT) Media on the basis of qualification wise.
- iv. To identify the factors that affect usage of ICT by locality wise as rural and urban.
- v. To analyze and interpret the opinions of users of Information and communication technologies(ICT) Tools regarding age wise less than 35 and above age 35.
- vi. To identify the relationship between the Assistant Professor and Associate Professor as designation wise using various Information and communication technologies(ICT) Media.

**4. HYPOTHESES**

- i. There is no significant difference between male and female of Arts and Science College Faculties of Madurai and Tirunelveli Districts.
- ii. There is no significant difference in using Information and communication technologies(ICT) application in regard with departmental wise.
- iii. There is no significant difference using ICT with qualification wise.
- iv. There is no significant difference found out using ICT Media on the area wise.
- v. There is no significant difference by the usage of Information and communication technologies(ICT) on age wise.
- vi. There is no significant difference with designation wise using various ICT applications.

**5. METHODOLOGY**

The present study is based on survey method. There are more than 33 Arts and Science College from Madurai District and 19 Arts & Science College from Tirunelveli District Faculty Members are selected by adopting Stratified Random Sampling Method. A total of 242 Faculty Members and 220 have responded. Hence, the total respondent for the study is 90.91%. The information or data given by the Faculty is analyzed and presented.

**6. RESULTS AND DISCUSSION**

The information was collected out of 220 Faculty Members and they were {Sub Groups: Gender, Department, Qualification, Locality, Age, Designation} and information needs in Maduarai and Tirunelveli Districts.

**Gender:** Gender shows that 88(40%) Respondents are male and 132(60%) Respondents are female.

**Department:** Department shows that 94 (42.73%) faculty members are from the Arts departments, and 126(57.27%) faculty members are Science departments.

**Qualification:** Qualification shows that 101 (45.91%) Respondents faculty members had UG and 38 (17.27%) Respondents PG degree. 32 (14.55%) Respondents were holding M.Phil., degrees. Whereas 96(22.27%) Respondents were holding Ph.D., degrees respectively.

**Locality:** Locality shows that 75 (34.09%) Respondents are rural area and 145 (65.90%) are urban area.

**Age:** Age shows that 121 (55%) respondents are below 35 age category. Only 99 (45%) Respondents are faculty members were 35 years and above.

**Designation:** Designation shows that the 169(76.82%) respondents are Assistant Professors. While 51(23.18%) respondents are Associate Professors.

The investigator has adopted the Information and communication technologies(ICT) tool prepared by the D.Sankaranarayanan. The investigator modified the tool based on the samples.

**Table-1**  
**Sample Distribution of Population Study**

Demographic Variable	Sub-variables	No. of samples	(%)
Gender-Wise	Male	88	40
	Female	132	60
Department-Wise	Arts	94	42.73
	Science	126	57.27
Qualification-Wise	UG	101	45.91
	PG	38	17.27
	M.PHIL	32	14.55
	PH.D	49	22.27
Locality-Wise	Rural	75	34.09
	Urban	145	65.91
Age-Wise	Up to 35	121	55.00
	Above 35	99	45.00
Designation-Wise	Assistant Professor	169	76.82
	Associate Professor	51	23.18

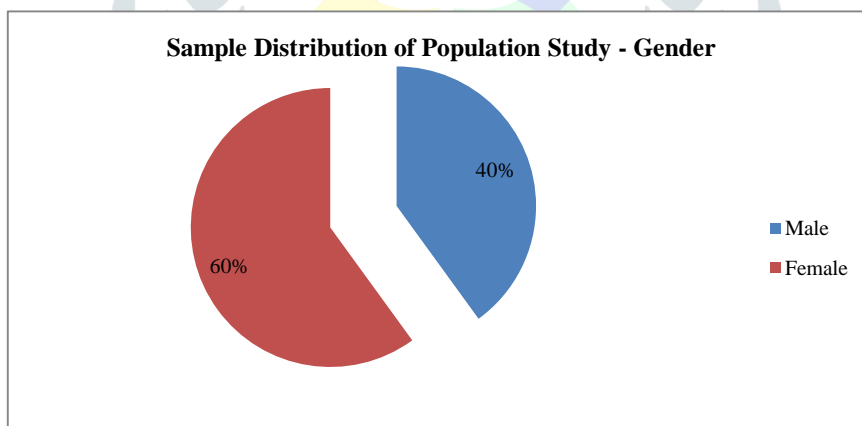


Fig. 1 Sample Distribution of Population Study - Gender

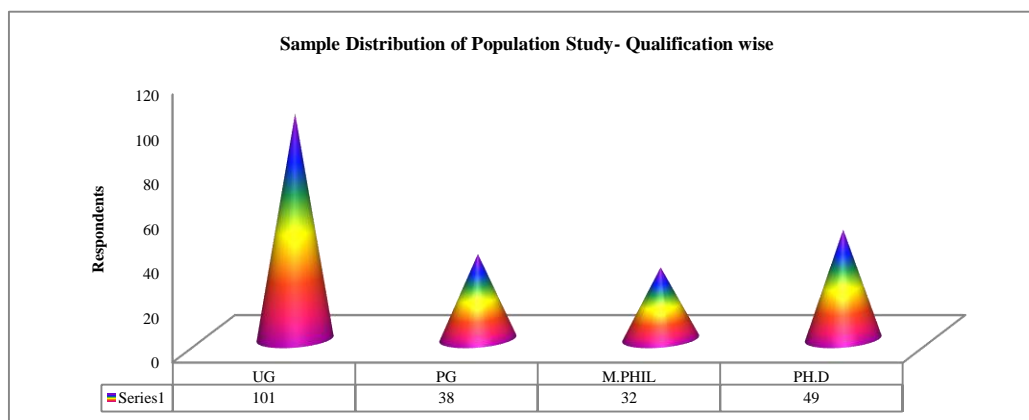


Fig.2 Sample Distribution of Population Study- Qualification wise

**Table-2**  
**Analysis and Interpretation of ICT Tools**

ICT Tool	No. of Respondents	(%)
E – Group	79	35.91
E – Mail	166	75.45
Fax	49	22.27
Internet	176	80.00
Intranet	42	19.09
Mobile Phone	208	94.55
Video Conferencing	31	14.09
Voice Mail	22	10.00

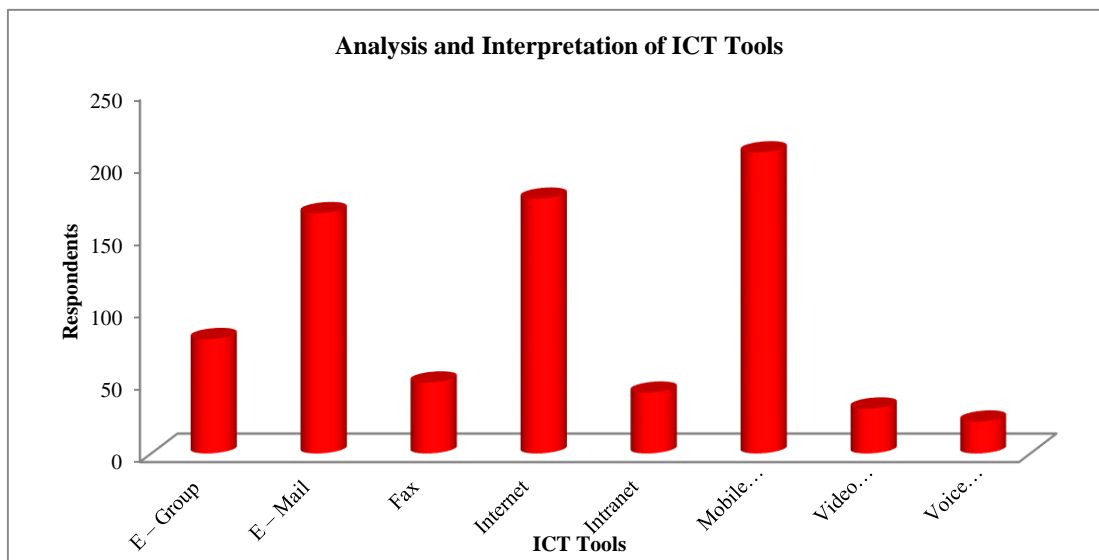


Fig.3 Analysis and Interpretation of ICT Tools

**Table-3**  
**Media Usage Based on Gender and Age**

ICT Media	Gender-Wise		Age-Wise	
	Male	Female	Age Below < 35	Age Above > 35
E – Group	34 (15.45%)	51 (23.18%)	47 (21.36%)	35 (15.91%)
E – Mail	82 (37.27%)	91 (41.36%)	103 (46.82%)	66 (30%)
Fax	33 (15%)	13 (5.91%)	28 (12.73%)	24 (10.91%)
Internet	76 (34.55%)	102 (46.36%)	98 (44.55%)	78 (35.45%)
Intranet	22 (10%)	29 (13.18%)	12 (5.45%)	31 (14.09%)
Mobile Phone	104 (47.27%)	100 (45.45%)	96 (43.64%)	95 (43.18%)
Video Conferencing	11 (5%)	14 (6.36%)	10 (4.55%)	19 (8.64%)
Voice Mail	14 (6.36%)	11 (5%)	15 (6.82%)	12 (5.45%)

The Table-2 depicts the percentage of ICT Tools by the respondents. From the survey of the study, it shows that the users of mobile phone (94.55%) respondents is higher than the other tools.

Table-3 describes that male and female differ in the usage of ICT Media. Male used mobile phone 104(47.27%) higher than female. So in the regard of female it is found out that internet 76(34.55%) used by female more than the male. Analysing on the basis of age-wise the table shows those below 35 use e-mail tool 96(43.64%) and above 35 use mobile phone 95(43.18%).

## 7. CONCLUSION

The study investigated the Aptitude of the faculties working in Arts and Science Colleges around Madurai and Tirunelveli Districts in the Usage of Information and communication technologies(ICT) Tools. Mobile Phone occupies first position on seeing the collected samples. Among the usage of different Information and communication technologies(ICT) Media Tools the mobile phone is used more than the other media by the faculty members. There is no significant relationship between the Use of (E – Mail and Internet vs. Sex). The respondents age less 35 and above 35 were surveyed and the result of the survey the age less 35 and above 35 were using e-mail and mobile phone. The service of (Video Conferencing and Voice Mail) were not seen sufficiently. So it should be increased in Arts and Science Colleges. As to the suggestion of my friends they say the use of Information and communication technologies(ICT) Tools going well potentially for collecting information and it is accessible for users to have touch with their friends and social community.

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