CHAPTER VI

FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 INTRODUCTION

In this Chapter, the data collected on 'Awareness on ICT application among the women library professionals working in various higher educational institutions in Coimbatore, Madurai and Trichy region through questionnaire (Appendix - I) has been analyzed and interpreted, using appropriate statistical tools and techniques, to fulfill the stated objectives and tested the hypotheses. The findings have been presented here.

6.2. FINDINGS
6.2.1. Sample

- The questionnaire were distributed to 350 women library professionals working in three regions viz., Coimbatore, Madurai and Trichy and the responded were 333. The response rate is 95 percentage.

6.2.2. Demographic Details

- Out of 333 respondents, 144 (43.2%) were from Coimbatore region; 88 (26.4%) from Madurai and 101 (30.3%) from Trichy. Among 333 respondents, 143 (42.9%) were from Arts and Science; 129 (38.7%) from Engineering and 61 (18.3%) from other domain. Similarly there are 170 (51.1%) were librarians. It is followed by 82 (24.6%) were Assistant Librarian and 81(24.3%) were others. Among 333, 96 (28.8%) were below five years of experience; 91(27.3%) were between 6-10 years; 71 (21.3%) between 11-15 years; 53(15.9%) between 16-20 years and the remaining 21 (6.6%) were above 21 years of experience. There are 30 (9.0%) belongs to the age group of below 30 years. It is followed by 126 (37.8%) between 31 and 40 years; 105 (31.5%) between 41 and 50 years and 72 (21.6%) above 50 years.

6.2.3. Factors for Analysis

- The awareness on ICT among the women library professionals has been identified based on four factors such as views, use, opinion and threats. Each factor has been divided into few categories and each category has number of variables. Respondents' opinion on each variables has been ascertained based

on verbal scales with due weightage. Besides respondents' opinion, it has further analyzed based on independent variables such as region, domain, designation and experience.

6.2.4. Views

- The views on ICT has been ascertained based on Views on ICT, Importance of ICT, and Place of Accessing E- resources

6.2.4.1. Views on ICT

- It could be inferred that ICT has not been an ornamental idea and something that could be beneficial. Further it could also be inferred that ICT is a strategic part of library service irrespective of region, domain, designation and experience.

- The Kruskal-Wallis test has further been extended to independent variables such as region, domain, designation and experience in order to identify precisely who had maximum usage. The chi-square test had also been administrated.

- Assistant Librarians those who have less than 10 years of experience of Engineering domain working in Madurai region indicated that ICT were something that could be beneficial. In the case of Trichy region, the Assistant Librarians of Engineering domain who had above 10 years indicated that ICT is strategic part of service where as the Librarian of same category indicated that ICT has not an ornamental idea. The calculated value of chi-square test less than the table value indicate that the ICT were significant irrespective of region, domain, designation and experience

6.2.4.2. Importance of ICT

- It could be inferred that ICT is not a formality and it is quite important. Further it could also be inferred that ICT is updatable.

- Library Professionals those who had less than 10 years of experience of other domain working in Madurai region indicated that ICT is quite important. In the case of Trichy region, the Asst. Librarian of other domain who had above 10 years indicated that ICT is not updatable where as the library professionals of Engineering domain of same category indicated that ICT is a formality. The calculated value of chi-square test less than the table value indicated that the

ICT were significant irrespective of region, domain, designation and experience.

6.2.4.3. Place of Accessing E-Resources

- The place of access for e-journals; network based services and internet services were library. The home had been preferred for Audio/video recording and CD/DVD. However the department had been used as intermediary between home and Library.

- Library professionals those who had less than 10 years of experience of other domain working in Madurai region used Internet Services and above 10 years used e-journals. Similarly Madurai region, librarian below 10 years of Engineering domain used CD/DVD more than other library professionals. Coimbatore region Arts and Science library professionals who have above 10 years used audio/video recording. Further Asst. Librarian of other Coimbatore region who had below 10 years of experience preferred network based services more than other services.

6.2.5. USE

- The use on ICT had been ascertained based on Awareness of Library automation software; online resources regularly used; online resources needed for the library; Frequency of accessing e-Resources; Ways of identifying e-Resources; Preferred Method of learning Internet ; Time spent on Internet tools; Frequency of use of Internet search engines and Use of web tools and services.

6.2.5.1. Awareness on Library Software

- The top preference of the software was indicated to SOUL. It is followed by LIBSYS and Alice Windows. Least preference were indicated to the software WINISIS and KOHA.

- It could be inferred that major library automation software were either heard about or aware among the library professionals.

- The Trichy region women professionals were aware of CDS/ISIS, LIBSYS, SOUL, WINISIS and ALICE for Windows, where as Madurai preferred LIBASOFT and Coimbatore preferred KOHA. Arts and Science respondents preferred KOHA and WINISIS where as Engineering preferred LIBASOFT and

Alice Windows. Similarly other domain professionals' preferred CDS/ISIS, LIBSYS and SOUL. In the case of designation other library professionals prefered KOHA, LIBSYS, LIBASOFT and SOUL where as Assistant Librarian preferred CDS/ISIS and Alice Windows. In the case of Librarian prefered WINISIS. The Other library professionals who have below 10years preferred CDS/ISIS, SOUL, KOHA, LIBASOFT, Alice Windows, whereas above 10 years preferred LIBSYS/and WINISIS.

- It could be inferred that Other library professionals who had below 10 years were interested in learning the library software. More over Trichy region Other library professionals were interested in knowing library software compare with others. The calculated value of chi-square test less than the table value indicated that the awareness of the softwares were significant irrespective of region, domain, designation and experience except few software such as LIBSIS, SOUL and KOHA.

6.2.5.2 . Online resources regularly used

- The top preference of the online resources was indicated to Applied Science. It is followed by Web of Science and Engineering Village. Least preference were indicated to IEEE and JCCC.

- Coimbatore region other domain Librarian of above 10 years were aware Emerald full and UGC INFONET more than others. Similarly Other library professionals of other domain of below 10 years aware ASCE and euro monitor. Librarian below 10 years of Engineering domain of Coimbatore region aware AICTE INDEST.

- Madurai Arts & Science other library professionals below 10 years aware applied science and engineering village whereas Assistant Librarian of Engineering domain aware ABI/INFORM, capitaline and science direct. Similarly Madurai others domain Assistant Librarian above 10 years aware ACM, EBSCO and Sci finder.

- Trichy, Engineering, Other library Professionals, above 10 years more aware ASME and J-GATE where as Assistant Librarian, below 10 years preferred

IEEE. Similarly other domain Other library professionals of below 10 years aware Nature.

- Trichy, Arts and Science, Librarian, above 10 years of experience were aware of INSPEC whereas below 10 years experience preferred JCCC. Similarly below 10 years of experience Other library professionals were aware of ASTM and web of Science. Majority of the online resources calculated value of chi-square test were less than the table value indicated that the use of online resources were significant. It could be inferred that the remaining online resources were to be made aware among the professionals irrespective of region, domain, designation and experience.

6.2.5.3. Online Resources needed for the Library

- Coimbatore region Engineering domains Librarian of above 10 years were preferred ASTM, JCCC and web of Science.

- Madurai Engineering domain Assistant Librarian of below 10 years aware ASCE, IEEE and Sci finder whereas Assistant Librarian who had above 10 years of experience of other domain prefer ASME, INSPEC and UGC INFONET. Similarly Madurai other domain Other library professionals of above 10 years preferred EBSCO.

- Trichy, Engineering, Other library professionals, above 10 years preferred Applied science, Capitaline, Euro monitor and Science Direct where as Librarian preferred AICTE INDEST, Engineering village and Nature.

- Trichy, Arts and Science, Librarian, above 10 years preferred ACM, Emerald full and J-GATE.

- It could be inferred that the remaining online resources were to be made aware among the professionals irrespective of region, domain, designation and experience.

6.2.5.4 Frequency of Accessing e-resources

- Among the five resources internet service were used predominantly. It is followed by CD/DVD and Network based service. Least preference was given for Audio/Video recording. Even e-journal had been given fourth preference nearly

50.8% of respondents were accessing once in a day.   It could be inferred that e-resources were accessed once in day.

- Madurai region other domain, Other library professionals who were below 10 years of experience were accessing the Audio/video recording, and network based services more. Whereas above 10 years preferred   e-journals.

- In the case of Coimbatore region Arts and Science domain below 10 years Other library professionals preferred internet services and Librarian of other domain above 10 years preferred CD/DVD services.

- In general it is inferred that the Librarian and Other library professionals, the frequency of accessing e-resources were more when compare with Assistant Librarian and Trichy region.

6.2.5.5 Ways of Identifying e-resources

- Among the five ways of identifying the e-resources 'use of internet', was identified as first preference. It is followed by through personal and seminars. Least preference was given to citation and bibliography.

- The majority of the ways if identifying e-resources chi-square calculated values were less than the table value which indicates that these ways of identifying e-resources were significant.

- The Librarian of Engineering domain who had above 10 years preferred use of internet as a way of identifying e-resources where as Assistant librarian preferred through personal as a best way. In the case of Other library professionals of other domain who had less than 10 years of experience preferred seminar where as above 10 years identify bibliography as a best way of identifying e- resources. The Other library professionals those who had more than 10 years of experience in Engineering domain of Coimbatore region preferred citation as a best mean of identifying the e-resources.

- In general, it is inferred that the respondents who had above 10 years, Engineering and other domain were predominantly using all the five ways for getting exposure to e-resources.

6.2.5.6 Preferred Method of Learning Internet

- Among the seven preferred methods of learning internet, 'online instructions' as first preference. It is followed by 'from literature' and 'instruction by library staff'. Least preferences were given for 'information literacy program' and 'through courses'.

- The preferred methods of learning internet were Online instructions, from literature and instruction by library staff rather than information literacy program and courses.

- The Assistant Librarian, who had below 10 years of experience, working in Engineering domain in Coimbatore region indicated that through courses was the preferred method of learning internet. The Assistant Librarian working in Engineering domain of Trichy region who had above 10 years indicated online instructions and instructions by library staff were the preferred methods. In the case of Madurai region Librarian of Arts and science domain those who had below 10 years preferred friends whereas other domain respondents preferred information literacy program. In the case of Madurai, Arts and Science Other library professionals below 10 years preferred literature.

- It could be inferred that Engineering domain of Coimbatore and Trichy region were adopting online instructions, self-learning and instruction by library staff and through courses as various methods in learning internet. The Arts and Science of Madurai region preferred friends and from literature method in learning internet.

6.2.5.7 Time spent on Internet tools

- The respondents below 10 years preferred tools were e-mail, Newsgroups / Discussion list, Web Resources, e-Journals, e- Database and e-directories where as above 10 years of experience preferred Web Resources, e- Database and online services.

- Trichy region Engineering domain respondents preferred method were e-mail, and e-thesis whereas Arts and Science domain preferred tool were newsgroups/discussion list and e-database.

- In the case of Coimbatore region Other library professionals preferred online service, e-journal and web resources whereas Arts and Science preferred method were e-directories.

- It could be inferred that Other library professionals effectively spending their time on internet tools for retrieving information

6.2.5.8 Use of Internet search engines

- Among the ten search engines google was indicated as first preference. It is followed by Lycos and Bing. Least preference were given for MSN and Altavista.

- Google, Lycos and Bing search engine were used rather than MSN, Altavista and Hotbot.

- Other library professionals of below 10 years irrespective of Coimbatore and Madurai region Engineering domain indicated Ask, Google, Hotbot, MSN and Yahoo were their preferred search engine.

- Trichy region engineering domain Assistant Librarian of above 10 years preferred Altavista and Lycos whereas Bing preferred by Madurai region.

- Trichy region Assistant Librarian of Arts and Science domain who had above 10 years preferred Excite search engine.

- Trichy region engineering Other library professionals of above 10 years preferred webcrawler.

- Madurai region Arts and Science domain Other library professionals below 10 years preferred Yahoo as their search engine. Thus library professionals frequently utilised various search engines for retrieving information.

- Among the eight tools e-journals were indicated first preference. It was followed by online services and web resources. Least preference were given for e-thesis and e-mail.

- Majority of the respondents were spending the time in the internet tools till their task completes. This indicated that they were effectively using the internet tools.

- Other library professionals spent their time irrespective of region and domain indicated by using the internet tools such as e-mail, Newsgroups / Discussion list, e-Journals, e- Database, e-directories and online services except Librarians preferred tool was e-Thesis.

6.2.5.9 Use of web tools and services

- Among the ten prevalent web tools and services, blogging was indicated as first preference. It is followed by "Discussion Groups" and "listserve". Least preferences were given for RSS feed and Social book marking/aggregating. The preferred web tools and services were blogging, discussion group and listserve.

- Madurai region, Arts and Science respondents Librarian below 10 years preferred Audio/video sharing/ webcasting and RSS feed where as Other library professional preferred Listservs and Social book marking/aggregating. Similarly Assistant Librarians of above 10 years preferred Wikis (Wikipedia, LISWiki).
- Madurai region, Engineering domain Assistant Librarian of above 10 years preferred email/instant messaging/chat and below 10 years preferred social networking.
- Trichy Arts and science Other library professional below 10 years preferred blogging and Assistant Librarian of above 10 years preferred discussion groups.
- Coimbatore region of Engineering domain Assistant Librarian those who have below 10 years preferred content management.
- It could be inferred that Arts and Science domain of Madurai and Trichy region were using web tools and services effectively.

6.2.6. OPINION ON ICT

6.2.6.1. Opinion on providing Web based Library Services

- Among the ten services Online book reservation/renewal service were given first preference. It is followed by Links to ask@librarian service and Library web OPAC. Least preference were given for New book additions display.
- It could be inferred that all the web based library services were preferred by the professionals except new book display.
- Madurai region, Arts and Science domain librarian of below 10 years preferred Institutional repository collection where as link to ask@librarian service were preferred by Other library professionals.
- Madurai region Engineering domain Assistant Librarian of above 10 years preferred national and international institution repository link where as below 10 years preferred links to e-journal databases.
- Madurai region, other domain librarians who had below 10 years preferred online membership registration.
- Trichy region, Arts and Science domain Librarian who had below 10 years preferred new books addition display.

- Trichy region, Engineering domain Assistant Librarian who had above 10 years of experience preferred Library web OPAC (book search); Online book reservation/renewal and Links to open source e-journals where as Librarians preferred Links to Digital library collections.

6.2.6.2. Opinion on Social Media Services

- Among the 10 social media tools Twitter was given first priority. It is followed by Wikis and Flicker. Least preference was given to RSS feed.

- Coimbatore region Arts and science domain Other library professionals below 10 years indicated their preferences as myspace, pod cast, wikis where as Engineering Librarian above 10 years preferred facebook.

- Madurai Engineering Assistant Librarian above 10 years indicated library blog whereas Other library professionals below 10 years indicated Flicker.

- Madurai other domain Other library professional below 10 years indicated Ask@librarian whereas Librarian indicated RSS feed.

- Trichy engineering Assistant Librarian of above 10 years indicated Twitter where as Arts and Science indicated Youtube.

6.2.6.3. Utility of ICT

- The women library professionals were indicated "To keep in touch with old friends"; "Get to know someone" and "Facilitates to make important decision" had the first three preferences.

- The least preferences were given for "Exchange of confidential or sensitive information", "Help to improve the professional developments" and "It is an opportunity to interact with friends and experts".

- The proximity matrix analysis enabled to identify the nearest and farthest variables.

Nearest factors are

- To keep in touch with old friends and Get to know someone
- Facilitates to make important decision and Resolve disagreements
- Facilitates to make important decision and It is an opportunity to interact with friends and experts

Farthest factors are

- Get to know someone and Facilitates to make important decision
- To keep in touch with old friends and Facilitates to make important decision
- Time saving and it is an opportunity to interact with friends and experts.

- Madurai region other domain Other library professionals who had below 10 years of experience indicated "Provides a platform for discussing the professional issues" and "Time saving" were main utility of ICT whereas librarian indicated "It is an opportunity to interact with friends and experts" has another utility.

- Madurai region Arts and Science domain Librarian below 10 years indicated "Facilitates to make important decision" where as Assistant Librarian indicated "Exchange of confidential or sensitive information".

- Trichy region Engineering domain Assistant Librarian who had below 10 years indicated To keep in touch with old friends.

- Trichy region Arts and Science domain Other library professionals below 10 years indicated "Resolve disagreements" was a major utility where as above 10 years indicated "Get to know someone". Similarly other domain Other library professionals "Help to improve the professional developments" indicated as major utility of ICT.

6.2.6.4. Attitude towards ICT Applications

- The professionals were indicated "Reduce workload of library professional"; "Facilitates quick access to current data" and "Increased job satisfaction of library professional" had the first three preferences.

- The least preferences were given for "Disturbs routine work of the library"; "Affects regular budgeting provision" and "Help to improve communication". The majority of the ICT applications chi-square calculated values were less than the table value which indicated that these ICT applications were significant.

- Coimbatore Engineering Other library professionals of above 10 years preferred attitude towards ICT applications were to improve the quality of library service and to make integration within the library.

- Madurai Arts and Science Assistant Librarian below 10 years preferred attitude towards ICT applications were to facilitate quick access to current data where as Engineering domain Assistant librarian indicated help to improve communication. Similarly above 10 years experience other domain Assistant Librarian attitude was to improve the status of library.

- Trichy region Arts and Science domain Assistant Librarian above 10 years attitude was do not disturbs routine work of the library.

- Trichy Engineering Other library professionals above 10 years attitude were Increased job satisfaction of library professional and Reduce workload of library

professional where as other domain attitude was do not affect regular budgeting provision.

6.2.7. THREATS ON ICT

6.2.7.1. Problems faced in the Effective Utilization of ICT

- "Lack of scope due to non implementation of ICT applications" had been indicated as first reason. It is followed by "No support from administration in training library professionals" and "Lack of infrastructure".
- Least preference were indicated to "Inadequate training in ICT applications" and "Lack of co-ordination among library staff".
- The proximity matrix analysis enabled to identify the nearest and farthest variables.

Nearest factors are

- Lack of interest on the part of users and Lack of support from authorities for implementing ICT applications in library
- Lack of scope due to non implementation of ICT applications and No support from administration in training library professionals.
- No initiative from professional associations to conduct specialized training programs and Lack of infrastructure

Farthest factors are

- Fear of ICT applications and Inadequate training in ICT applications
- Fear of ICT applications and No initiative from professional associations to conduct specialized training programs
- Lack of support from authorities for implementing ICT applications in library and Inadequate training in ICT applications
- Madurai Arts and Science Librarian below 10 years suggested "lack of infrastructure" and above 10 years suggested "No initiative from professional associations to conduct specialized training programs".

- Trichy Engineering Librarians above 10 years indicated "Lack of cooperation among library staff" whereas Arts and Science Librarian below 10 years suggested other problems.

- Coimbatore Arts and Science Librarian of below 10 years suggested Lack of scope due to non implementation of ICT applications, no support from administration in training library professionals and lack of interest on the part of users. Whereas above 10 years indicated fear of ICT applications.

6.2.7.2 LIMITATION

- The women professionals were indicated feminine limitations was their first preferences   followed by the cultural, financial, environmental and learning limitations.

- Coimbatore region, Arts and Science domain Other library professional of below 10 years indicated financial and cultural limitations in learning ICT.

- The limitation as feminine has been indicated by the Other library professionals who have less than 10 years of experience of Arts and Science domain belongs to Madurai region.

- The Assistant Librarians who have above 10 years working in Arts and Science domain of Trichy region indicated learning was a limitation.

- Trichy region other domain librarian above 10 years indicated environment was a major limitation in learning ICT.

6.2.7.3 Suggestions for improving ICT skills

- Involvement in teaching was given first preference. It is followed by Reading general books/ literary works and Learning from web resources.

- Least preference were given for Undertaking individual research work/ publication and Searching internet for relevant professional information.

- Coimbatore Engineering Other library professionals above 10 years suggested for Regular attendance of relevant conferences/ workshops, regularly reading relevant

professional literature. Whereas Librarian suggested attending professional association meetings.

- Madurai Engineering Assistant Librarian of above 10 years suggested Discussion of professional matters with colleagues where as below 10 years Undertaking individual research work/ publication. Similarly Other library professionals below 10 years of this region suggested Reading general books/ literary works.

- Trichy region Engineering domain Assistant Librarian who had above 10 years suggested Learning from web resources and Going for higher studies/ Formal courses whereas Librarians suggested Searching internet for relevant professional information.

- Trichy region Engineering domain Librarian below 10 years suggested involvement in teaching whereas above 10 years suggested In- house training programs for staff development.

FINDINGS IN RELATION TO HYPOTHESES

The findings and the hypotheses thus formulated based on objectives had been related with table number and figure number in chapter 5 and also Section number in findings chapter and the same is shown in Table 6.1.

TABLE 6.1

FINDINGS WITH RELATION TO HYPOTHESES

S.No.	Objectives	Hypotheses	Section No. in Finding	Chapter - 5	
				Table no	Figure no
1	To identify the views on ICT among women library professionals	There exist significant differences in perception on views of ICT among the women library professionals irrespective of designations, level of experience and domain of institutions	6.2.4.1	5.3 to 5.8	5.3
2	To identify the use and purpose of ICT among women library professionals.	a. There exist significant differences in perception on use of ICT among the women library professionals. b. There exist significant differences in the purpose of ICT among the women library professionals	6.2.5 to 6.2.5.9	5.15 to 5.60	6 to 8
3	To identify the opinion on ICT among women library professionals	There is no significant difference in their opinion with regard to the utility of ICT among the women library professionals	6.2.6.3	5.69 to 5.73	9
4	To identify the awareness on library automation software and e-resources.	There exist significant difference towards awareness on library automation software and e-resources among the women library professionals	6.2.5.1, 6.2.5.2, 6.2.5.3	5.19 to 5.23 5.24 to 5.36	-
5	To identify the opinion and attitude towards Web based library services.	There is no significant difference in their opinion and attitude with regard to Web based library services and social media among the women library professionals.	6.2.6.1	5.61 to 5.64	-
6	To identify the opinion on social media services.	There is no significant difference in their opinion and attitude with regard to social media among the women library professionals	6.2.6.2	5.65 to 5.68	-
7	To identify the stumbling blocks on using and applying ICT among women library professionals.	There exist barriers in implementing ICT in academic institutions. There exist uniform opinion on the constraints in using the ICT among women professionals.	6.2.7.1	5.78 to5.81	-

6.4. SUGGESTIONS

From the analysis and interpretation of the data, the findings and observations have contributed to the formulation of suggestions as outlined below for the library professionals.

6.4.1. Positive Attitude

Women library professionals must have a positive approach towards ICT applications and services in libraries, but majority do not have the opportunities to develop their skills and competencies in their work environment. To develop competitive personnel in a technologically advanced world, high priority must be given to develop competence in ICT applications, library management and soft skills among women library professionals, by the University administrators and Library associations. New competencies are required in a rapidly changing environment in order to maintain competitive edge and work effectively. Professional development occurs when people seek to improve their job competencies.

6.4.2. Library Professionals

In an environment of information centered libraries, they are at a risk of being marginalized with shrinking resources. In order to survive and thrive, women library professionals must develop efficient services from minimum usage of resources and demonstrate an integrated approach from all ways and means. Managing resources and library performance with continuous development, involves a holistic view and a systematic approach. The implementation of an integrated ICT model has been proposed and the benefits of periodical evaluation and reporting practices are to be discussed.

To achieve positive results, women library professionals must have detailed and comprehensive strategies, implementation and periodic evaluation techniques, involve the staff and other stakeholders. Empowering libraries and library professionals with integrated efforts from the parent institution will give a positive growth graph for the users, libraries, community, environment and the nature, on a whole.

6.4.3.   Expansion of Boundaries of Library

Creating a new market for library service with a new type of client, from the global environment to the local, information and communication technologies are changing our lives and changing the way libraries do business. No longer are libraries an arcane world of their own. Every major trend impacting on today's society is also impacting on libraries. Today's environment is one of paradoxes: there is decentralisation within globalism, fragmentation within mass culture, and customisation within mass manufacturing. Boundaries are breaking down: between disciplines, among industries, and between suppliers and customers. Dominant functions and processes in the information age are increasingly organised around networks, and this enables virtual services to come together in partnerships and alliances. Process has become as important as product, as the knowledge era increases emphasis on abstraction; it is an age dominated by ideas, concepts, and experience - and services are a form of process.

6.4.4 Core Competencies

Thus the need of the hour is that women library professionals must address to critical information needs of their users by developing their core competencies and skills. In order to manage the change, professional as well as personal competencies are required. The American Association of Law Libraries has created a document for the core competencies required by law librarianship which are equally applicable in other types of libraries also. According to the document, the core competencies aim to:

- Demonstrate a strong commitment to excellent customer service by recognizing and addressing the diverse nature of the library's patrons and community.
- Demonstrate knowledge of the library system and the library profession with adequate awareness of issues, standards, trends, current best practices and competence in the use of information technologies to support teaching, learning, and research.
- Understand the use of methodologies, including digital imaging and recording technologies, for creating reproductions of primary source materials.
- Maintain awareness of changes in the scholarly uses of information technology and user expectations and monitors and implements changes in technology and information systems.

- Familiar with local procedures concerning acquisitions, prioritization for processing, shelf preparation, collections management, and preservation for special collections and materials.

- Exhibit leadership skills including critical thinking, risk taking and creativity regardless of levels of designation within the management structure.

- Share knowledge and expertise with users and colleagues.

- Display excellent communication skills and is able to promote the library and advocate for its needs.

- Familiar with publishing trends and communicate effectively with publishers and other information providers to advance the interests of the library.

- Recognize the value of professional networking and actively participates in professional associations.

- Actively pursues personal and professional growth through continuing education.

(Source: http://www.aallnet.org/prodev/competencies.asp)

The findings of the study also authenticate the same.

6.4.5 Equipping Skill

The women library professionals must understand the ways to learn new concepts and ideas, constantly seek the new opportunities to learn additional skills, acquire systematic knowledge with scholarly application and to overcome the limitations such as feminine, cultural and environmental limitations. The women library professionals encourage themselves to work cooperatively as a team.

6.4.6 Motivate Women Professionals

Motivate the women library professional to put in their best in the work environment. Besides, the skill enhancement will enable the women libray professional to meet the need fulfillment, they must attain economic, social and psychological satisfaction, Cooperative work, avoiding conflict, Secure economic, empowerment among staff and job satisfaction becomes the prime importance of the day.

6.4.7 Overcome Barriers

Over a period of time, the women LIS professionals build several barriers within themselves and in relation to others. As a result, they tend to become either too aggressive, thus, closing themselves to other's ideas, or too submissive and accept

everything that is told to them, which stunts innovation. Unless and until their attitude strikes a balance, one cannot be open to ideas and talk, nor their productivity.

6.4.8 Queen Bee Syndrome

The queen bee syndrome is a term that has been used to describe women professionals who find themselves within a predominantly male environment and have alienated other women by their behaviour, and are therefore perceived to be a barrier to the advancement of other women coming through the ranks. These women fail to assist other women in their aspirations to advance and do not work towards the advancement and empowerment of other women. The queen bees are normally very protective of their powerbase and attempt to surround themselves with men. They do not believe in female solidarity behaviour and do not actively seek to mentor or coach other women.

6.5. DIRECTIONS FOR FURTHER RESEARCH

The following are the directions for further research.

1. The in-depth study may be extended to the particular domains of the institutions.
2. The study may be extended to other professionals.
3. The study may be extended to Research and Development institutions.
4. The opinion of ICT among the women LIS professionals may be extended national and international institutions.
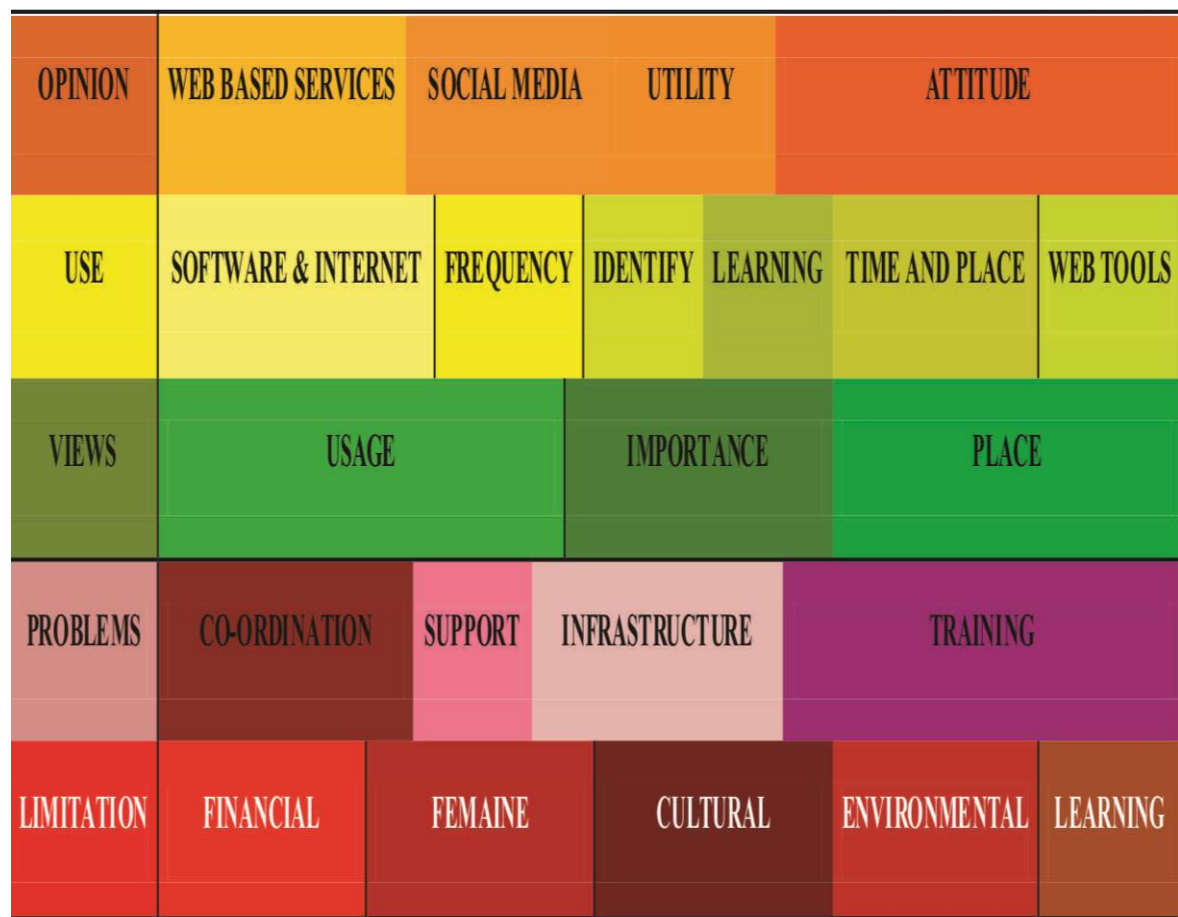
6.6. CONCLUSION

This study sought to examine the use of ICT among Women Library Professionals. Most of the objectives are met within the results. The hypotheses thus framed based on the objectives were holds good in this study.

There is considerable impact of ICT among women library professionals. Good training programmes results in positive attitudes towards ICT among them. Using ICT with their own will increase a positive attitude towards their work. ICT increases efficient in planning and preparation of work due to more collaborative approach between women library professionals.

The use of ICT tools to collect and disseminate information has been in a slow pace among women library professionals primarily due to the perception on ICT. Over a period of time, the women library professionals build several barriers within

themselves especially in the use of ICT and in relation to others. As a result, they tend to become either too aggressive, thus, closing themselves to other's ideas, or too submissive and accept everything that is told to them, which stunts innovation. Unless and until their attitude strikes a balance, one cannot be open to ideas and talk, nor their productivity. The women library professionals must understand the ways to learn new concepts and ideas, constantly seek the new opportunities to learn additional skills, acquire systematic knowledge with scholarly application and to overcome the limitations such as feminine, cultural and environmental limitations. The women library professionals encourage themselves to work cooperatively as a team.

The study paved way for developing a model for enhancing the use of ICT. The same has been shown in Fig. 6.1

Fig 6.1 Model - Use of ICT among the Women Library Professionals

From the study a model has been developed on use of ICT. The use of ICT among women library professionals have level and stages. It has five levels. Each level has different stages. The five levels are:

- Basic Level on ICT use was the Limitation. The Limitation has five stages such as Financial, Femaine, Curtural, Environmental and Learning Intention.

- The second level was Problems. The problems have four stages viz., Co-ordination, Support, Infrastructure and Training.

- The third level was views. The views have three stages such Use, Importance and Training.

- The fourth level was use. The use has six stages such as Software and Internet, Frequency, Identifying the resources, Knowledge, Time and Place, Web tools.

- The fifth level was opinion. The opinion has four stages such as Web based services, Social media, Utility, Attitude.

The width of each cell indicates the importance. It could be seen in the figure that the finance limitation primarily depends on part of Co-ordination, Use, Software & Internet and Web based services.

Similarly the Feminine has part of co-ordination, support and Infrastructure in problem level. In views level it has part of use and importance. In use level Software & Internet, Frequency and Identify. In the opinion level it has web based services and social media.