

## CHAPTER 5

### FINDINGS, SUGGESTION AND CONCLUSION

#### 5.1 INTRODUCTION

This chapter dealt findings according to the research objectives. This chapter consists of five parts viz: Findings, hypotheses tested, suggestion, scope for the future research and conclusion.

#### 5.2 PERSONAL PROFILE OF ENGINEERING COLLEGE WOMEN FACULTY MEMBERS

1. 364 responses were received from 41 engineering colleges (Table 4.1).
2. Coimbatore district has the highest number of respondents, with 198 respondents (54%) followed by Erode district with 82 respondents (23%). Put together 280 respondents (77%) are in these two districts i.e. Coimbatore and Erode (Table 4.2).
3. 52 % of the respondents belong to ‘urban’ and ‘semi urban’, an overwhelming majority of the respondents seem to have their origin from urban habitats (Table 4.4).
4. Majority (29%) of the respondents belong to Electrical and Electronic engineering, followed by 14% of the respondents each from Electronics and Communication Engineering and Computer science engineering (Table 4.5).

5. Majority 58% of the respondents possesses PG Degree and 28% of the women faculty members pursuing Ph.D degree. 6% of the women faculty members completed UG degree and only 3% of the women faculty members have Ph.D (Table 4.6).
6. Out of 364 women faculty members 328 of them (90%) are Assistant Professor, 28 (8%) women faculty members are Associate Professors and only 2% of the respondents are Professors (Table 4.7).
7. 191 respondents (52%) had 2-5 years of work experience. 64 respondents (18%) had less than 2 years of work experience and it is found that 70% of the respondents had less than 5 years of work experience (Table 4.8).
8. Majority of women faculty members (71%) have computer proficiency and 29% of them are not having computer proficiency (Table 4.9).
9. In terms of work experience, 82/255 (32%) of women engineering faculty with less than five years of experience self-reported as lacking computer proficiency. For women engineering faculty with more than five years of experience, 24/110 (22%) self-reported as lacking computer proficiency.
10. In terms of professional designation, 99 out of 328 (30%) women assistant professors in engineering colleges self-reported as lacking computer proficiency. For associate professors, the number self-reporting as lacking computer proficiency was 7 out of 29 (24%) (Table 4.15)

11. The respondents from UG (39%) PG (36%) pursuing PhD and MPhil qualifications put together ( 19% ) opine that they are not computer proficient (Table 4.16).

### **5.3 ATTITUDES, PERCEPTIONS AND OPINIONS ON INFORMATION RETRIEVAL STRATEGY**

1. 40% women faculty members are searching information for various purposes depending on their needs which include all the listed purposes. 26% of the respondents stated that the teaching practice was their purpose of search information. (Table 4.19).
2. Majority of the respondents (73%) learn to identify and locate information by their own practice or self-learning (Table 4.20).
3. Majority of the faculty members (64%) depends institutional library for their information requirement (Table 4.21).
4. 62% of the respondents have their own personal system & Internet connectivity. 38% of them are not having computer personally which means they are depending other sources for their effective learning. (Table 4.22).
5. 40(20%) and 134 (66%) out of 364 respondents are having the habit to visiting Institutional library once in a week and twice in a week respectively. Interestingly 8% out of 204 women faculty members visits institutional library daily (Table 4.24).
6. 16 % of the respondents are highly satisfied with their institutional sources. 233 (64%) out of 364 respondents opine that the institutional library resources including e – resources is good (Table 4.25)

7. In terms of most preferred source for research/presentation/publication, 48 % of the respondents prefer books, 42% prefers research and review articles, 39 % uses research reports and 40 % prefers workshops as their sources of information for research/presentation. 68% out of 364 (82%) respondents opine their self-preference on internet and online sources for their information requirement. 28% of the respondents ‘almost preferred’ internet and online sources. Two clusters were found with reference to the respondent’s preference and named as ‘reference sources’ and ‘referral sources’ (Table 4.28 & 4.30).
8. Books is given higher priority by respondents that is 74% of 364. Professional expert's Notes and Communication within the professional groups are informal sources and most effective sources. This is almost preferred by 51% and 38% of 364 respondents opine that they are preferred and almost preferred respectively Three clusters were found with reference to the respondent’s preference and named as usual preferred sources, timely preferred sources, occasionally preferred sources ((Table 4.29 & 4.31)).
9. 25% of 364 respondents agree on less proficiency in using technology. 26% and 24% of 364 respondents felt ‘accessing limited time’ and ‘Internet speed is slow’ respectively. 46% of 364 respondents high opine that the information is not compiled in one place. Information is not compiled in one place (18%), Amount of Information is overwhelming (20%), Information giving complicity results (21%), Articles are not easily available (22%), Information is not relevant widely (22%), Information are not expressed in terms of easy access

(20%), Incomplete information in sources (14%), Information scattered in too many sources (17%), Not having awareness of websites and links (32%) (Table 4.32).

10. 34% of 364 respondents opine that ‘need workshops/ discussions with the subject experts to update the knowledge of sources. 25% of the respondents are opine that ‘all the suggestion’ could be overcome barriers in information retrieval (Table 4.34).

#### **5.4 ATTITUDES, PERCEPTIONS AND OPINIONS ON INFORMATION DISSEMINATION**

1. Most of the faculty members (75%) adapts the information and communication technology, 74% women faculty members preferred Multimedia, 72% of respondents gives second priority to electronic and digital material and 84% of the respondents gives third priority to printed material (Table 4.37 & Table 4.38).
2. In terms of assessing respondents’ initiatives on Imparting research attitude and innovative teaching practice, women faculty members self-perceived themselves that the research attitude and innovative thoughts of faculty members enhanced their teaching would resulted on the focusing higher education development of the society and focusing student career development. 38% of them are having regular teaching practice to impart research among students (Table 4.46).
3. Faculty members are used the way of convey the information by directing the interested students to refer research reports and by giving simple experiments with simplified research reports followed their guidance. 95% of women faculty

members opine that they are interested to inform about the details of the location of subject information sources, identification of required information and retrieval (Table 4.48 & 4.49).

4. Majority of the respondents self-perceived to information literacy skills & strategies of faculty members would impact on excels in teaching, research and personal development (4.50)

## **5.5 ASSESSMENT OF INFORMATION LITERACY SKILLS AMONG WOMEN FACULTY MEMBERS**

1. Self-assessment of respondents information Literacy Skills towards information seeking attitudes specific to Question formation(76%); brainstorming(73%); Categorizing(68%); skimming(57%); scanning(68%); evaluating printed material(75%); content analysis(72%); note making(75%); synthesizing(66%); and information presentation of findings (74%), women faculty members perceived themselves to have these information literacy skills (Table 4.55).
2. Self-assessment of respondent's information literacy skills towards information seeking attitudes specific to internet using search engines(76%); data bases(63%) and Internet evaluating online material(70%), women faculty members perceived themselves to have these skills(Table 4.56)
3. Respondents attitude on information retrieval strategy towards locating information specific to footnote chasing (52%); citation searching (51%) and journal content analysis(52%), women faculty members perceived themselves do not have the information retrieval skills (Table 4.57).

4. Respondent's attitude on information retrieval strategy towards locating information specific to area scanning (50%); subject searching in bibliographies (51%); abstracting and indexing (55%) and author searching (74%), women faculty members perceived themselves to have the information retrieval skills (Table 4.57).
5. Respondents attitude on information retrieval strategy towards locating information using internet sources specific to cross checking (55%); skimming(59%); bouncing (62%); berry picking(67%); Chaining (67%) and squirreling(63%), women faculty members perceived themselves do not have using information retrieval strategy in internet sources (Table 4.58).
6. The result shows 100 units of change in information literacy skills towards information seeking attitude will improve usage of information retrieval strategies by  $(0.224 \times 100) = 22.4$  units. This indicates information literacy skills on internet sources improve skill of information retrieval strategies (Table 4.64).
7. The result shows 100 units of seeking attitude of faculty members and the same on internet sources influences significantly  $(.062 \times 100) = 6.2$  units by confident level of their skills to handle the information (Table 4.66)
8. Majority of the respondents 'Agree' and 'partially agree' this attitudinal barriers statement which means they are accepting the constructs under use of information is not possible in research and teaching. Altogether 'agree' and 'partially agree' around 60% of respondents agreed this attitudinal barrier on all statements except the barrier 'no time to make change' (Table 4.67).

## 5.6 HYPOTHESES TESTED

1. The options given for copying text from a source without considering the copy right law are not equally considered by the respondents. There is some significant difference between respondents opinion on this construct. Hence Null hypothesis is accepted.
2. The options given for inclusion of citations in faculty's research paper are not equally considered. There is some significant difference between respondents opinion on inclusion of citations in their research paper. Hence a null hypothesis is accepted.
3. The research attitude and innovative thoughts of faculty members enhanced their teaching to the results are not equally considered by the faculty members. There is some significant difference between the opinion in this construct. Hence null hypothesis accepted.
4. Way of Conveying the information related to the research to the students is not equally considered by the respondents. There is significant difference between respondent's attitudes. Hence null hypothesis accepted.
5. Information literacy skills & strategies of women faculty members have impacted on all the options given are not equally considered by the faculty members. There is some significant difference between their opinions. Hence null hypothesis accepted.
6. Self-assessment of respondents perceived themselves to have Information Literacy Skills towards information seeking attitudes

specific to print & internet sources. Hence null hypothesis rejected.

7. Self-assessment of respondent's attitude on IRS towards locating information on printed and online sources, women faculty members perceived themselves to not have the information retrieval skills. Hence null hypothesis accepted.
8. There is some influence between faculty member's information literacy skills towards information seeking attitudes and their confidence on skill to handle the information. Hence null hypothesis rejected.

## 5.7 FURTHER STUDY

This study based on the data survey conducted among the women faculty members working in engineering colleges affiliated to Anna University, Coimbatore Region. This study revealed that 29% of faculty members self-perceived that they did not have computer proficiency. However, they were interested to discuss information related to information literacy skills, impart research related information, motivate students to do research, and majority of the faculty members learned these skills only by self-learning and practice.

Based on this conclusion the following research areas are identified for further study.

1. The same research study can be extended to male faculty members to know their level of skills, attitude and innovative teaching practice in this context.
2. The same research study can be done in different geographical area of all level of institutions and professionals.
3. Impact can be measured and analysed by a pre and post test of the modules which include information retrieval, dissemination, and assessment among the Faculty members, Research Scholars and PG students.
4. Research can be done among the faculty members on usage of new emerging technology platform like social media for their teaching, research & learning.

## 5.8 SUGGESTIONS

It has been identified that the respondents face some challenges and problems in information retrieval. It should be rectified by availing effective infrastructural setup along with proper allocation of time for accessing information and educating respondents to overcome these problems for effective information retrieval.

It has been identified that many of the respondents were interested to share the information related to their research among the students. This is a welcoming attitude of faculty members which will help to nurture research interest among students. The developed countries publish standard innovative science reports and engineering based patents in high number. The same standard must be implemented in India also. Steps and initiatives must be taken for more standard publication from engineering field of research.

It is clear that many respondents gained familiarity on information accessing and retrieval knowledge from their personal learning and observation from their learning circle. It has to be channelized by a proper course of information and digital literacy skills in the engineering curriculum itself. ICT platform may be used for tutoring information literacy skills.

It has to be ensured that the availability of standard information sources and services in all engineering educational institutions because faculties and students solely depend on the institutional sources for their information needs to achieve educational excellence.

Faculty members are interested to impart research information to the students apart from the syllabus. It is also proved that the classroom instruction on information location, identification of required information and retrieval of information etc., effectively cultivate information literacy skills

among learning groups. This gives a great impact on information literacy skills of faculty members. Engineering education has mainly focused on the syllabus framed for the particular course and also suggested to strongly consider inclusion of information literacy and digital literacy skills development course as a part of all engineering fields of study as this would support innovation, research skills, presentation and publication.

It is also suggested that the women faculty members need more motivation and appreciation for additional research, presentation, and publication.

## **5.9 CONCLUSION**

From the above research findings the following conclusions are made. Women faculty members are fully committed to covering syllabus and make all the students to pass in the subject. They opine that they are interested to share research related information and to motivate research attitude among students. Majority of the women faculty members are interested to discuss or inform the details of the location of subject information sources, such as identification of required information and retrieval of information etc., in classroom teaching. The study ensures that the respondents take some efforts in future to impart research information to the students apart from the syllabus. It is proved that the classroom instruction on information location, identification of required information and retrieval of information etc., effectively cultivate information literacy skills among learning groups.

The finding shows that there is relationship between information literacy skills towards information seeking attitude and information retrieval strategy towards locating information in terms of print material. There is a need to learn quickly the use of internet & online sources. Majority of the respondents self-perceived that they lacked using information retrieval

strategies in online sources. The relationship between information literacy skills, information seeking attitude, information retrieval strategies, and the same on internet sources are positively impact on confidence level of women faculty members. Further, it requires more course integrated formation literacy program, motivation and appreciation for research, presentation and publication.