

## **CHAPTER IV**

### **ANALYSIS AND INTERPRETATION**

#### **INTRODUCTION**

The job of Librarians in the new millennium has been changing swiftly due to advancement of Information and communication technology. Traditionally, Library professionals played a limited role in a small domain. But now, their role has been expanded across the globe in the digital era. Therefore, Librarians apart from the knowledge gained through formal education require a variety of skills for providing right information to the right user at the right time. This chapter provides the professional skills possessed by Women Librarians in academic institutions of Tamil Nadu, India.

#### **PROFILE OF WOMEN LIBRARIANS**

The first section of this chapter deals with the profile of Women Librarians. The profile variables included for the study are Age, Educational qualifications, Years of experience, Type of institution and Location of the institution.

#### **AGE OF THE RESPONDENTS**

Age of the respondents may play a vital role in shaping the professional skills possessed by the respondents. Hence, age is included as one of the profile variables. The age of the respondents is classified as 20 – 30 years, 31 years – 40 years, 41 – 50 years and 51 – 60 years. The distribution of the respondents on the basis of their age is shown in the table 4.1.

**Table 4.1**

**Age wise classification of the respondents**

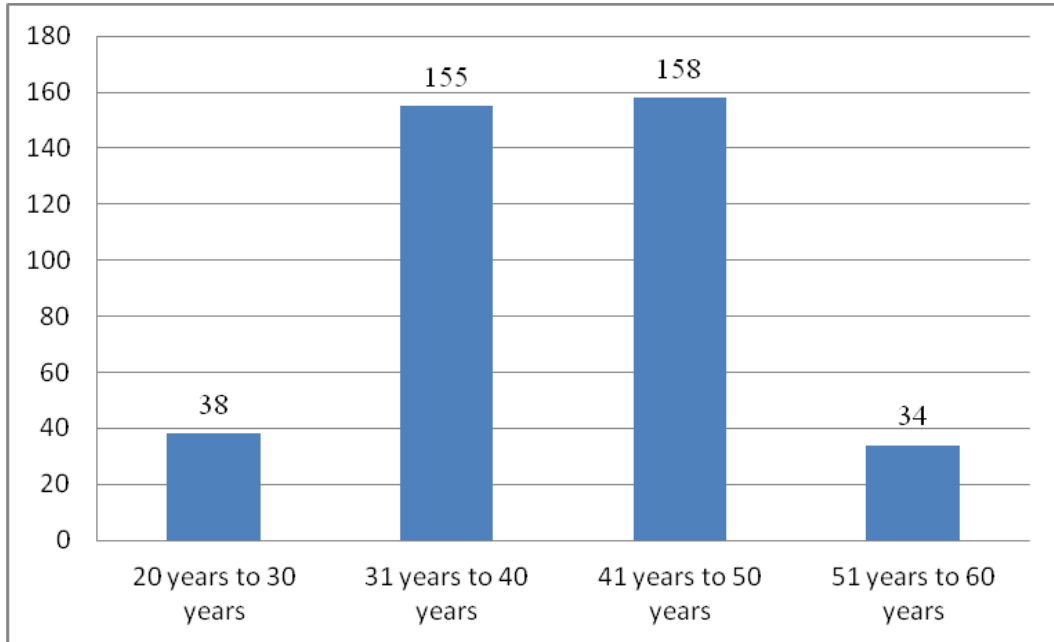
<b>S. No</b>	<b>Age Group</b>	<b>Number of Respondents</b>	<b>Percentage</b>
1	20 years to 30 years	38	9.87
2	31 years to 40 years	155	40.26
3	41 years to 50 years	158	41.04
4	51 years to 60 years	34	8.83
	Total	385	100

Source: Primary data

The dominant age group among the respondents is 41 years – 50 years and 31 – 40 years, which constitute 41.04 and 40.26 percent to the total respectively. 9.87 percent of the respondents are in the age group of 10 years to 30 years and 8.83 percent are in the age group of 51 to 60 years. The women librarians are mostly in the age group of 31 to 50 years (81.30%). This shows that young woman needs to enter into this service. This gap could be addressed by providing Library and Information Science education at the graduate level in colleges. This can be visualized in the chart below.

**Chart 4.1**

**Age wise classification of the respondents**



### **EDUCATIONAL QUALIFICATIONS OF THE RESPONDENTS**

Educational qualifications of women Librarians may have an influence on the personal, generic, information technology and technical skills possessed by them and hence it is included as one of the profile variables. Women Librarians are classified on the basis of their qualifications such as BLISc, MLISc, MPhil, and Ph.D. The classification of women Librarians on the basis of their highest educational qualifications is shown in table.

**Table 4.2**

**Educational qualifications of the respondents**

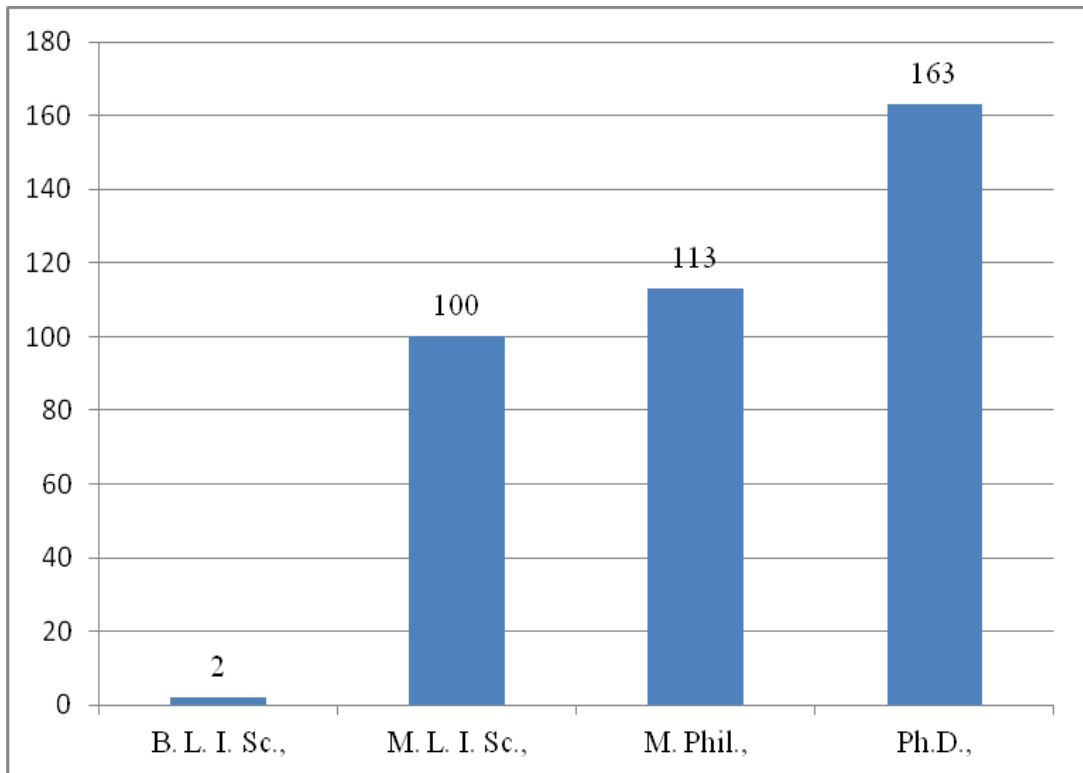
<b>S. No</b>	<b>Qualification</b>	<b>Number of Respondents</b>	<b>Percentage</b>
1	BLISc	2	0.52
2	MLISc	100	25.97
3	MPhil	113	29.35
4	Ph.D	163	42.34
5	Others	7	1.82
	Total	385	100

**Source: Primary Data**

It can be inferred from the table 4.2 that 42.34 percent of the respondents possess Ph. D., 29.35 percent have MPhil as their highest educational qualification and 25.95 percent of the respondents have Master's degree in Library and Information Science. It can be concluded that majority of the respondents hold Ph.D. As colleges are institutions of higher learning, Ph.D is preferred by the college management. The present educational scenario also makes the candidates to acquire Ph.D degree. The chart gives a clear visualization too.

**Chart 4.2**

**Educational Qualifications of the respondents**



## EXPERIENCE OF THE RESPONDENTS

The years of experience may have an impact on the level of personal, generic, information technology and technical skills possessed by them and hence it is included one of profile variables for the study. Women Librarians are grouped on the basis of their years of experience in groups such as 1 year to 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years and above 20 years. The distribution of Women Librarians based on experience is given in table 4.3

**Table 4.3**

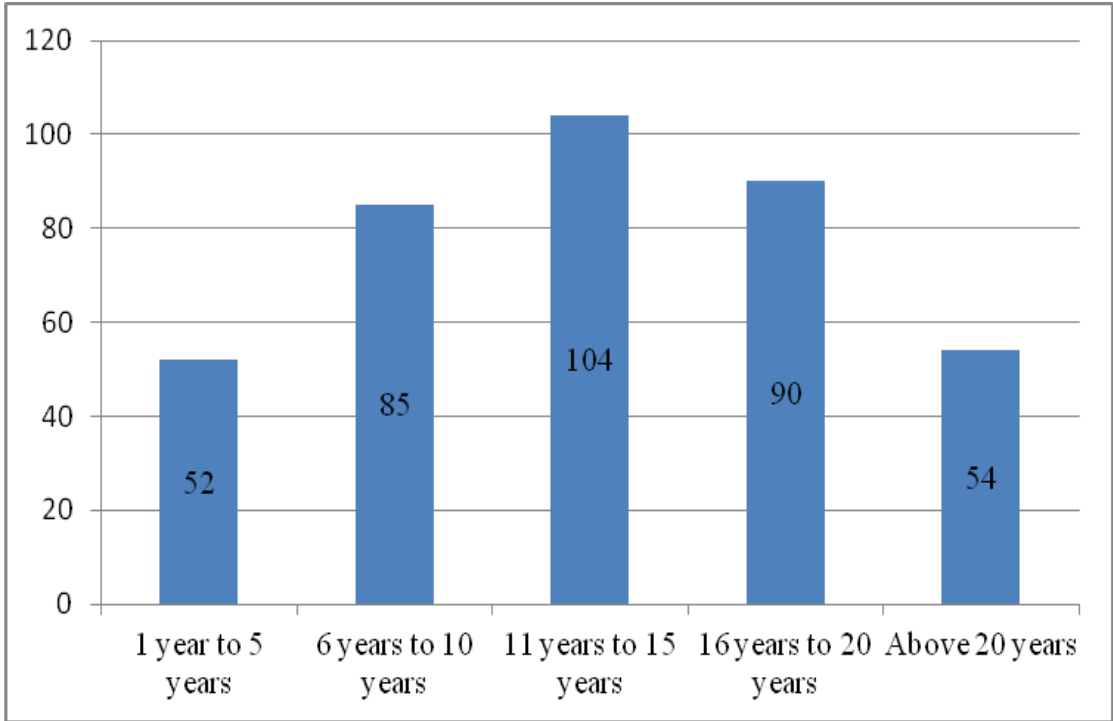
### Experience of the respondents

S. No	Experience in years	Number of respondents	Percentage
1	1-5	52	13.51
2	6-10	85	22.08
3	11-15	104	27.01
4	16-20	90	23.38
5	Above 20 years	54	14.03
	Total	385	100

**Source: Primary Data**

The experience of respondents is presented in table 4.3. Out of the total (385) respondents, 13.51 percentages have experience between one year and 5 years, 22.08 percentages have experience between 6 - 10 years, 27.01 per cent have experience between 11 – 15 years, 23.38 have experience between 16 – 20 years and the rest 14.03 percentage have experience of above 20 years. It can be concluded that a majority of the respondents has experience between 11 – 15 years. This can be visualized in the chart below.

**Chart 4.3**  
**Experience of the respondents**



## **TYPE OF INSTITUTION**

The type of institution where the women Librarians work, may have an impact on the level of personal, generic, information technology and technical skills possessed by them and hence it is included as profile variable for the study. Women Librarians are grouped based on type of institution in such as University, Government and Government Aided Arts & Science Colleges, Self Financing Arts & Science Colleges, Government & Government Aided Engineering Colleges, Self Financing Engineering Colleges and Nursing & Dental Colleges. The distribution of women Librarians based on type of institution is given in table 4.4.



**Table 4.4**  
**Type of Institution of sample group**

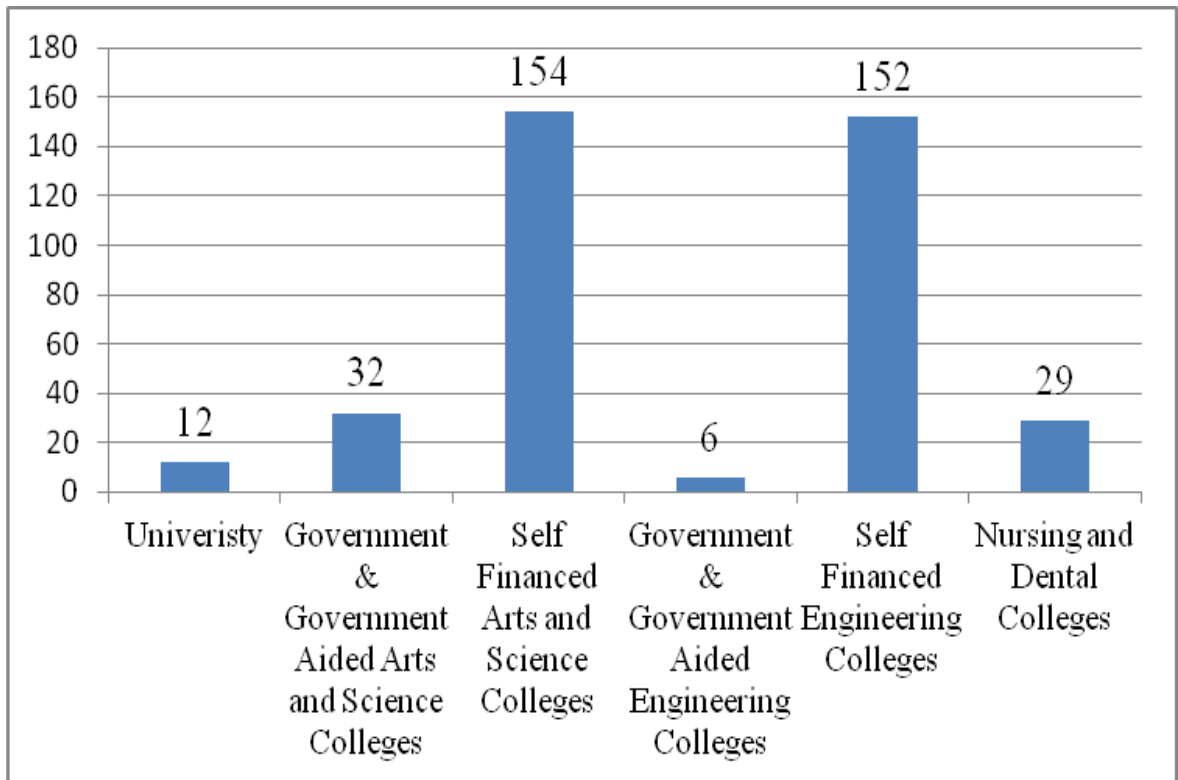
S. No	Type of Institution	Number of respondents	Percentage
1	University	12	3.12
2	Government & Government Aided Arts and Science Colleges	32	8.31
3	Self Financing Arts and Science Colleges	154	40.00
4	Government & Government Aided Engineering Colleges	6	1.56
5	Self Financing Engineering Colleges	152	39.48
6	Nursing and Dental Colleges	29	7.53
	Total	385	100

**Source: Primary Data**

It can be viewed from table 3.4 that 3.12 percentage of the respondents are working in universities, 8.31 percentage in Government & Government Aided Arts and Science Colleges, 40 percentage in Self Financed Arts and Science Colleges, 1.56 per cent in Government & Government Aided Engineering Colleges, 39.48 percentage are working in Self Financed Engineering Colleges and the remaining 7.53 percentage are working in Nursing and Dental Colleges. It can be ascertained that majority of the respondents are working as Librarians in Self Financing Arts and Science Colleges. The vacancy positions in the Government and aided institutions are limited. The increasing self financing institutions offer wide opportunities for library professionals. This can be seen in the chart below.

**Chart 4.4**

**Type of Institution in which they work**



#### **LOCATION OF INSTITUTION**

The location of the institution with which they associate may have an impact on the level of personal, generic, information technology and technical skills possessed by them and hence it is included as profile variable for the present study. Women Librarians are grouped on the basis of the type of location (institution) in which they work such as urban, semi urban and rural areas. The distribution of women Librarians on the basis of the location of the institution in which they are employed is presented in table 4.5.

**Table 4.5**

**Location of the Institution**

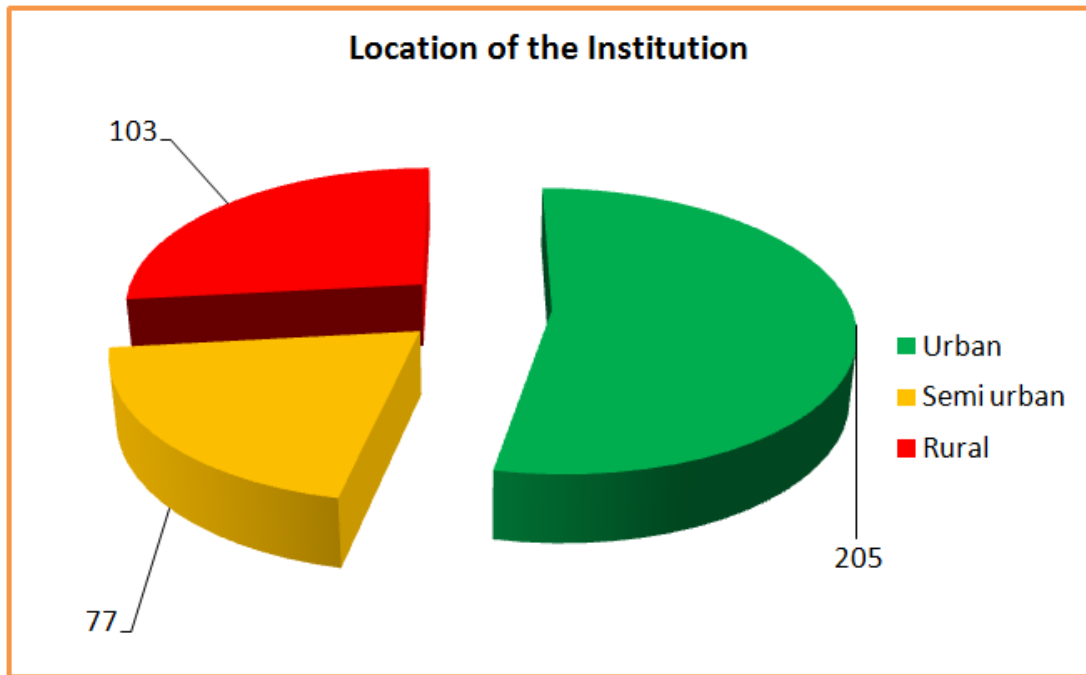
<b>S. No</b>	<b>Location</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Urban	205	53.25
2	Semi urban	77	20.00
3	Rural	103	26.75
	Total	385	100

**Source: Primary Data**

It can be noted from the table 4.5 that 53.25 per cent of the respondents are working in academic institutions located in urban areas, 20 per cent are working in semi urban and the remaining 26.75 per cent are working in rural areas. It is inferred that majority of the respondents are working in institutions located in urban areas. It clearly point out that huge number of higher learning institutions locate in urban areas. This can be visualized in the chart below.

**Chart 4.5**

**Location of the Institution**



**PARTICIPATION IN PROFESSIONAL TRAINING PROGRAMMES**

Librarians of academic institutions have to attend professional development training programmes like workshops, seminars, conferences, video presentations and online courses. By attending such training programmes, it will enhance the level of personal, generic, information technology and technical skills of the women librarians and hence it is included as profile variable for the study. Details regarding the respondents who have attended professional development training programmes is shown in table 3.6.

**Table 4.6**

**Participation in Professional Training Programmes**

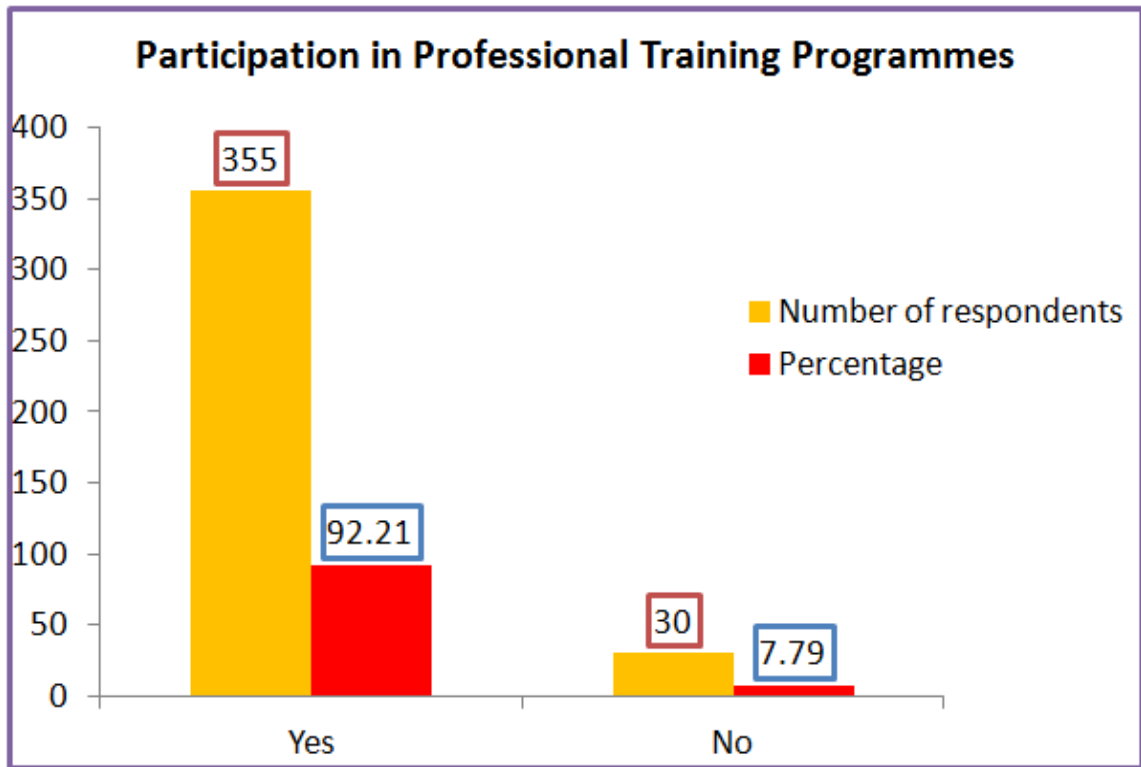
<b>S. No</b>	<b>Participation</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Yes	355	92.21
2	No	30	7.79
	Total	385	100

**Source: Primary Data**

It can be understood from the above table that 92.21 per cent of the respondents have attended professional development training programmes and the rest 7.79 per cent have not attended any programmes. This can be visualized in the chart below.

Chart 4.6

**Participation in Professional Training Programmes**



**NUMBER OF WORKSHOPS ATTENDED BY THE SAMPLE GROUP**

A workshop can be defined as “a period of discussion or practical work on a particular subject in which a group of people share their knowledge or experience” (collinsdictionary.com, 2018). Women Librarians have to attend workshops for gaining personal, generic, information technology and technical skills. To attend any workshop Women Librarians need to spare time and if they have to attend workshops at places located far away from residence. The table 4.7 shows the number of workshops attended by Women Librarians.

**Table 4.7**

**Number of Workshops attended**

<b>S. No</b>	<b>Number of Workshops</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Zero	41	10.65
2	1 to 5	213	55.32
3	6 to 10	66	17.14
4	11 to 15	22	5.71
5	More than 15	43	11.17
	Total	385	100

**Source: Primary Data**

It can be inferred from the table 4.7 that out of the 385 respondents, 10.65 percentage have not attended any workshops, 55.32 percentage have attended 1 to 5 workshops, 17.14 percentage have attended 6 to 10 workshops, 5.71 percentage have attended 11 to 15 workshops and the rest 11.17 percentage have attended more than 15 workshops. The women Library professionals need to be encouraged to participate in workshop. This may hone their skills and it would make the work more professional.

## NUMBER OF SEMINARS ATTENDED BY THE LIBRARIANS

Seminar can be defined as a “formal presentation by one or more experts in which the attendees are encouraged to discuss the subject matter” (businessdictionary.com, 2018). Women Librarians have to attend seminars for exposing to, generic, information technology and technical skills. Table 4.8 shows the number of seminars which were attended by Women Librarians.

**Table 4.8**

### Number of seminars attended by the Librarians

S. No	Number of seminars	Number of respondents	Percentage
1	Zero	42	10.91
2	1 to 5	213	55.32
3	6 to 10	55	14.29
4	11 to 15	25	6.49
5	More than 15	50	12.99
	Total	385	100

**Source: Primary Data**



It can be identified from the table 4.8 that out of the 385 respondents, 10.91 percentage have not attended any seminars, 55.32 percentage have attended 1 to 5 seminars, 14.29 percentage have attended 6 to 10 seminars, 6.49 percentage have attended 11 to 15 seminars and the remaining 12.99 percentage have attended more than 15 seminars.

### **NUMBER OF CONFERENCES ATTENDED BY THE SAMPLE GROUP**

Conference can be defined as “a large meeting, often lasting a few days, where people who are interested in a particular subject come together to discuss ideas” (macmillandictionary.com, 2018). Women Librarians have to attend conferences for gaining personal, generic, information technology and technical skills. Table 4.9 shows the number of conferences attended by Women Librarians.

**Table 4.9**  
**Number of conferences attended by the Population**

<b>S. No</b>	<b>Number of Conferences</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Zero	39	10.13
2	1 to 5	203	52.73
3	6 to 10	45	11.69
4	11 to 15	27	7.01
5	More than 15	71	18.44
	Total	385	100

**Source: Primary Data**

It can be seen from the above table that out of the 385 respondents, 10.13 percent have not attended any conferences, 52.73 percent have attended 1 to 5 conferences, 11.69 percent have attended 6 to 10 conferences, 7.01 percent have attended 11 to 15 conferences and the rest 18.44 percent have attended more than 15 conferences.

### **NUMBER OF VIDEO-PRESENTATIONS ATTENDED BY THE RESPONDENTS**

Video presentations are being done using video clips for training and teaching (businessballs.com, 2017). Women Librarians have to attend video presentations for learning personal, generic, information technology and technical skills. Table 4.10 shows the number of video-presentations attended by women Librarians.

**Table 4.10**

**Number of Video-Presentations attended by the sample group**

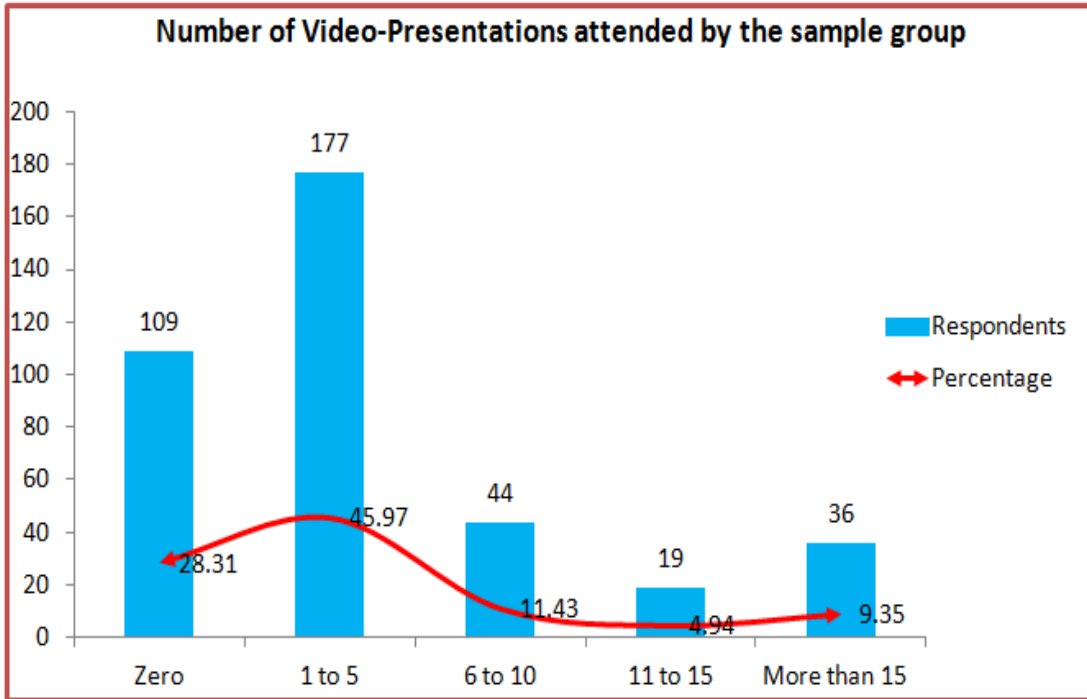
S. No	Number	Number of respondents	Percentage
1	Zero	109	28.31
2	1 to 5	177	45.97
3	6 to 10	44	11.43
4	11 to 15	19	4.94
5	More than 15	36	9.35
	Total	385	100

**Source: Primary Data**

It can be identified from the above table that out of the 385 respondents, 28.31 per cent have not attended any video-presentations, 45.97 per cent have attended 1 to 5 video-presentations, 11.43 per cent have attended 6 to 10 video-presentations, 4.94 per cent have attended 11 to 15 video-presentations and the rest 9.35 per cent have attended more than 15 video-presentations. This can be visualized in the chart below.

**Chart 4.7**

**Number of Video-Presentations attended by the sample group**



**NUMBER OF ONLINE COURSES ATTENDED BY THE LIBRARIANS**

Online education can be defined as “a flexible instructional delivery system that encompasses any kind of learning that takes place via the Internet” (encyclopedia.com, 2016). Women Librarians have to attend online courses for familiar sing with personal, generic, information technology and technical skills. Table 4.11 shows the number of online courses attended by women Librarians.

**Table 4.11**

**Number of online courses attended by the sample population**

<b>S. No</b>	<b>Number</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Zero	211	54.81
2	1 to 5	174	45.19
3	6 to 10	-	-
4	11 to 15	-	-
5	More than 15	-	-
	Total	385	100

**Source: Primary Data**

It can be seen from the above table that out of the 385 respondents, 54.81 percent have not attended any online courses and 45.19 percent have attended 1 to 5 online courses.

**NUMBER OF OTHER PROFESSIONAL DEVELOPMENT PROGRAMMES**

There are other professional development programmes like symposiums, orientation programmes, refresher courses, etc. Women Librarians require to take part in symposiums, orientation programmes and refresher courses for gaining knowledge with regard to personal, generic, information technology and technical skills. Table 4.12 shows the number of other professional development training programmes such as symposiums, orientation programmes, refresher courses, etc attended by Women Librarians.

**Table 4.12**

**Number of other professional development programmes**

<b>S. No</b>	<b>Number</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Zero	215	55.84
2	1 to 5	170	44.16
3	6 to 10	-	-
4	11 to 15	-	-
5	More than 15	-	-
	Total	385	100

**Source: Primary Data**

It can be understood from the above table that out of the 385 respondents 55.84 percent have not attended any other professional development training programmes like symposium, orientation programmes and refresher course and rest 44.16 percent have attended 1 to 5.

**FACTOR ANALYSIS**

Factor analysis is a technique used to reduce a large number of variables into lesser numbers of factors. This method extracts maximum common variance from all variables and puts them into a common score. As an index of all variables, this score is widely used for further analysis. In the present study, a factor analysis was administered to reduce 38 variables into representative factors. These 38 variables have been transformed into 5 representative factors as well.

### Factor Analysis: Suitability for the Data

The table 4.13 below shows the two tests which indicate the suitability of the data drawn through this research for factor analysis.

**Table 4.13**  
**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.953
Bartlett's Test of Sphericity	Approx. Chi-Square	11588.341
	Df	703
	Sig.	.000

The Kaiser-Meyer-Olkin and Bartlett's Test is used as measure of sampling adequacy. It indicates the proportion of variance in variables, which is a common variance. This is caused by underlying factors; higher values which are close to 1.0 by which it typically indicates that a factor analysis is useful with the given data. If the value is less than 0.5, the results of the factor analysis may probably not be very useful. In the present study, the KMO measure remains as 0.953 confirming the appropriateness of factor analysis. The Bartlett's test of sphericity indicates whether a given correlation matrix is an identity matrix, which will indicate that the variables are not related. The significance level gives the result of the test. Very small values, less than 0.05, indicates that there are probably significant relationship among given variables. The values higher than 0.10 or so indicate that the data are not suitable for factor analysis. In this case, the significance level has a very small

value i.e. 0.000 which is less than 0.05, thereby by thus suggesting that the variables are highly correlated.

### **Factor Analysis: Communalities**

Communality values are used to assess how well each variable is explained by the factors. If the communality of a variable is closer to 1, the variable is the better explained by the factors. The following table indicates the communalities which reveal the quantity of variance in each variable accounted for.



**Table 4.14**  
**Variables and the Communalities**

<b>S. No</b>	<b>Variables</b>	<b>Initial</b>	<b>Extraction</b>
1	Analytical thinking	1.00	0.6113
2	Creativeness	1.00	0.6333
3	Flexibility	1.00	0.6931
4	Reflectiveness	1.00	0.6603
5	Adaptability	1.00	0.7187
6	Pro-activeness	1.00	0.6858
7	Self-motivation	1.00	0.6133
8	Marketing skills	1.00	0.5989
9	Professional interaction	1.00	0.6104
10	Communication Skills	1.00	0.6870
11	Social Responsibility	1.00	0.6143
12	Decision Making Skills	1.00	0.7082
13	Critical Thinking	1.00	0.6357
14	Team work	1.00	0.7069
15	Problem Solving	1.00	0.7108
16	Leadership	1.00	0.7143
17	Building Relationship	1.00	0.6090
18	Research Skills	1.00	0.6289
19	Training Skills	1.00	0.6827
20	Negotiation Skills	1.00	0.5672
21	MS Office Tools	1.00	0.6488
22	Presentation Skills	1.00	0.6894
23	Web Design Skills	1.00	0.6570
24	Institutional Repository	1.00	0.6389

25	Web 2.0	1.00	0.7005
26	Computer Security	1.00	0.6519
27	Information Retrieval	1.00	0.6220
28	DBMS	1.00	0.6268
29	Open Source Full-text Databases	1.00	0.6180
30	Open Source Software	1.00	0.6354
31	CMS	1.00	0.6370
32	Data interoperability	1.00	0.6775
33	Digital Library Source	1.00	0.6502
34	Copyright	1.00	0.7418
35	Digital Rights Management	1.00	0.7716
36	E-books/E-journals	1.00	0.7339
37	Acquisition licensing	1.00	0.5995
38	RFID	1.00	0.7519

Extraction Method: Principal Component Analysis

Initial communalities are the estimates of the variance in each variable which is accounted by all the factors. In case of principal components analysis method of extraction, initial communalities will always be equal to 1.0. Extraction communalities are the estimates of the variance in each variable which is accounted for the factors (factor solution). Small values which are less than 0.5 indicate the variables that do not fit well with the factor solution, and they have to be dropped from the analysis. But, the extraction communalities are greater than 0.5, there is no need to drop any variable.

### **Factor Analysis: Total Variance Explained**

The following table presents the eigen values, % of variance explained, and % of cumulative variance which are explained for the factor solution.

**Table 4.15**  
**Total Variance Explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	17.543	46.166	46.166	17.543	46.166	46.166
2	3.469	9.128	55.294	3.469	9.128	55.294
3	1.653	4.351	59.645	1.653	4.351	59.645
4	1.352	3.558	63.203	1.352	3.558	63.203
5	1.125	2.962	66.165	1.125	2.962	66.165
6	.901	2.372	68.537			
7	.872	2.294	70.830			
8	.749	1.970	72.801			
9	.720	1.895	74.696			
10	.690	1.816	76.512			
11	.603	1.588	78.099			
12	.583	1.534	79.634			
13	.535	1.407	81.041			
14	.520	1.369	82.410			
15	.506	1.332	83.742			
16	.471	1.240	84.982			
17	.451	1.187	86.169			
18	.435	1.144	87.313			
19	.415	1.092	88.405			
20	.368	.967	89.372			
21	.354	.933	90.305			
22	.334	.878	91.183			
23	.314	.826	92.009			
24	.290	.762	92.772			

25	.281	.740	93.512			
26	.277	.728	94.240			
27	.262	.690	94.930			
28	.240	.632	95.562			
29	.214	.563	96.125			
30	.206	.542	96.667			
31	.193	.509	97.176			
32	.185	.486	97.662			
33	.172	.451	98.113			
34	.166	.438	98.551			
35	.152	.399	98.950			
36	.147	.387	99.337			
37	.133	.350	99.687			
38	.119	.313	100.000			

Extraction Method: Principal Component Analysis

**Table 4.16**  
**Total Variance**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	8.4286	22.1805	22.1805
2	7.1683	18.8640	41.0446
3	4.7915	12.6092	53.6537
4	3.5391	9.3134	62.9672
5	1.2150	3.1973	66.1645

Percentage of variance explained by third factor is 4.351.

**Extraction method used Principal Component Analysis**

The first panel presents the values which are based on initial Eigen values. For the initial solution, there are many components or factors as the variables. The "Total" column gives the amount of variance in the observed variables accounted by each component or factor.

The "% of Variance" column gives the percent of variance accounted by each specific factor, which is related to the total variance among the variables. The "Cumulative %" column gives the percent of variance accounted by all factors up to five factors. There may be a few factors that explain a lot of the variance and the rest of the factors provide relatively small amount of variance. A decision is made to leave all those factors which account for a very small amount of cumulative variance. In this research, the researcher has taken all the six components or factors Eigen value since they

are more than one and account for a cumulative variance of 66.16%. The extraction sums of squared loadings group give information regarding the extracted factors or components. For principal components extraction, these values are the same as those reported under initial Eigen values.

### **Factor Analysis: Rotated Component Matrix**

The following table presents the rotated component matrix and also reports the factor loadings for each variable on the components or factors after rotation. Each factor loading value represents the partial correlation between the item and the rotated factor. These correlations enable to formulate an interpretation of the factors, by looking for a common thread among the variables which have large loadings for a particular factor or component. The factor analysis rotation methods start with the original axes and apply a mathematical rotation which simplifies the relationship between factors and variables.

**Table 4.17**  
**Rotated Component Matrixes**

S. No	Professional Skills	Component				
		1	2	3	4	5
1	Communication Skills	<b>0.7653</b>	0.2642	0.1411	0.0909	0.0569
2	Leadership	<b>0.7355</b>	0.0994	0.3097	0.2479	-0.0785
3	Training Skills	<b>0.7347</b>	0.3333	0.1525	0.0915	-0.0108
4	Team work	<b>0.7313</b>	0.1498	0.3030	0.2364	-0.0441
5	Decision Making Skills	<b>0.7300</b>	0.3737	0.1871	0.0202	0.0167
6	Research Skills	<b>0.7221</b>	0.2943	0.1378	0.0229	0.0363
7	Critical Thinking	<b>0.6909</b>	0.2054	0.2896	0.1402	0.1126
8	Building Relationship	<b>0.6772</b>	0.1389	0.2812	0.2279	0.0012
9	Social Responsibility	<b>0.6660</b>	0.1199	0.3135	0.1520	-0.1869
10	Problem Solving	<b>0.6497</b>	0.0875	0.4322	0.3066	-0.0149
11	Presentation Skills	<b>0.6042</b>	0.5358	0.1810	-0.0362	0.0568
12	Negotiation Skills	<b>0.5860</b>	0.1819	0.2880	0.2963	0.1412
13	MS Office Tools	<b>0.5558</b>	0.5066	0.2867	-0.0321	0.0019
14	Professional interaction	<b>0.5429</b>	0.1488	0.4343	0.3094	0.0956
15	Self-motivation	<b>0.5233</b>	0.1818	0.5188	0.1729	0.0855
16	Analytical thinking	<b>0.5100</b>	0.2877	0.4760	0.1049	0.1756
17	Web 2.0	0.1477	<b>0.7345</b>	0.1942	0.1816	0.2617
18	DBMS	0.2035	<b>0.7182</b>	-0.0160	0.2623	-0.0223
19	Web Design Skills	0.1123	<b>0.7057</b>	0.3050	0.0560	0.2240
20	Open Source Software	0.2150	<b>0.6947</b>	0.1494	0.2876	-0.0390
21	Computer Security	0.1920	<b>0.6903</b>	0.1457	0.2827	0.1932
22	Institutional Repository	0.2479	<b>0.6854</b>	0.3005	0.1252	-0.0421
23	Open Source Full-text Databases	0.2812	<b>0.6795</b>	0.0598	0.2641	-0.0629

24	Information Retrieval	0.3783	<b>0.6585</b>	0.1265	0.0238	-0.1694
25	CMS	0.1574	<b>0.6564</b>	0.1935	0.3781	-0.0311
26	Digital Library Source	0.1908	<b>0.6281</b>	0.1916	0.4213	-0.0705
27	Data interoperability	0.2457	<b>0.6190</b>	0.0883	0.4525	-0.1464
28	Flexibility	0.3384	0.1036	<b>0.7465</b>	0.1028	-0.0036
29	Adaptability	0.3682	0.1669	<b>0.7415</b>	0.0732	0.0120
30	Pro-activeness	0.2785	0.2466	<b>0.7172</b>	0.1566	-0.0926
31	Reflectiveness	0.3366	0.2374	<b>0.6842</b>	0.1372	0.0608
32	Creativeness	0.4457	0.3588	<b>0.5417</b>	0.0937	0.0599
33	Marketing skills	0.4258	0.1394	<b>0.5063</b>	0.2903	0.2399
34	Digital Rights Management	0.2140	0.3826	0.1226	<b>0.7441</b>	0.1035
35	Copyright	0.1972	0.3581	0.0344	<b>0.7411</b>	0.1558
36	E-books/e-journals	0.2156	0.3329	0.2676	<b>0.7081</b>	-0.0600
37	Acquisition licensing	0.0913	0.3930	0.2829	<b>0.5933</b>	-0.0682
38	RFID	0.0250	.01300	0.0530	0.0360	<b>0.8640</b>

Extraction Method: Principal Component Analysis.

**Rotation Method: Varimax with Kaiser Normalization.**

Rotation converged in 13 iterations.

Through Factor Analysis, the extraction of five factors out of 38 variables related to professional skills is performed. Hence 16 variables correlate with first factor; 11 variables correlate with second factor; 6 variables correlate with third factor; 4 variables correlate with fourth factor and 1 variable with fifth factor.



**Table 4.18****Professional Skills of Women Librarians**

<b>S. No</b>	<b>Professional Skills Factors</b>	<b>Number of variables</b>	<b>Eigen value</b>	<b>% of Variance</b>	<b>Cumulative %</b>
1.	Managerial Skills	16	17.543	46.166	46.166
2	IT Skills	11	3.469	9.128	55.294
3	Soft Skills	6	1.653	4.351	59.645
4	Technical Skills	4	1.352	3.558	63.203
5	RFID Technology Skills	1	1.125	2.962	66.165
Kaiser-Meyer-Olkin Measure of Sampling Adequacy : 0.953			Bartlett's Test of Sphericity: Chi –Square : 11588.341		

**Source: Primary Data**

**Table 4.19****Details of Professional skills variables and underlying factors**

<b>S. No</b>	<b>Professional Skills Factors</b>	<b>Variables</b>	<b>Component</b>
<b>1</b>	Managerial Skills	Communication Skills	<b>0.7653</b>
		Leadership	<b>0.7355</b>
		Training Skills	<b>0.7347</b>
		Team work	<b>0.7313</b>
		Decision Making Skills	<b>0.7300</b>
		Research Skills	<b>0.7221</b>
		Critical Thinking	<b>0.6909</b>
		Building Relationship	<b>0.6772</b>
		Social Responsibility	<b>0.6660</b>
		Problem Solving	<b>0.6497</b>
		Presentation Skills	<b>0.6042</b>
		Negotiation Skills	<b>0.5860</b>
		MS Office Tools	<b>0.5558</b>
		Professional interaction	<b>0.5429</b>
		Self-motivation	<b>0.5233</b>
Analytical thinking	<b>0.5100</b>		
<b>2</b>	IT Skills	Web 2.0	<b>0.7345</b>
		DBMS	<b>0.7182</b>
		Web Design Skill	<b>0.7057</b>
		Open Source Software	<b>0.6947</b>
		Computer Security	<b>0.6903</b>
		Institutional Repository	<b>0.6854</b>
		Open Source Full-text Databases	<b>0.6795</b>
		Information Retrieval	<b>0.6585</b>

		CMS	<b>0.6564</b>
		Digital Library Source	<b>0.6281</b>
		Data interoperability	<b>0.6190</b>
<b>3</b>	Soft Skills	Flexibility	<b>0.7465</b>
		Adaptability	<b>0.7415</b>
		Pro-activeness	<b>0.7172</b>
		Reflectiveness	<b>0.6842</b>
		Creativeness	<b>0.5417</b>
		Marketing skills	<b>0.5063</b>
<b>4</b>	Technical Skills	Digital Rights Management	<b>0.7441</b>
		Copyright	<b>0.7411</b>
		E-books/e-journals	<b>0.7081</b>
		Acquisition licensing	<b>0.5933</b>
<b>5</b>	RFID Technology Skills	RFID	<b>0.8640</b>

**Source: Primary Data**

The primary aim of administering factor analysis is to identify the significant factors that have valid impact on the professional skills required for women Librarians. To accomplish this purpose, analyses are done based on the responses of 385 Women Librarians towards 38 variables and 5 representative factors that are extracted through factor analysis. The five factors extracted through factor analysis are managerial skills, IT skills, soft skills, technical skills and RFID technology skills.

The first factor is “managerial skills”, which includes the variables, such as communication skills, leadership, training skills, team work, decision making skill, research skills, critical thinking, building relationship, social responsibility, problem solving, presentation skills, negotiation skills, MS office tools, professional interaction, self-motivation and analytical thinking.

The second factor is “IT skills”, that includes the variables, i.e. web 2.0, DBMS, web design skills, open source software, computer security, institutional repository, open source full-text databases, information retrieval, CMS, digital library source and data interoperability.

The third factor is “soft skills”, which includes the variables flexibility, adaptability, pro-activeness, reflectiveness, creativeness and marketing skills.

The fourth factor is “RFID technology skills” and it includes a variable “RFID”.

## **ASSOCIATION BETWEEN PROFILE OF THE RESPONDENTS AND PROFESSIONAL SKILL FACTORS**

Profile of the respondents may have an association between the professional skill factors. The profile variables taken for the study are age, educational qualification, years of experience, type of institution, location of the institution where women librarians currently employed and participation in professional skill development programmes. In order to identify the impact of the profile variables and professional skills factors, One-way ANOVA is applied and the results have been provided in the following section.

## **ONE WAY ANOVA BETWEEN AGE OF THE RESPONDENTS AND PROFESSIONAL SKILLS FACTORS**

To find out a relationship between age of the respondents and professional skills factors the following hypothesis was formulated.

Ho: There is no significant difference between age of the respondents and professional skills factors.

H1: There is significant difference between age of the respondents and professional skills factors.

In order to identify the relationship between the age of the respondents and the professional skills factors, One-way ANOVA is applied and the result is presented in table 4.20.

**Table 4.20****One-way ANOVA: Relationship between Age of the respondents and Professional Skills Factors**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Managerial Skills Factor	Between Groups	1.962	3	.654	1.171	.321
	Within Groups	212.808	381	.559		
	Total	214.769	384			
IT Skills Factor	Between Groups	4.023	3	1.341	2.150	.093
	Within Groups	237.644	381	.624		
	Total	241.667	384			
Soft Skills Factor	Between Groups	1.647	3	.549	.876	.454
	Within Groups	238.896	381	.627		
	Total	240.543	384			
Technical Skills Factor	Between Groups	8.740	3	2.913	4.365	.005*
	Within Groups	254.275	381	.667		
	Total	263.015	384			
RFID Technology Skills Factor	Between Groups	.600	3	.200	.144	.933
	Within Groups	529.389	381	1.389		
	Total	529.990	384			

\* Significant at 5 per cent level

**Source: Primary Data**

It is evident that, the Technical Skills Factor has significant association with age of the respondents since the respective “F” statistics are significant at 5 per cent level. Managerial skills factor, IT skills factor, soft skills factor and RFID technology skills factor have not shown any significant association with age of the respondents.

### **ONE WAY ANOVA BETWEEN EDUCATIONAL QUALIFICATIONS AND PROFESSIONAL SKILLS FACTORS**

To find out a relationship between educational qualifications and professional skills factors, the following hypothesis was formulated.

Ho: There is no significant difference between educational qualifications of the respondents and professional skills factors.

H1: There is significant difference between educational qualifications of the respondents and professional skills factors.

In order to identify the relationship between educational qualification of the respondents and the professional skills factors, One-way ANOVA is applied and the result is presented in table 4.21.

**Table 4.21****One-way ANOVA: Relationship between Educational Qualifications of the Respondents and Professional Skills Factors**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Managerial Skills Factor	Between Groups	4.226	4	1.056	1.907	.109
	Within Groups	210.544	380	.554		
	Total	214.769	384			
IT Skills Factor	Between Groups	4.204	4	1.051	1.682	.153
	Within Groups	237.463	380	.625		
	Total	241.667	384			
Soft Skills Factor	Between Groups	1.497	4	.374	.595	.667
	Within Groups	239.046	380	.629		
	Total	240.543	384			
Technical Skills Factor	Between Groups	1.646	4	.411	.598	.664
	Within Groups	261.369	380	.688		
	Total	263.015	384			
RFID Technology Skills Factor	Between Groups	8.349	4	2.087	1.520	.195
	Within Groups	521.641	380	1.373		
	Total	529.990	384			

\* Significant at 5 per cent level

**Source: Primary Data**



From the table 4.21, it is evident that managerial skills factor, IT skills factor, soft skills factor, technical skills factor and RFID technology skills factor have not shown any significant association with educational qualifications of the respondents.

### **ONE WAY ANOVA BETWEEN YEARS OF EXPERIENCE AND PROFESSIONAL SKILLS FACTORS**

To find out a relationship between years of experience (as Librarians) and professional skills factors, the following hypothesis was formulated.

Ho: There is no significant difference between years of experience as librarians and professional skills factors.

H1: There is a significant difference between years of experience as librarians and professional skills factors.

In order to identify the relationship between years of experience as librarians and the professional skills factors, One-way ANOVA is applied and the result is presented in table 4.22.

**Table 4.22****One-way ANOVA: Relationship between Years of Experience and Professional Skills Factors**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Managerial Skills Factor	Between Groups	6.790	4	1.697	3.101	.016*
	Within Groups	207.980	380	.547		
	Total	214.769	384			
IT Skills Factor	Between Groups	3.699	4	.925	1.477	.209
	Within Groups	237.968	380	.626		
	Total	241.667	384			
Soft Skills Factor	Between Groups	9.728	4	2.432	4.004	.003*
	Within Groups	230.815	380	.607		
	Total	240.543	384			
Technical Skills Factor	Between Groups	6.617	4	1.654	2.452	.046*
	Within Groups	256.397	380	.675		
	Total	263.015	384			
RFID Technology Skills Factor	Between Groups	6.348	4	1.587	1.152	.332
	Within Groups	523.641	380	1.378		
	Total	6.790	4	1.697		

\* Significant at 5 per cent level

**Source: Primary Data**

From the above table (4.22), it is evident that, the managerial skills factor, soft skills factor and technical skills factor have significant association with years of experience of the respondents since the respective “F” statistics are significant at 5 per cent level. IT skills factor and RFID technology skills factor have not shown any significant association with years of experience of the respondents.

### **ONE WAY ANOVA BETWEEN TYPE OF INSTITUTION AND PROFESSIONAL SKILLS FACTORS**

To find out relationship between the type of institution where the respondents are working and professional skills factors, the following hypothesis was formulated.

Ho: There is no significant difference between the type of institution where the respondents are working and professional skills factors.

H1: There is a significant difference between the type of institution where the respondents are working and professional skills factors.

In order to identify the relationship between the type of institution where the respondents are working and the professional skills factors, One-way ANOVA is applied and the result is presented in table 4.23.

**Table 4.23****One-way ANOVA: Relationship between the Type of Institution and Professional Skills Factors**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Managerial Skills Factor	Between Groups	4.122	5	.824	1.483	.194
	Within Groups	210.648	379	.556		
	Total	214.769	384			
IT Skills Factor	Between Groups	4.794	5	.959	1.534	.178
	Within Groups	236.873	379	.625		
	Total	241.667	384			
Soft Skills Factor	Between Groups	2.539	5	.508	.809	.544
	Within Groups	238.004	379	.628		
	Total	240.543	384			
Technical Skills Factor	Between Groups	7.191	5	1.438	2.131	.061
	Within Groups	255.824	379	.675		
	Total	263.015	384			
RFID Technology Skills Factor	Between Groups	10.135	5	2.027	1.478	.196
	Within Groups	519.854	379	1.372		
	Total	4.122	5	.824		

\* Significant at 5 per cent level

**Source: Primary Data**

It is understood that managerial skills factor, IT skills factor, soft skills factor, technical skills factor and RFID technology skills factor have not shown significant association with the type of institution where the respondents are working.

### **ONE WAY ANOVA BETWEEN LOCATION AND PROFESSIONAL SKILLS FACTORS**

To find out relationship between the location of institution where the respondents are working and professional skills factors, the following hypothesis was formulated.

Ho: There is no significant difference between the location of institution where the respondents are working and professional skills factors.

H1: There is a significant difference between the location of institution where the respondents are working and professional skills factors.

In order to identify the relationship between the location of institution where the respondents are working and the professional skills factors, One-way ANOVA is applied and the result is presented in the table 4.24.

**Table 4.24****One-way ANOVA: Relationship between the Location of Institution and Professional skills factors**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Managerial Skills Factor	Between Groups	1.387	2	.694	1.242	.290
	Within Groups	213.382	382	.559		
	Total	214.769	384			
IT Skills Factor	Between Groups	1.767	2	.884	1.407	.246
	Within Groups	239.900	382	.628		
	Total	241.667	384			
Soft Skills Factor	Between Groups	2.216	2	1.108	1.776	.171
	Within Groups	238.327	382	.624		
	Total	240.543	384			
Technical Skills Factor	Between Groups	1.027	2	.513	.749	.474
	Within Groups	261.988	382	.686		
	Total	263.015	384			
RFID Technology Skills Factor	Between Groups	1.464	2	.732	.529	.590
	Within Groups	528.526	382	1.384		
	Total	529.990	384			

\* Significant at 5 per cent level

**Source: Primary Data**

From the table 4.24, it is identified that managerial skills factor, IT skills factor, soft skills factor, technical skills factor and RFID technology skills factor have not shown significant association with the location of institution where the respondents are working.

### **ONE WAY ANOVA BETWEEN PARTICIPATION IN PROFESSIONAL DEVELOPMENT TRAINING PROGRAMMES AND PROFESSIONAL SKILLS FACTORS**

To find out a relationship between the location of participation in professional development training programmes and professional skills factors the following hypothesis was formulated.

Ho: There is no significant difference between participation in professional development training programmes and professional skills factors.

H1: There is a significant difference between participation in professional development training programmes and professional skills factors.

In order to identify the relationship between participation in professional development training programmes and the professional skills factors, One-way ANOVA is applied and the result is presented in table 4.25.

**Table 4.25**

**One-way ANOVA: Relationship between participation in professional development training programmes and professional skills factors**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Managerial Skills Factor	Between Groups	.039	1	.039	.069	.793
	Within Groups	214.731	383	.561		
	Total	214.769	384			
IT Skills Factor	Between Groups	.837	1	.837	1.331	.249
	Within Groups	240.830	383	.629		
	Total	241.667	384			
Soft Skills Factor	Between Groups	.124	1	.124	.197	.658
	Within Groups	240.419	383	.628		
	Total	240.543	384			
Technical Skills Factor	Between Groups	.152	1	.152	.221	.638
	Within Groups	262.863	383	.686		
	Total	263.015	384			
RFID Technology Skills Factor	Between Groups	.292	1	.292	.211	.646
	Within Groups	529.697	383	1.383		
	Total	529.990	384			

\* Significant at 5 per cent level

**Source: Primary Data**



It is evident that managerial skills factor, IT skills factor, soft skills factor, technical skills factor and RFID technology skills factor have not shown significant association with participation in professional development training programmes.

### **SOURCE USED BY RESPONDENTS FOR GAINING KNOWLEDGE**

Beyond gaining skills, women Librarians need to obtain knowledge to provide right information to the right user at the right time. On the job, trial and error, colleagues, professional networks/blogs, mailing lists and published Paper are the sources from which women Librarians can gain knowledge. Table 4.26 shows the sources used by the women Librarians for gaining knowledge.

**Table 4.26**

**Source Used for Gaining Knowledge**

<b>S. No</b>	<b>Source of Knowledge</b>	<b>Number of Respondents</b>	<b>Percentage</b>
1	On the job	74	19.22
2	Trial and error	89	23.12
3	Colleagues	70	18.18
4	Professional networks/blogs	56	14.55
5	Published Paper	96	24.94
	Total	385	100

**Source: Primary Data**

It can be inferred that 19.22 percent of the respondents gain knowledge on the job, 23.12 percent gain knowledge by trial and error method, 18.18 percent receive knowledge from colleagues, 14.55 percent obtain knowledge from professional networks\blogs and 24.94 percent gain knowledge from reading published papers.

### **SOURCE USED FOR GAINING KNOWLEDGE AND PROFILE OF THE RESPONDENTS**

The following section presents the two way classification of source used by the respondents for gaining knowledge and their profile variables.

### **AGE OF THE RESPONDENTS AND SOURCE USED FOR GAINING KNOWLEDGE**

The following table presents the age of the respondents and the source used by them for gaining knowledge.

**Table 4.27****Age of the respondents and Source used for gaining knowledge**

S. No	Source of Knowledge	Age group				Total
		20 years to 30 years	31 years to 40 years	41 years to 50 years	51 years to 60 years	
1	On the job training	5 (6.76%)	32 (43.24%)	31 (41.89%)	6 (8.11%)	74
2	Trial and error	9 (10.11%)	33 (37.08%)	40 (44.94%)	7 (7.87%)	89
3	Colleagues	6 (8.57%)	31 (44.29%)	28 (40.00%)	5 (7.14%)	70
4	Professional networks/blogs	5 (8.93%)	25 (44.64%)	22 (39.29%)	4 (7.14%)	56
5	Published Papers	13 (13.54%)	34 (35.42%)	37 (38.54%)	12 (12.50%)	96
	Total	38	155	158	34	385

**Source: Primary Data**

It can be inferred from the table 4.27 that out of the 89 respondents who gain knowledge through trial and error, 44.94% are in the age group of 41 to 50 years and out of the 56 respondents who gain knowledge through professional networks and blogs 44.64% are in the age group of 31 years to 40 years.

## EDUCATIONAL QUALIFICATIONS OF THE RESPONDENTS AND SOURCE USED FOR GAINING KNOWLEDGE

The following table presents the educational qualification of the respondents and the source used by them for gaining knowledge.

**Table 4.28**

**Educational Qualifications of the Respondents and Source used for gaining knowledge**

S. No	Source of Knowledge	Educational Qualifications					Total
		B. L. I. Sc.,	M. L. I. Sc.,	M. Phil.,	Ph.D.,	Others	
1	On the job training	0 (0.00%)	18 (24.32%)	15 (20.27%)	38 (51.35%)	3 (4.05%)	74
2	Trial and error	1 (1.12%)	23 (25.84%)	34 (38.20%)	30 (33.71%)	1 (1.12%)	89
3	Colleagues	0 (0.00%)	15 (21.43%)	20 (28.57%)	35 (50.00%)	0 (0.00%)	70
4	Professional networks / blogs	1 (1.79%)	21 (37.50%)	6 (10.71%)	28 (50.00%)	0 (0.00%)	56
5	Published Papers	0 (0.00%)	23 (23.96%)	38 (39.58%)	32 (33.33%)	3 (3.13%)	96
	Total	2	100	113	163	7	385

**Source: Primary Data**

It can be inferred from the above table that out of the 74 respondents who gain knowledge through on the job training, 51.35% of the respondents' educational qualifications are Ph. D., and out of 70 respondents who gain knowledge from their colleagues, 50% are Ph. D. degree holders.

## EXPERIENCE OF THE RESPONDENTS AND SOURCE USED FOR GAINING KNOWLEDGE

The following table presents the experience of the respondents and the source used by them for gaining knowledge.

**Table 4.29**

### Experience of the Respondents and Source used for Gaining Knowledge

S. No	Source of Knowledge	Experience of the respondents					Total
		1 year to 5 years	6 years to 10 years	11 years to 15 years	16 years to 20 years	Above 20 years	
1	On the job training	7 (9.46%)	19 (25.68%)	23 (31.08%)	18 (24.32%)	7 (9.46%)	74
2	Trial and error	12 (13.48%)	16 (17.98%)	22 (24.72%)	29 (32.58%)	10 (11.24%)	89
3	Colleagues	12 (17.14%)	20 (28.57%)	14 (20.00%)	19 (27.14%)	5 (7.14%)	70
4	Professional networks/blogs	6 (10.71%)	15 (26.79%)	17 (30.36%)	8 (14.29%)	10 (17.86%)	56
5	Published Papers	15 (15.63%)	15 (15.63%)	28 (29.17%)	16 (16.67%)	22 (22.92%)	96
	Total	52	85	104	90	54	385

**Source: Primary Data**

It has been identified from table 4.29 that out of 89 respondents who gain knowledge through trial and error, 32.58% have experience between 16 years to 20 years and out of the 56 respondents who gain knowledge through professional networks and blogs, 30.36% have experience between 11 years to 15 years.

**TYPE OF INSTITUTION WHERE THE RESPONDENTS ARE WORKING AND SOURCE USED FOR GAINING KNOWLEDGE**

The following table indicates the type of institution where the respondents are working and the source used by them for gaining knowledge.

**Table 4.30**

**Type of Institution and Source used for gaining knowledge**

S. No	Source of Knowledge	University	Govt. & Govt. Aided Arts & Science Colleges	SF Arts & Science Colleges	Govt. & Govt. Aided Engineering Colleges	SF Engineering Colleges	Nursing & Dental Colleges	Total
1	On the job training	3 (4.05%)	7 (9.46%)	21 (28.38%)	1 (1.35%)	34 (45.95%)	8 (10.81%)	74
2	Trial and error	2 (2.25%)	7 (7.87%)	43 (48.31%)	1 (1.12%)	30 (33.71%)	6 (6.74%)	89
3	Colleagues	4 (5.71%)	9 (12.86%)	30 (42.86%)	0 (0.00%)	26 (37.14%)	1 (1.43%)	70
4	Professional networks /blogs	2 (3.57%)	4 (7.14%)	19 (33.93%)	3 (5.36%)	23 (41.07%)	5 (8.93%)	56
5	Published Papers	1 (1.04%)	5 (5.21%)	41 (42.71%)	1 (1.04%)	39 (40.63%)	9 (9.38%)	96
	Total	12	32	154	6	152	29	385

**Source: Primary Data**

It can be seen from the table 4.30 that out of 89 respondents who gain knowledge through trial and error, 48.31% are working in self financed Arts and Science colleges and out of 74 respondents who gain knowledge through on the job training, 45.95% are working in self financed Engineering colleges.

## LOCATION OF INSTITUTION WHERE THE RESPONDENTS ARE WORKING AND SOURCE USED FOR GAINING KNOWLEDGE

The following table reveals the location of institution where the respondents are working and the source used by them for gaining knowledge.

**Table 4.31**

**Location of Institution and Source used for gaining Knowledge**

S. No	Source of Knowledge	Urban	Semi Urban	Rural	Total
1	On the job training	34 (45.95%)	22 (29.73%)	18 (24.32%)	74
2	Trial and error	41 (46.07%)	19 (21.35%)	29 (32.58%)	89
3	Colleagues	41 (58.57%)	15 (21.43%)	14 (20.00%)	70
4	Professional networks/blogs	34 (60.71%)	6 (10.71%)	16 (28.57%)	56
5	Published Papers	55 (57.29%)	15 (15.63%)	26 (27.08%)	96
	Total	205	77	103	385

**Source: Primary Data**

It can be understood from table 4.31 that out of the 56 respondents who gain knowledge through professional networks and blogs, 60.71% are from urban areas and out of 70 respondents who gain knowledge through colleagues, 58.71% are from urban areas. Urban areas consists of good IT infrastructural facilities and act as the knowledge hub. This makes the professional to get the knowledge. Nevertheless the professionals from rural

pockets, the rural also catch up the momentum in acquiring the knowledge too.

### **OPINION OF THE RESPONDENTS ABOUT THE IMPORTANCE OF PROFESSIONAL DEVELOPMENT TRAINING PROGRAMMES**

Women librarians are asked to give their opinion about the usefulness of professional development training programme on a five point scale very important, important, somewhat important, not important and not at all important. Women librarian's opinion is about the usefulness of professional development training programme presented in the following table.

**Table 4.32**

#### **Opinion of about the importance of professional development training programmes**

<b>S. No</b>	<b>Opinion</b>	<b>Number of respondents</b>	<b>Percentage</b>
1	Very important	255	66.23
2	Important	121	31.43
3	Somewhat important	9	2.34
4	Not important	-	-
5	Not at all important	-	-
	Total	385	100

**Source: Primary Data**



## **SATISFACTION LEVEL OF WOMEN LIBRARIANS WITH PROFESSIONAL DEVELOPMENT TRAINING PROGRAMME**

Women Librarians may or may not be satisfied with professional development training programmes like workshops, seminars and conference. Details regarding the level of satisfaction and not satisfied with training programmes are detailed in the following table.

**Table 4.33**

### **Satisfaction Level of Women Librarians with Professional Development Training Programme**

<b>S. No</b>	<b>Level of satisfaction</b>	<b>Number of Respondents</b>	<b>Percentage</b>
1	Yes	321	83.38
2	No	64	16.62
	Total	385	100

**Source: Primary Data**

It can be identified that 83.38 percent of the respondents are satisfied with the professional development training programme and the rest 16.62 per cent are not satisfied.

## REASONS FOR DISSATISFACTION WITH PROFESSIONAL DEVELOPMENT TRAINING PROGRAMMES

Women Librarians may be dissatisfied with professional skill development programmes like seminars, conferences, workshops, etc. due to various reasons such as lack of expertise, duration of the programme, personal reasons and lack of support from their organisation. The reasons for dissatisfaction with professional skill development programmes are detailed in table 4.34.

**Table 4.34**

### **Reasons for dissatisfaction with professional development training programmes**

<b>S. No</b>	<b>Reasons</b>	<b>Number of Respondents</b>
1	Lack of expertise among the resource persons	26
2	Duration of the programme	15
3	Wide coverage in short span of time	22
4	Lack of hands on training	31
5	Lack of support from parent organisation	19
6	Narrow scope	7
7	Personal reasons	39

(Multiple responses given by the respondents)

**Source: Primary Data**

It can be inferred from the table that, 39 respondents are dissatisfied with professional development training programme due to their personal reasons. 31 respondents are dissatisfied because of lack of hands of training methodology, 26 are dissatisfied since they feel that the resource persons are up to the level and 22 respondents are dissatisfied due to wide coverage is done in very short period.

### **MEAN SCORES OF PROFESSIONAL SKILLS FACTORS**

To study the perception of Women Librarians in Tamil Nadu, mean scores are calculated for the five professional skills factor. The scores for the factors are calculated by summarizing the value of the variables.

For example, individual score of each respondent is calculated for the factor “Technical Skill” by adding the scores of the four variables which constitute the factors namely, digital rights management, copyright, e-books/e-journals and acquisition licensing. Total score for the factor is calculated by adding the individual score of 385 respondents and the mean score is calculated by dividing the total score with the sample size of 385. Mean factor score can be used to understand the perception of respondents towards the factor. Scores of 1, 2, 3, 4 and 5 are given to poor, average, good, very good and excellent. The mean scores of professional skill factors of Women Librarians are shown in the following table.

**Table 4.35**

**Mean Scores of Professional Skill Factors**

<b>S. No</b>	<b>Factors</b>	<b>Mean Score</b>
1	Managerial Skills	3.369
2	IT Skills	2.966
3	Soft Skills	3.206
4	Technical Skills	2.876
5	RFID Technology Skills	2.994

**Source: Primary Data**

It can be identified that the respondents ranked very good with regard to the factors: managerial skills and soft skills as their average score is 3.369 and 3.206 respectively.

Mean scores for the factors IT, technical and RFID are around three so, the respondents ranked good regarding these factors.

**MEAN SCORES OF PROFESSIONAL SKILL FACTORS AND PROFILE OF THE RESPONDENTS**

Mean scores of opinion of respondents towards various the five professional skill factors obtained through factor analysis and their profile variables such as age, educational qualification, years of experience, type of institution and location of the institution where Women Librarians are currently employed have been calculated and the cross tabulation is presented in the following section.

## AGE OF THE RESPONDENTS AND THEIR OPINION TOWARDS MANAGERIAL SKILLS FACTOR

Opinion of respondents towards managerial skill factor is classified on the basis of their age and the results are shown in table 4.36.

**Table 4.36**

### Age of the respondents and their opinion of towards Managerial Skill Factor

S. No	Age group	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	20 years to 30 years	1 (2.63%)	13 (34.22%)	15 (39.47%)	9 (23.68%)	38
2	31 years to 40 years	5 (3.23%)	32 (20.64%)	85 (54.84%)	33 (21.29%)	155
3	41 years to 50 years	7 (4.43%)	50 (31.65%)	73 (46.20%)	28 (17.72%)	158
4	51 years to 60 years	0 (0%)	14 (41.18%)	9 (26.47%)	11 (32.35%)	34
	<b>Total</b>	13	109	182	81	385

**Source: Primary Data**

It can be seen from the above table that 54.84 percent of the respondents are in the age group of 31 years - 40 years and have good managerial skills and 46.20 percent of the respondents (age group of 31 to 40) have good managerial skills.

## EDUCATIONAL QUALIFICATIONS OF THE RESPONDENTS AND THEIR OPINION TOWARDS MANAGERIAL SKILLS FACTOR

Opinion of respondents towards managerial skill factor is classified on the basis of their educational qualifications and the results are shown in table 4.37.

**Table 4.37**

### Educational qualifications of the respondents and their opinion of towards Managerial Skill Factor

S. No	Educational qualifications	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	B. L. I. Sc.,	0 (0.00%)	0 (0.00%)	2 (100.00%)	0 (0.00%)	2
2	M. L. I. Sc.,	4 (4.00%)	30 (30.00%)	43 (43.00%)	23 (23.00%)	100
3	M. Phil.,	6 (5.31%)	39 (34.51%)	49 (43.36%)	19 (16.81%)	113
4	Ph.D.,	7 (4.29%)	34 (20.86%)	83 (50.92%)	39 (23.93%)	163
5	Others	1 (14.29%)	1 (14.29%)	5 (71.43%)	0 (0.00%)	7
	Total	18	104	182	81	385

**Source: Primary Data**

It can be indentified that 100 percent of the respondents whose educational qualifications are B.L.I. Sc., have good managerial skills and 50.92 percent of the respondents whose educational qualifications are Ph. D., have good managerial skills.

## YEARS OF EXPERIENCE AND THEIR OPINION TOWARDS MANAGERIAL SKILLS FACTOR

Opinion of respondents towards managerial skill factor is classified on the basis of their years of experience and the results are shown in table 4.38.

**Table 4.38**

### Years of experience and their opinion of towards Managerial Skill Factor

S. No	Years of Experience	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	1 year to 5 years	4 (7.69%)	17 (32.69%)	21 (40.38%)	10 (19.23%)	52
2	6 years to 10 years	4 (4.71%)	26 (30.59%)	42 (49.41%)	13 (15.29%)	85
3	11 years to 15 years	2 (1.92%)	19 (18.27%)	63 (60.58%)	20 (19.23%)	104
4	16 years to 20 years	5 (5.56%)	27 (30.00%)	42 (46.67%)	16 (17.78%)	90
5	Above 20 years	3 (5.56%)	15 (27.78%)	14 (25.93%)	22 (40.74%)	54
	Total	18	104	182	81	385

**Source: Primary Data**

It can be seen from the above table that 60.58 percent of the respondents whose experience is between 11 years - 15 years have very good managerial skills and 49.41 percent of the respondents whose experience is between 6 years - 10 years have very good managerial skills.

**TYPE OF INSTITUTION WHERE THE RESPONDENTS ARE WORKING AND THEIR OPINION TOWARDS MANAGERIAL SKILLS FACTOR**

Opinion of respondents towards managerial skill factor is classified on the basis of type of institution where the respondents are working and the results are shown in table 4.39 accordingly.

**Table 4.39**

**Type of institution where the respondents are working and their opinion of towards Managerial Skill Factor**

S. No	Type of institution	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	University	0 (0.00%)	4 (33.33%)	5 (41.67%)	3 (25.00%)	12
2	Government & Government Aided Arts and Science Colleges	0 (0.00%)	11 (34.38%)	18 (56.25%)	3 (9.38%)	32
3	Self Financed Arts and Science Colleges	11 (7.14%)	40 (25.97%)	67 (43.51%)	36 (23.38%)	154
4	Government & Government Aided Engineering Colleges	1 (16.67%)	3 (50.00%)	2 (33.33%)	0 (0.00%)	6
5	Self Financed Engineering Colleges	3 (1.97%)	38 (25.00%)	78 (51.32%)	33 (21.71%)	152
6	Nursing and Dental Colleges	3 (10.34%)	8 (27.59%)	12 (41.38%)	6 (20.69%)	29
	Total	18	104	182	81	385

**Source: Primary Data**

It can be understood that 56.25 percent of the respondents who are working in Government & Government Aided Arts and Science Colleges have very good managerial skills and 51.32 percent of the respondents who are working in Self Financed Engineering Colleges have very good managerial skills.



## LOCATION OF INSTITUTION AND THEIR OPINION TOWARDS MANAGERIAL SKILL FACTOR

Opinion of respondents towards managerial skill factor is classified on the basis of the location of institution where the respondents are working and the results are shown in table 4.40.

**Table 4.40**

**Location of institution and their opinion of towards Managerial Skill  
Factor**

S. No	Location of Institution	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	Urban	11 (5.37%)	49 (23.90%)	98 (47.80%)	47 (22.93%)	205
2	Semi urban	6 (7.79%)	17 (22.08%)	37 (48.05%)	17 (22.08%)	77
3	Rural	1 (0.97%)	38 (36.89%)	47 (45.63%)	17 (16.50%)	103
	Total	18	104	182	81	385

**Source: Primary Data**

It can be inferred from the table that 48.05 percent of the respondents who are working in semi urban areas have very good managerial skill and 47.80 percent of the respondents who are working in urban areas very good managerial skills.

## AGE OF THE RESPONDENTS AND THEIR OPINION TOWARDS IT SKILL FACTOR

Opinion of respondents towards IT skill factor is classified on the basis of their age and the results are shown in table 4.41.

**Table 4.41**

### Age of the respondents and their opinion of towards IT Skill Factor

S. No	Age group	Mean Score				
		1 – 2	2 – 3	3 - 4	Above 4	Total
1	20 years to 30 years	3 (7.89%)	14 (36.84%)	15 (39.47%)	6 (15.79%)	38
2	31 years to 40 years	12 (7.74%)	79 (50.97%)	48 (30.97%)	16 (10.32%)	155
3	41 years to 50 years	14 (8.86%)	83 (52.53%)	53 (33.54%)	8 (5.06%)	158
4	51 years to 60 years	6 (17.65%)	14 (41.18%)	10 (29.41%)	4 (11.76%)	34
	Total	35	190	126	34	385

**Source: Primary Data**

It can be seen from the table that 52.53 percent of the respondents in the age group of 41 years - 50 years have average IT skills and 50.97 percent of the respondents in the age group of 31 to 40 have average IT skills.

## EDUCATIONAL QUALIFICATIONS AND THEIR OPINION TOWARDS IT SKILL FACTOR

Opinion of respondents towards IT skill factor is classified on the basis of their educational qualifications and the results are shown in table 4.42.

**Table 4.42**

**Educational qualifications and their opinion of towards IT Skill Factor**

S. No	Educational qualifications	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	B. L. I. Sc.,	0 (0.00%)	1 (50.00%)	1 (50.00%)	0 (0.00%)	2
2	M. L. I. Sc.,	13 (13.00%)	41 (41.00%)	36 (36.00%)	10 (10.00%)	100
3	M. Phil.,	19 (16.81%)	55 (48.67%)	33 (29.20%)	6 (5.31%)	113
4	Ph.D.,	16 (9.82%)	76 (46.63%)	53 (32.52%)	18 (11.04%)	163
5	Other	0 (0.00%)	4 (57.14%)	3 (42.86%)	0 (0.00%)	7
	Total	48	177	126	34	385

**Source: Primary Data**

It can be identified from the table that 50 percent of the respondents whose educational qualification is B.L.I. Sc., have good IT skills and 48.67 percent of the respondents whose educational qualification is M. Phil., have average IT skills.

## YEARS OF EXPERIENCE AND THEIR OPINION TOWARDS IT SKILL FACTOR

Opinion of respondents towards IT skill factor is classified on the basis of their experience and the results are shown in table 4.43.

**Table 4.43**

**Years of experience and their opinion of towards IT Skill Factor**

S. No	Years of experience	Mean Score				
		1 – 2	2 – 3	3 - 4	Above 4	Total
1	1 year to 5 years	8 (15.38%)	22 (42.31%)	16 (30.77%)	6 (11.54%)	52
2	6 years to 10 years	8 (9.41%)	42 (49.41%)	27 (31.76%)	8 (9.41%)	85
3	11 years to 15 years	8 (7.69%)	49 (47.12%)	34 (32.69%)	13 (12.50%)	104
4	16 years to 20 years	15 (16.67%)	45 (50.00%)	28 (31.11%)	2 (2.22%)	90
5	Above 20 years	9 (16.67%)	19 (35.19%)	21 (38.89%)	5 (9.26%)	54
	Total	48	177	126	34	385

**Source: Primary Data**

It can be noted from the table that 50 percent of the respondents whose experience is between 16 years - 20 years have average IT skills and 49.41 percent of the respondents whose experience is between 6 years - 10 years have average IT skills.

## TYPE OF INSTITUTION AND THEIR OPINION TOWARDS IT SKILLS FACTOR

Opinion of respondents towards IT skill factor is classified on the basis of the type of institution where the respondents are working and the results are shown in table 4.44.

**Table 4.44**

**Type of institution and their opinion of towards IT Skill Factor**

S. No	Type of institution	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	University	1 (8.33%)	5 (41.67%)	4 (33.33%)	2 (16.67%)	12
2	Government & Government Aided Arts and Science Colleges	7 (21.88%)	18 (56.25%)	5 (15.63%)	2 (6.25%)	32
3	Self Financed Arts and Science Colleges	19 (12.34%)	70 (45.45%)	49 (31.82%)	16 (10.39%)	154
4	Government & Government Aided Engineering Colleges	1 (16.67%)	4 (66.67%)	1 (16.67%)	0 (0.00%)	6
5	Self Financed Engineering Colleges	16 (10.53%)	68 (44.74%)	58 (38.16%)	10 (6.58%)	152
6	Nursing and Dental Colleges	4 (13.79%)	12 (41.38%)	9 (31.03%)	4 (13.79%)	29
	Total	48	177	126	34	385

**Source: Primary Data**

It can be identified from the above table that 66.67 percent of the respondents who are working in Government & Government Aided Engineering Colleges have average IT skills and 56.25 percent of the respondents who are working in Government & Government Aided Arts and Science Colleges have average IT skills.

### **LOCATION OF INSTITUTION AND THEIR OPINION TOWARDS IT SKILLS FACTOR**

Opinion of respondents towards IT skill factor is classified on the basis of the location of institution where they are working and the results are shown in table 4.45.

**Table 4.45**

#### **Location of institution and their opinion of towards IT Skill Factor**

S. No	Location of Institution	Mean Score				Total
		1 – 2	2 – 3	3 - 4	Above 4	
1	Urban	26 (12.68%)	82 (40.00%)	80 (39.02%)	17 (8.29%)	205
2	Semi urban	7 (9.09%)	45 (58.44%)	14 (18.18%)	11 (14.29%)	77
3	Rural	15 (14.56%)	50 (48.54%)	32 (31.07%)	6 (5.83%)	103
	Total	48	177	126	34	385

**Source: Primary Data**

It can be seen from the table that 58.44 percent of the respondents who are working in semi urban areas have average IT skills and 48.54 percent of the respondents who are working in rural areas average IT skills.

### **AGE OF THE RESPONDENTS AND THEIR OPINION TOWARDS SOFT SKILL FACTOR**

Opinion of respondents towards soft skill factor is classified on the basis of their age and the results are shown in table 4.46.

**Table 4.46**

**Age of the respondents and their opinion of towards Soft Skill Factor**

S. No	Age group	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	20 years to 30 years	4 (10.53%0)	21 (55.26%)	5 (13.16%)	8 21.05%	38
2	31 years to 40 years	11 (7.10%)	62 (40.00%)	56 (36.13% )	26 16.77%	155
3	41 years to 50 years	13 (8.23%)	65 (41.14%)	61 (38.61%)	19 12.03%	158
4	51 years to 60 years	2 (5.88%)	10 (29.41%)	15 (44.12%)	7 (20.59%)	34
	Total	30	158	137	60	385

**Source: Primary Data**

It can be identified from the above table that 55.26 percent of the respondents in the age group of 20 years - 30 years have average soft skills and 44.12 percent of the respondents in the age group of 51 to 60 have good soft skills.

## EDUCATIONAL QUALIFICATIONS AND THEIR OPINION TOWARDS SOFT SKILLS FACTOR

Opinion of respondents towards soft skill factor is classified on the basis of their experience and the results are shown in table 4.47.

**Table 4.47**

### Educational qualifications and their opinion of towards Soft Skill Factor

S. No	Educational qualifications	Mean Score				Total
		1 – 2	2 – 3	3 - 4	Above 4	
1	B. L. I. Sc.,	0 (0.00%)	1 (50.00%)	1 (50.00%)	0 (0.00%)	2
2	M. L. I. Sc.,	10 (10.00%)	42 (42.00%)	32 (32.00%)	16 (16.00%)	100
3	M. Phil.,	9 (7.96%)	49 (43.36%)	41 (36.28%)	14 (12.39%)	113
4	Ph.D.,	11 (6.75%)	63 (38.65%)	59 (36.20%)	30 (18.40%)	163
5	Other	0 (0.00%)	3 (42.86%)	4 (57.14%)	0 (0.00%)	7
	<b>Total</b>	<b>30</b>	<b>158</b>	<b>137</b>	<b>60</b>	<b>385</b>

**Source: Primary Data**

It can be identified from the above table that 50 percent of the respondents, whose educational qualification is BLISc, have good soft skills and 43.36 percent of the respondents whose educational qualification is M. Phil., have average soft skills.



## YEARS OF EXPERIENCE AND THEIR OPINION TOWARDS SOFT SKILLS FACTOR

Opinion of respondents towards soft skill factor is classified on the basis of their experience and the results are shown in table 4.48.

**Table 4.48**

**Years of experience of the respondents and their opinion of towards Soft Skill Factor**

S. No	Years of experience	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	1 year to 5 years	7 (13.46%)	26 (50.00%)	13 (25.00%)	6 (11.54%)	52
2	6 years to 10 years	6 (7.06%)	41 (48.24%)	26 (30.59%)	12 (14.12%)	85
3	11 years to 15 years	3 (2.88%)	41 (39.42%)	45 (43.27%)	15 (14.42%)	104
4	16 years to 20 years	9 (10.00%)	38 (42.22%)	32 (35.56%)	11 (12.22%)	90
5	Above 20 years	5 (9.26%)	12 (22.22%)	21 (38.89%)	16 (29.63%)	54
	Total	30	158	137	60	385

**Source: Primary Data**

It can be seen from the above table that 50 percent of the respondents whose experience is between 1 years - 5 years have average soft skills and 48.24 percent of the respondents whose experience is between 6 years - 10 years have average soft skills.

## TYPE OF INSTITUTION AND THEIR OPINION TOWARDS SOFT SKILLS FACTOR

Opinion of respondents towards soft skill factor is presented on the basis of type of institution where they are working and the results are shown in table 4.49.

**Table 4.49**

**Type of institution and their opinion of towards Soft Skill Factor**

S. No	Type of institution	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	University	1 (8.33%)	6 (50.00%)	4 (33.33%)	1 (8.33%)	12
2	Government & Government Aided Arts and Science Colleges	3 (9.38%)	14 (43.75%)	12 (37.50%)	3 (9.38%)	32
3	Self Financed Arts and Science Colleges	11 (7.14%)	63 (40.91%)	58 (37.66%)	22 (14.29%)	154
4	Government & Government Aided Engineering Colleges	1 (16.67%)	3 (50.00%)	2 (33.33%)	0 (0.00%)	6
5	Self Financed Engineering Colleges	9 (5.92%)	64 (42.11%)	50 (32.89%)	29 (19.08%)	152
6	Nursing and Dental Colleges	5 (17.24%)	8 (27.59%)	11 (37.93%)	5 (17.24%)	29
	Total	30	158	137	60	385

**Source: Primary Data**

It can be identified from the above table that 50 percent of the respondents who are working in Government & Government Aided Engineering Colleges have average soft skills and 50 percent of the respondents who are working in University have average soft skills.

## LOCATION OF INSTITUTION AND THEIR OPINION TOWARDS SOFT SKILLS FACTOR

Opinion of respondents towards soft skill factor is classified on the basis of location institution where they are working and the results are shown in table 4.50.

**Table 4.50**

**Location of institution where the respondents are working and their  
opinion of towards Soft Skill Factor**

S. No	Location of Institution	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	Urban	18 (8.78%)	76 (37.07%)	79 (38.54%)	32 (15.61%)	205
2	Semi urban	5 (6.49%)	29 (37.66%)	28 (36.36%)	15 (19.48%)	77
3	Rural	7 (6.80%)	53 (51.46%)	30 (29.13%)	13 (12.62%)	103
	Total	30	158	137	60	385

**Source: Primary Data**

It can be inferred from the above table that 51.46 percent of the respondents who are working in rural areas have average soft skills and 38.54 percent of the respondents who are working in urban areas very good soft skills.

## AGE OF THE RESPONDENTS AND THEIR OPINION TOWARDS TECHNICAL SKILLS FACTOR

Opinion of respondents towards technical skill factor is classified on the basis of their age and the results are shown in table 4.51.

**Table 4.51**

**Age the respondents and their opinion of towards Technical Skill Factor**

S. No	Age group	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	20 years to 30 years	8 (21.05%)	16 (42.11%)	8 (21.05%)	6 (15.79%)	38
2	31 years to 40 years	27 (17.42%)	55 (35.48%)	53 (34.19%)	20 (12.90%)	155
3	41 years to 50 years	37 (23.42%)	76 (48.10%)	44 (27.85%)	1 (0.63%)	158
4	51 years to 60 years	11 (32.35%)	13 (38.24%)	6 (17.65%)	4 (11.76%)	34
	Total	83	160	111	31	385

**Source: Primary Data**

It can be seen from the above table that 48.10 percent of the respondents in the age group of 41 years - 50 years have average technical skills and 42.11 percent of the respondents in the age group of 20 to 30 have good technical skills.

## EDUCATIONAL QUALIFICATIONS AND THEIR OPINION TOWARDS TECHNICAL SKILLS FACTOR

Opinion of respondents towards technical skill factor is classified on the basis of their educational qualifications and the results are shown in table 4.52.

**Table 4.52**  
**Educational Qualifications and their opinion of towards Technical Skill Factor**

S. No	Educational Qualifications	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	B. L. I. Sc.,	0 (0.00%)	1 (50.00%)	1 (50.00%)	0 (0.00%)	2
2	M. L. I. Sc.,	17 (17.00%)	38 (38.00%)	33 (33.00%)	12 (12.00%)	100
3	M. Phil.,	31 (27.43%)	42 (37.17%)	28 (24.78%)	12 (10.62%)	113
4	Ph.D.,	33 (20.25%)	79 (48.47%)	44 (26.99%)	7 (4.29%)	163
5	Other	2 (28.57%)	0 (0.00%)	5 (71.43%)	0 (0.00%)	7
	Total	83	160	111	31	385

**Source: Primary Data**

It can be seen from the above table that 50 percent of the respondents whose educational qualification is B.L.I. Sc., have good technical skills and 48.47 percent of the respondents whose educational qualification is Ph. D., have average technical skills.

## YEARS OF EXPERIENCE AND THEIR OPINION TOWARDS TECHNICAL SKILLS FACTOR

Opinion of respondents towards technical skill factor is classified on the basis of their experience and the results are shown in table 4.53.

**Table 4.53**

### Years of experience and their opinion of towards Technical Skill Factor

S. No	Years of experience	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	1 year to 5 years	18 (34.62%)	20 (38.46%)	11 (21.15%)	3 (5.77%)	52
2	6 years to 10 years	11 (12.94%)	32 (37.65%)	34 (40.00%)	8 (9.41%)	85
3	11 years to 15 years	19 (18.27%)	46 (44.23%)	34 (32.69%)	5 (4.81%)	104
4	16 years to 20 years	23 (25.56%)	39 (43.33%)	24 (26.67%)	4 (4.44%)	90
5	Above 20 years	12 (22.22%)	23 (42.59%)	8 (14.81%)	11 (20.37%)	54
	Total	83	160	111	31	385

**Source: Primary Data**

It can be identified from the table that 44.23 percent of the respondents whose experience is between 11 years - 15 years have average technical skill and 43.33 percent of the respondents whose experience is between 16 years - 20 years have average technical skill.

## TYPE OF INSTITUTION AND THEIR OPINION TOWARDS TECHNICAL SKILLS FACTOR

Opinion of respondents towards technical skill factor is classified on the basis of the type of institution they are working and the results are shown in table 4.54.

**Table 4.54**

### Type of institution and their opinion of towards Technical Skill Factor

S. No	Type of institution	Mean Score				Total
		1 – 2	2 – 3	3 - 4	Above 4	
1	University	4 (33.33%)	2 (16.67%)	5 (41.67%)	1 (8.33%)	12
2	Government & Government Aided Arts and Science Colleges	11 (34.38%)	18 (56.25%)	2 (6.25%)	1 (3.13%)	32
3	Self Financed Arts and Science Colleges	27 (17.53%)	61 (39.61%)	54 (35.06%)	12 (7.79%)	154
4	Government & Government Aided Engineering Colleges	2 (33.33%)	3 (50.00%)	1 (16.67%)	0 (0.00%)	6
5	Self Financed Engineering Colleges	31 (20.39%)	62 (40.79%)	43 (28.29%)	16 (10.53%)	152
6	Nursing and Dental Colleges	8 (27.59%)	14 (48.28%)	6 (20.69%)	1 (3.45%)	29
	Total	83	160	111	31	385

**Source: Primary Data**

It can be understood from the table 4.54 that 56.25 percent of the respondents who are working in Government & Government Aided Arts and Science Colleges have average technical skills and 50 percent of the

respondents who are working in Government & Government Aided Engineering Colleges have average technical skills.

### **LOCATION OF INSTITUTION AND THEIR OPINION TOWARDS TECHNICAL SKILLS FACTOR**

Opinion of respondents towards technical skill factor is classified on the basis of location of institution where they are working and the results are shown in table 4.55.

**Table 4.55**

**Location of institution and their opinion of towards Technical Skill Factor**

S. No	Location of Institution	Mean Score				Total
		1 – 2	2 – 3	3 - 4	Above 4	
1	Urban	40 (19.51%)	89 (43.41%)	59 (28.78%)	17 (8.29%)	205
2	Semi urban	18 (23.38%)	27 (35.06%)	24 (31.17%)	8 (10.39%)	77
3	Rural	25 (24.27%)	44 (42.72%)	28 (27.18%)	6 (5.83%)	103
	Total	83	160	111	31	385

**Source: Primary Data**

It can be identified from the table that 43.41 percent of the respondents who are working in urban areas have average technical skills and 42.72 percent of the respondents who are working in urban areas average technical skills.



## AGE OF THE RESPONDENTS AND THEIR OPINION TOWARDS RFID TECHNOLOGY SKILL FACTOR

Opinion of respondents towards RFID skill factor is classified on the basis of their age and the results are shown in table 4.56.

**Table 4.56**

**Age of the respondents and their opinion of towards RFID Skill Factor**

S. No	Age Group	Mean Score				Total
		1 – 2	2 – 3	3 - 4	Above 4	
1	20 years to 30 years	9 (23.68%)	17 (44.74%)	6 (15.79%)	6 (15.79%)	38
2	31 years to 40 years	49 (31.61%)	42 (27.10%)	55 (35.48%)	9 (5.81%)	155
3	41 years to 50 years	44 (27.85%)	53 (33.54%)	53 (33.54%)	8 (5.06%)	158
4	51 years to 60 years	11 (32.35%)	10 (29.41%)	11 (32.35%)	2 (5.88%)	34
	<b>Total</b>	113	122	125	25	385

**Source: Primary Data**

It can be seen from the table that 44.74 percent of the respondents in the age group of 20 years - 30 years have average RFID skills and 35.48 percent of the respondents in the age group of 31 to 40 have good RFID skills.

## EDUCATIONAL QUALIFICATIONS AND THEIR OPINION TOWARDS RFID TECHNOLOGY SKILL FACTOR

Opinion of respondents towards RFID skill factor is classified on the basis of their educational qualifications and the results are shown in table 4.57.

**Table 4.57**

**Educational qualifications and their opinion of towards RFID Skill Factor**

S. No	Educational Qualifications	Mean Score				Total
		1 – 2	2 – 3	3 - 4	Above 4	
1	B. L. I. Sc.,	1 (50.00%)	1 (50.00%)	0 (0.00%)	0 (0.00%)	2
2	M. L. I. Sc.,	30 (30.00%)	29 (29.00%)	32 (32.00%)	9 (9.00%)	100
3	M. Phil.,	41 (36.28%)	31 (27.43%)	34 (30.09%)	7 (6.19%)	113
4	Ph.D.,	40 (24.54%)	58 (35.58%)	56 (34.36%)	9 (5.52%)	163
5	Other	1 (14.29%)	3 (42.86%)	3 (42.86%)	0 0.00%	7
	Total	113	122	125	25	385

**Source: Primary Data**

It can be identified from the above table that 50 percent of the respondents whose educational qualification is B.L.I. Sc., have average RFID skills and 36.28 percent of the respondents whose educational qualification is M. Phil., have poor RFID skills.

## YEARS OF EXPERIENCE AND THEIR OPINION TOWARDS RFID TECHNOLOGY SKILLS FACTOR

Opinion of respondents towards RFID skill factor is classified on the basis of their experience and the results are shown in table 4.58.

**Table 4.58**

**Years of experience and their opinion of towards RFID Skill Factor**

S. No	Years of Experience	Mean Score				
		1 – 2	2 – 3	3 - 4	Above 4	Total
1	1 year to 5 years	18 (34.62%)	15 (28.85%)	15 (28.85%)	4 (7.69%)	52
2	6 years to 10 years	26 (30.59%)	29 (34.12%)	27 (31.76%)	3 (3.53%)	85
3	11 years to 15 years	31 (29.81%)	32 (30.77%)	40 (38.46%)	1 (0.96%)	104
4	16 years to 20 years	21 (23.33%)	30 (33.33%)	32 (35.56%)	7 (7.78%)	90
5	Above 20 years	17 (31.48%)	16 (29.63%)	11 (20.37%)	10 (18.52%)	54
	Total	113	122	125	25	385

**Source: Primary Data**

It can be inferred from the above table that 38.46 percent of the respondents whose experience is between 11 years - 15 years have very good RFID skills and 35.56 percent of the respondents whose experience is between 16 years - 20 years have very good skills.

## TYPE OF INSTITUTION AND THEIR OPINION TOWARDS RFID TECHNOLOGY SKILL FACTOR

Opinion of respondents towards RFID skill factor is classified on the basis of the type of institution where they are working and the results are shown in table 4.59.

**Table 4.59**

**Type of institution and their opinion of towards RFID Skill Factor**

S. No	Type of Institution	Mean Score				Total
		1 – 2	2 - 3	3 - 4	Above 4	
1	University	5 (41.67%)	5 (41.67%)	2 (16.67%)	0 (0.00%)	12
2	Government & Government Aided Arts and Science Colleges	15 (46.88%)	6 (18.75%)	10 (31.25%)	1 (3.13%)	32
3	Self Financed Arts and Science Colleges	44 (28.57%)	47 (30.52%)	54 (35.06%)	9 (5.84%)	154
4	Government & Government Aided Engineering Colleges	1 (16.67%)	2 (33.33%)	3 (50.00%)	0 (0.00%)	6
5	Self Financed Engineering Colleges	39 (25.66%)	53 (34.87%)	45 (29.61%)	15 (9.87%)	152
6	Nursing and Dental Colleges	9 (31.03%)	9 (31.03%)	11 (37.93%)	0 (0.00%)	29
	Total	113	122	125	25	385

**Source: Primary Data**

It can be seen from the above table that 50 percent of the respondents who are working in Government & Government Aided Engineering Colleges have average good RFID skills and 46.88 percent of the respondents who are working in Government & Government Aided Arts and Science Colleges have poor RFID skills.

## LOCATION OF INSTITUTION AND THEIR OPINION TOWARDS RFID TECHNOLOGY SKILLS FACTOR

Opinion of respondents towards RFID skill factor is classified on the basis of the type of institution where they are working and the results are shown in table 4.60.

**Table 4.60**

### Location of institution and their opinion of towards RFID Skill Factor

S. No	Location of Institution	Mean Score				
		1 – 2	2 - 3	3 - 4	Above 4	Total
1	Urban	59 (28.78%)	60 (29.27%)	71 (34.63%)	15 (7.32%)	205
2	Semi urban	26 (33.77%)	23 (29.87%)	23 (29.87%)	5 (6.49%)	77
3	Rural	28 (27.18%)	39 (37.86%)	31 (30.10%)	5 (4.85%)	103
	Total	113	122	125	25	385

**Source: Primary Data**

It can be inferred from the table that 37.86 percent of the respondents who are working in rural areas have average RFID skills and 34.63 percent of the respondents who are working in urban areas have very good RFID skills.

## QUALITIES REQUIRED FOR LIS PROFESSIONALS

With increasing use of information technology Librarians need various skills like ready to adopt new technology, vision, communication, flexibility, delegation, creativity, team work, updating and planning for future. The opinion of respondents towards skills required by Librarians is detailed in the following table.

**Table 4.61**  
**Qualities required for Library Professionals**

S. No	Qualities of Librarian	Number of respondents
1	Ready to adopt new technology	385
2	Vision	185
3	Communication	298
4	Flexibility	76
5	Delegation	127
6	Creativity	265
7	Team work	345
8	Planning for future	201

(Multiple responses given by the respondents)

**Source: Primary Data**

It can be identified from the above table that all 385 respondents are prepared to adopt new technology which is an important quality required among the Library professionals 345 respondents agreed that team work is the important quality and 298 feel that communication is the important quality required for LIS professionals. The study explored the professional skills of women librarians in Tamil Nadu. Various demographic, to managerial and technical skills were analyzed with the relevant statistical tools and the appropriate inferences have been provided in the work wherever necessary. The candidate could excel in any place or institution of affiliation and it purely depends on the interest. A comprehensive view about educational qualification, location of the institute and qualities required has been provided. This data analysis pertaining to this research work touched upon various facets of skills acquired by and needed for effective Library professionals.