

CHAPTER - IV

RESULTS AND DISCUSSION

Data presented in table 1 indicate the institution wise respondent's duration of library visits. It could be noted that out of 474 respondents 10.55 per cent of them make library visit every day. Out of total respondents, 14.56 per cent of them visit library once in a week. This type of library visit was made by one-fifth of the respondents of University of Madras. Of the total 474 respondents, 26.16 per cent of them make library visit once in a fortnight. Moreover, 48.73 per cent of the total respondents make library visit once in a month. Majority of the respondents of Bharathiyar University (44.89%) and Annamalai University (59.86%) make library visit once in a month.

The chi square test is applied for further discussion. The computed chi square value is 57.25, which is greater than its tabulated value at 5% level of significance. Hence the difference in faculty background is statistically identified as significant with respect to respondents' duration of library visit in their libraries in search of research information.

It could be seen clearly from the above discussion that the majority of the respondents make library visit once in a month. However, the

respondents of University of madras considerable number in weekly visit to library.

Table - 1
Institution wise Respondents' duration of Library visit

Institution	Every day	Once in a week	Once in Fortnight	Once in Month	Total
University of Madras	22 (16.79)	28 (21.37)	48 (36.64)	23 (25.11)	131
Annamalai University	25 (7.82)	32 (10.88)	63 (21.43)	176 (59.86)	294
Bharathiyar University	5 (10.20)	9 (18.36)	13 (26.53)	22 (44.89)	49
Total	50 (10.55)	69 (14.56)	124 (26.16)	231 (48.73)	474

Source: computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	57.25
Degrees of freedom	6
Chi square table value 5%	12.6

A study of data in table 2 indicates the Faculty wise respondents duration of library visit. In general Arts Faculty respondents (62.24%) and Engineering Faculty respondents (50.71%) make library visit once in a month. In general senior Science Faculty respondents make more frequent library visits than those of others.

The chi square test is applied for further discussion. The computed chi square value is 33.22, which is greater than its tabulated value at 5%

level significance. Hence the difference in education status is statistically identified as significant with respect to respondents' duration of library visit in their libraries in search of research information.

It is evident that Science Faculty respondents need more information and it is a reason for the frequent library visits.

Table - 2
Faculty Wise Respondents' Duration of Library Visit

Faculty	Every day	Once in a week	Once in a Fortnight	Once in a Month	Total
Faculty of Arts	14 (9.79)	17 (11.89)	23 (16.1)	89 (62.24)	143
Faculty of Science	13 (10.83)	23 (19.17)	49 (40.83)	35 (29.17)	120
Faculty of Engineering	23 (10.90)	29 (13.74)	52 (24.64)	107 (50.71)	211
Total	50 (10.55)	69 (14.56)	124 (26.16)	231 (48.73)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	33.22
Degrees of freedom	6
Chi square table value 5%	12.6

A study of data in table 3 indicates the sex wise respondent's library visit behaviour. In general female respondents are more in number with respect to daily library visit than those of female professionals.

The chi square test is applied for further discussion. The computed chi square value is 1.907, which is lesser than its tabulated value at 5% level of significance. Hence the difference in sex status is statistically identified as insignificant with respect to respondents' duration of library visit in their libraries in search of research information.

Table - 3
Sex wise Respondents' duration of Library visit

Sex	Every day	Once in a week	Once in a Fortnight	Once in a Month	Total
Male	42 (10.39)	58 (14.35)	102 (25.25)	202 (50)	404
Female	8 (11.43)	11 (15.71)	22 (31.43)	29 (41.43)	70
Total	50 (10.55)	69 (14.55)	124 (26.16)	231 (49.04)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	1.907
Degrees of freedom	3
Chi square table value 5%	7.81

It is concluded that there is no significant variation between male and female research scholars in their duration of library visit.

Data presented in table 4 indicate the faculty wise respondent's quantum of time utilization pattern in libraries. It could be noted that out of the total 474 respondent, 41.35 per cent of them spend ½ to

1hour per day in search of library information. Out of the total 474 respondents, 32.28 per cent of them spend 1-2 hours per day in their libraries in search of research information. This type of habit is mainly observed among the research scholars of Annamalai University respondents (33.03%). Of the total respondents, 16.45 per cent of them spend about 2-4 hours per day in their libraries in search of information. Moreover 9.92 per cent of the total respondents spend 4-6 hours per day in their libraries in search of information.

The chi square test is applied for further discussion. The computed chi square value is 6.752, which is lesser than its tabulated value at 5% level of significance. Hence the difference in institutional background is statistically identified as insignificant with respect to respondents' quantum of time utilization in their libraries in search of research information.

It could be noted that University of Madras and Annamalai University research scholar spend more time on availing the benefits of library services in relation to others.

Table - 4

Institution wise Respondents' Quantum of time utilization in Library per Visit

Institution	½ to 1 hours	1 – 2 hours	2 – 4 hours	4 – 6 hours	Total
University of Madras	56 (42.75)	36 (27.48)	25 (19.08)	14 (10.68)	131
Annamalai University	123 (41.84)	103 (35.03)	43 (14.63)	25 (8.5)	294
Bharathiyar University	17 (34.69)	14 (28.57)	10 (20.41)	8 (16.32)	49
Total	196 (41.35)	153 (32.28)	78 (16.45)	47 (9.92)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	6.752
Degrees of freedom	6
Chi square table value 5%	12.6

Table 5 presents data on the Faculty wise respondents' quantum of time utilization pattern in library. It could be noted that majority of the Science Faculty respondents spend 2-4 hours per week in respect of availing the benefit of library services and facilities. Majority of the Engineering Faculty respondents spend about one hour per day in their libraries in satisfying their information needs.

The chi-square test is applied for further discussion. The computed square value is 84.59, which is much greater than its tabulated value at 5 per cent level significance.

Table - 5
Faculty wise Respondents Quantum of time utilization in Library per Visit

Faculty	½ to 1 hours	1 – 2 hours	2 – 4 hours	4 – 6 hours	Total
Faculty of Arts	37 (25.87)	61 (42.66)	18 (12.59)	27 (18.88)	143
Faculty of Science	43 (35.83)	22 (18.33)	41 (31.17)	14 (11.67)	120
Faculty of Engineering	116 (54.98)	70 (33.17)	19 (9)	6 (2.84)	211
Total	196 (41.35)	153 (32.28)	78 (16.45)	47 (9.91)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	84.59
Degrees of freedom	6
Chi square table value 5%	12.6

Hence, the difference in education status is statistically identified as significant with respect to respondents' quantum of time utilization in the library of their own institution.

It could be seen clearly from the above discussion that there is a correspondence between faculty status of the research scholar and their quantum of time utilization in their library.

Data presented in table 6 indicate the sex wise respondents' quantum of time utilization in the library of their information. The female scientist predominate the time utilization 1-2 hours per day in the library of their own in search of library information. Whereas the male research scholar mainly spend ½ hours – 1 hour per day.

The chi-square test is applied for further discussion. The computed hi-square value is 9.01, which is much greater than its tabulated value at 5 per cent level. Hence, the sex difference is statistically identified as significant with respect to respondent' quantum of time utilization in search of library information.

It could be seen clearly from the above discussion that male scientists relatively spend less time on availing the benefits of library services than that of female scientists.

Table - 6
Sex wise Respondents Quantum of time utilization in visit to Library

Sex	½ to 1 hours	1 – 2 hours	2 – 4 hours	4 – 6 hours	Total
Male	172 (42.57)	122 (30.19)	65 (16.1)	45 (11.14)	404
Female	24 (34.28)	31 (44.28)	13 (18.57)	2 (2.86)	70
Total	196 (41.35)	153 (32.28)	78 (16.45)	47 (9.91)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	9.010
Degrees of freedom	6
Chi square table value 5%	12.6

A study of data in table 7 indicates the Institution wise respondents' number of visit to libraries of other institutions. It could be noted that out of the total 474 respondents 13.71 per cent of them have made visit to 1-2 libraries, 26.78 per cent of them have made visit to 3-4 libraries and 29.75 per cent of them have made visit to 5-6 libraries. In this study, 12.66 per cent of them have made visit to 7-8 libraries. 7.59 per cent of them have made visit to 9-10 libraries and 9.49 per cent of them have made visit to 10 and above libraries.

Table - 7
Institution wise Respondents' Number of visit to Libraries of Other Institutions

Institution	1 to 2 libraries	3-4 Libraries	5-6 Libraries	7-8 Libraries	9-10 Libraries	More than Ten Libraries	Total
University of Madras	22 (16.79)	36 (27.48)	25 (19.08)	14 (10.68)	19 (14.50)	15 (11.45)	131
Annamalai University	38 (12.92)	73 (24.83)	102 (34.69)	39 (13.26)	15 (5.1)	27 (9.18)	294
Bharathiyar University	5 (10.2)	18 (36.73)	14 (28.57)	7 (14.28)	2 (4.08)	3 (6.12)	49
Total	65 (13.71)	127 (26.79)	141 (29.75)	60 (12.66)	36 (7.59)	45 (9.49)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	24.35
Degrees of freedom	10
Chi square table value 5%	18.3

The Institution wise analysis reveals the following facts. Majority of the respondents of Annamalai University institution have made visit to 5-6 libraries (34.69 %) and Bharathiyar University research scholar mainly have made visit to 3-4 libraries. In general Madras University research scholar constitutes more number with respect to more than five libraries visit than those of others.

The chi square test is applied for further discussion. The computed chi square value is 24.35, which is greater than its tabulated value at 5% level significance. Hence the difference in institution status is statistically identified as significant with respect to respondents' number of visits to libraries of other institutions.

It could be seen clearly from above discussion that research scholar visit to 5-6 numbers of other libraries occupy the first position, 3-4 libraries visit the second, 1-2 libraries visit the third , 7-8 libraries visit the fourth, above libraries visit the fifth and 9-10 libraries visit the last.

Table - 8

Faculty wise Respondents Number of visit to Libraries of Other Institutions

Faculty	1 to 2 libraries	3-4 Libraries	5-6 Libraries	7-8 Libraries	9-10 Libraries	More than Ten Libraries	Total
Faculty of Arts	39 (27.27)	42 (29.37)	36 (25.17)	13 (9.09)	8 (5.59)	5 (3.49)	143
Faculty of Science	17 (14.16)	31 (25.83)	37 (30.83)	15 (12.5)	11 (9.16)	9 (7.5)	120
Faculty of Engineering	9 (4.26)	54 (25.59)	68 (32.23)	32 (15.16)	17 (8.05)	31 (14.69)	211
Total	65 (13.71)	127 (26.79)	141 (29.75)	60 (12.66)	36 (7.59)	45 (9.49)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	50.54
Degrees of freedom	10
Chi square table value 5%	18.3

A study of data in table 8 indicates the Faculty wise respondents' number of visit to libraries of other institutions. The Faculty wise analysis reveals the following facts. Majority of the Engineering Faculty respondents have made visit to 5-6 libraries (32.3 %) and Arts Faculty respondents mainly have made visit to 3-4 libraries. In general Science Faculty respondents constitute more number with respect 9-10 libraries visit than those of others.

The chi square test is applied for further discussion. The computed chi square value is 50.54, which is greater than its tabulated value at 5% level significance. Hence the difference in Faculty status is statistically identified as significant with respect to respondents' number of visits to libraries of other institutions.

It could be seen clearly above the discussion that Science Faculty respondents constitute more number with respect to more visits to libraries of other institutions than those of others.

Table - 9
Sex wise Respondents' Number of visit to Libraries of Other Institutions

Sex	1 to 2 libraries	3-4 Libraries	5-6 Libraries	7-8 Libraries	9-10 Libraries	More than Ten Libraries	Total
Male	44 (10.89)	106 (26.24)	124 (30.69)	55 (13.61)	34 (8.41)	41 (10.15)	409
Female	21 (30)	21 (30)	17 (24.28)	5 (7.14)	2 (2.86)	4 (5.71)	70
Total	65 (13.71)	127 (26.79)	141 (29.75)	60 (12.66)	36 (7.59)	45 (4.49)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	22.66
Degrees of freedom	5
Chi square table value 5%	11.1

A study of data in table 9 indicates the Sex wise respondents' number of visit to libraries of other institutions. The Sex wise analysis reveals the following facts. Majority of the male respondents have made visit to 5-6 libraries (30.69 %) and female respondents mainly have made visit to 3-4 libraries.

The chi square test is applied for further discussion. The computed chi square value is 22.66, which is greater than its tabulated value at 5% level significance. Hence, the difference in sex status is statistically identified as significant with respect to respondents' number of visits to libraries of other institutions.

It could be seen clearly above the discussion that male respondents constitute more number with respect to more visits to libraries of other institutions than Female research scholar.

Table - 10
Institution wise Respondents' Duration of Time Utilization with Computer in their own Institutions

Institution	Less than 1 years	1-2 Years	2-3 years	3-4 years	More than 4 years	Total
University of Madras	24 (18.32)	35 (26.72)	52 (39.69)	12 (9.16)	8 (6.11)	131
Annamalai University	56 (19.05)	98 (33.33)	86 (29.25)	31 (10.54)	23 (7.82)	294
Bharathiyar University	4 (8.16)	30 (61.22)	11 (22.45)	2 (4.08)	2 (4.08)	49
Total	84 (17.72)	163 (34.38)	149 (31.43)	45 (9.49)	33 (6.96)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	22.89
Degrees of freedom	8
Chi square table value 5%	15.5

A study of data in table 10 indicates the Institution wise respondents' duration of time utilization with computer in their own institution. It could be noted that out of the total 474 respondents 17.72 per cent of them have made computer in their institution up to one year, 34.38 per cent of them have made computer in their institution for a period of 1-2 years and 31.43 per cent of them have made computer in their institution for a period of 2-3 years. In this study 9.49 per cent of them have made computer in their institution for a period of 3-4 years. and 6.96 per cent of them have made computer in their institution for a period of above 4 years.

The Institution wise analysis reveals the following facts. Majority of the respondents of Annamalai University institution have made computer in their institution for a period of 1-2 years (33.33 %) and also Bharathiyar University research scholar. In general Madras University research scholar Constitute more number with respect to 2-3 years of computer use in their own institution than those of others.

The chi square test is applied for further discussion. The computed chi square value is 22.89, which is greater than its tabulated value at 5%

level significance. Hence, the difference in institution status is statistically identified as significant with respect to respondents' duration of computer use in the own institution.

It could be seen clearly from above discussion that 1-2 years of computer use among research scholar of the selected institutions occupy the first position. 2-3 years the second, below one year the third. 3-4 years the fourth and above 4 years the last.

Table - 11
Faculty wise Respondents' During of Time Utilization with Computer in their own Institutions

Faculty	Less than 1 years	1-2 Years	2-3 years	3-4 years	More than 4 years	Total
Faculty of Arts	31 (21.67)	42 (29.37)	47 (32.86)	12 (8.39)	11 (7.69)	143
Faculty of science	22 (18.33)	26 (21.66)	49 (40.83)	15 (12.5)	8 (6.66)	120
Faculty of Engineering	31 (14.69)	95 (45.02)	53 (25.12)	18 (8.53)	14 (6.64)	211
Total	84 (17.72)	163 (34.38)	149 (31.43)	45 (9.49)	33 (6.96)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	23.85
Degrees of freedom	8
Chi square table value 5%	15.5

A study of data in table 11 indicates the Faculty wise respondents' duration of time utilization with computer in their own institution. The Faculty wise analysis reveals the following facts. Majority of the Engineering Faculty respondents have made computer in their institution for a period of 1-2 years (45.02 %) and Science Faculty respondents constitute more number with respect to 2-3 years of time utilization with computer in their institution. In general Arts Faculty respondents constitute more number with respect to below one year of computer use in their own institution than those of others.

The chi square test is applied for further discussion. The computed chi square value is 23.85, which is greater than its tabulated value at 5% level significance. Hence, the difference in education status is statistically identified as significant with respect to respondents' duration of computer use in the own institution.

It could be seen clearly from above discussion that Engineering Faculty respondents mainly use computer in their institution up to 2 years.

Table - 12

Sex wise Respondents' During of Time Utilization with Computer in their own Institutions

Sex	Less than 1 years	1-2 Years	2-3 years	3-4 years	More than 4 years	Total
Male	70 (17.33)	134 (33.17)	136 (33.66)	40 (9.9)	24 (5.94)	404
Female	14 (20)	29 (41.43)	13 (18.57)	5 (7.14)	9 (12.86)	70
Total	84 (17.72)	163 (34.38)	149 (31.43)	45 (9.49)	33 (6.96)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	10.33
Degrees of freedom	4
Chi square table value 5%	9.49

A study of data in table 12 indicates the Sex wise respondents' duration of time utilization with computer in their own institution. The sex wise analysis reveals the following facts. Majority of the female respondents have made computer in their institution for a period of 1-2 years (41.43 %). In general male respondents constitute more number with respect to below 2 years of computer use in their own institution than those of others.

The chi square test is applied for further discussion. The computed chi square value is 10.33, which is greater than its tabulated value at 5% level significance. Hence the, difference in sex status is statistically

identified as significant with respect to respondents' duration of computer use in the own institution.

It could be seen clearly from above discussion that female research scholar mainly use computer in their institution up to 10 years.

Table - 13
Institution wise Respondents' Satisfaction on Internet Resource Facilities in their Libraries

Institution	Highly Satisfied	Partially Satisfied	Normally Satisfied	Un Satisfied	Total
University of Madras	45 (34.35)	28 (21.37)	37 (28.24)	21 (16.03)	131
Annamalai University	79 (26.87)	73 (24.83)	106 (36.05)	36 (12.24)	294
Bharathiyar University	5 (10.2)	21 (42.86)	17 (34.69)	6 (12.24)	49
Total	129 (27.22)	122 (25.74)	160 (33.75)	63 (13.29)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	16.99
Degrees of freedom	6
Chi square table value 5%	12.6

Data presented in table 13 indicate the institution wise respondent's satisfaction on internet resource facilities in the libraries. It is observed that out of the total 474 respondents 27.22 per cent of them

are highly satisfied with internet resource facilities available in their institutions and 24.75 per cent of them are partially satisfied. In this study, out of the total 474 respondents 33.75 per cent of them are normally satisfied with internet resource facilities available in their institutions and the rest 13.29 per cent of them are dissatisfied with internet resource facilities available in their institutions.

The institution wise analysis reveals the following words. Majority of the Madras University respondents (34.35%) are highly satisfied with internet resource facilities available in their institutions. A considerable number of Annamalai University research scholar (36.05%) are normally satisfied with internet resource facilities available in their institutions. Majority of the respondents of Bharathiyar University (42.86%) are partially satisfied with internet resource facilities available in their institutions.

The chi square test is applied for further discussion. The computed chi square value is 16.99, which is greater than its tabulated value at 5% level significance. Hence the, difference in institution status is statistically identified as significant with respect to respondents' satisfaction on internet resource facilities available in their institutions.

It could be seen clearly from above discussion that respondents rate first order priority to normal satisfaction with internet resource

facilities available in their institution, high level of satisfaction internet resource facilities available in their institutions the second, partially level of satisfaction the second, normal level satisfaction third and dissatisfaction with internet resource facilities available in their institutions the last.

Table -14

Faculty wise Respondents' Satisfaction on internet resource Facilities in the Libraries

Faculty	Highly Satisfied	Partially Satisfied	Normally Satisfied	Un Satisfied	Total
Faculty of Arts	39 (27.27)	41 (28.67)	47 (32.86)	16 (11.18)	143
Faculty of Science	41 (34.16)	25 (20.83)	41 (34.16)	13 (10.83)	120
Faculty of Engineering	49 (23.22)	56 (26.54)	72 (34.12)	34 (16.11)	211
Total	129 (27.22)	122 (25.74)	160 (33.45)	63 (13.29)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	7.35
Degrees of freedom	6
Chi square table value 5%	12.6

Data presented in table 14 indicate the Faculty wise respondent's satisfaction on internet resource facilities in the libraries. The Faculty

wise analysis reveals the following words. Majority of the Science Faculty respondents (34.16%) are highly satisfied with internet resource facilities available in their institutions. A considerable number of Engineering Faculty respondents (34.12%) are normally satisfied with internet resource facilities available in their institutions. Majority of the respondents Arts Faculty respondents (28.67%) are partially satisfied with internet resource facilities available in their institutions

The chi square test is applied for further discussion. The computed chi square value is 7.35, which is lesser than its tabulated value at 5% level significance. Hence the, difference in Faculty status is statistically identified as insignificant with respect to respondents' satisfaction with internet resource facilities available in their institutions.

It could be seen clearly from above discussion that Science Faculty respondents are mainly highly satisfied with internet resource facilities available in their institutions.

Data presented in table 15 indicate the sex wise respondents satisfaction on internet resource facilities in the libraries. The sex wise analysis reveals the following facts. A considerable number of female respondents (30%) are highly satisfied with internet resource facilities available in their institutions. A considerable number of male

respondents (26.24%) are partially satisfied with internet resource facilities available in their institutions.

Table -15

Sex wise Respondents' Satisfaction on ICT Facilities in the Libraries

Sex	Highly Satisfied	Partially Satisfied	Normally Satisfied	Un Satisfied	Total
Male	108 (26.73)	106 (26.24)	130 (32.17)	60 (14.85)	404
Female	21 (30)	16 (22.86)	30 (42.86)	3 (4.28)	70
Total	129 (27.21)	122 (25.74)	160 (33.75)	63 (13.29)	474

Source: Computed
 Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	7.526
Degrees of freedom	3
Chi square table value 5%	7.81

The chi square test is applied for further discussion. The computed chi square value is 7.526, which is lesser than its tabulated value at 5% level significance. Hence the, difference in sex status is statistically identified as insignificant with respect to respondents' satisfaction with internet resource facilities available in their institutions.

It could be seen clearly from above discussion that female respondents are mainly partially satisfied with internet resource facilities available in their institutions.

Table - 16

Institution wise Respondents' Internet Connection Facilities

Institution	Home		Total
	Yes	No	
University of Madras	85 (64.88)	46 (35.11)	131
Annamalai University	189 (64.28)	105 (35.71)	294
Bharathiyar University	32 (65.31)	17 (34.69)	49
Total	306 (64.56)	168 (35.44)	474

Source: Computed

Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	2.765E-02
Degrees of freedom	2
Chi square table value 5%	5.99

Table 16 indicates the Institution wise respondents' internet connection facilities. In this study all respondents have internet connection facilities in their office. Out of the total 474 respondents 64.56 per cent of them have internet facilities in their home and the rest 35.44 per cent of them have no internet facilities in their home. Majority of the respondents of all institutions have internet facilities in their home.

The chi square test is applied for further discussion. The computed chi square value is 00.2, which is lesser than its tabulated value at 5% level significance. Hence the, difference in institutional

status is statistically identified as insignificant with respect to respondents' internet facilities in their home.

It could be seen clearly from above discussion that a more than half of the research scholars have internet connection facilities in their home.

Table - 17
Faculty wise Respondents' Internet Connection Facilities

Faculty	Home		Total
	Yes	No	
Faculty of Arts	90 (62.94)	53 (37.06)	143
Faculty of Science	81 (67.5)	39 (32.5)	120
Faculty of Engineering	135 (63.98)	76 (36.02)	211
Total	306 (64.56)	168 (35.44)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	6.488E-01
Degrees of freedom	2
Chi square table value 5%	5.99

Table 17 indicates the Faculty wise respondents' internet connection facilities. In this study all respondents have internet connection facilities in their office. Majority of the respondents of all education groups have internet facilities in their home. The proportion

of internet connection holders are more among the Science Faculty respondents than those of others.

The chi square test is applied for further discussion. The computed chi square value is 0.64, which is lesser than its tabulated value at 5% level significance. Hence the, difference in Faculty status is statistically identified as insignificant with respect to respondents' internet facilities with their home.

It could be seen clearly from above discussion that Science Faculty respondents constitute more numbers among the internet connection holders than those of others.

Table - 18
Sex wise Respondents' Internet Connection Facilities

Sex	Home		Total
	Yes	No	
Male	268 (66.34)	136 (34.66)	404
Female	38 (54.28)	32 (45.71)	70
Total	306 (64.56)	168 (35.44)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	3.787
Degrees of freedom	1
Chi square table value 5%	3.84

Table 18 indicates the sex wise respondents' internet connection facilities. In this study, all respondents have internet connection facilities in their office. Majority of the male and female respondents have internet facilities in their home. The proportion of internet connection holders are more among the male respondents than female respondents

The chi square test is applied for further discussion. The computed chi square value is 3.78, which is lesser than its tabulated value at 5% level significance. Hence the difference in sex status is statistically identified as insignificant with respect to respondents' internet facilities in their home.

It could be seen clearly from above discussion that male respondents constitute more numbers among the internet connection holders than female respondents.

A study of data in table 19 indicates the Institution wise respondents' duration of internet use per day. It could be noted that out of the total 474 respondents 5.27 per cent of them use less than 1 hour internet per day, 12.61 per cent of them use internet 1-2 hours per day and 22.99 per cent of them use internet 2-4 hours per day. In this study 13.17 per cent of them use internet 4-6 hours per day, 13.08 per cent of them use internet 6-8 hours per day, 7.81 per cent of them use internet

8-10 hours per day and 7.81 per cent of them use internet more than 10 hours per day.

Table - 19
Institution wise Respondents' Duration Internet Per Day

Institution	Less than one hour	1 to 2 hours	2 to 4 hours	4-6 hours	6-8 hours	8-10 hours	More than ten hours	Total
University of Madras	4 (3.5)	18 (13.74)	42 (32.06)	32 (24.43)	15 (11.45)	13 (9.92)	8 (6.11)	131
Annamalai University	19 (6.46)	41 (13.94)	50 (17.1)	102 (34.69)	34 (11.56)	21 (7.14)	27 (9.18)	294
Bharathiyar University	2 (4.08)	2 (4.08)	17 (34.69)	9 (18.36)	13 (26.53)	3 (6.12)	3 (6.12)	49
Total	25 (5.27)	61 (12.67)	109 (22.99)	143 (30.17)	62 (13.08)	37 (7.81)	37 (7.81)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	33.86
Degrees of freedom	12
Chi square table value 5%	21

The Institution wise analysis reveals the following facts. Majority of the Madras University respondents use internet 2-4 hours per day (32.06 %) and Annamalai University research scholar mainly use internet 4-6 hours per day (34.69 %). In general Bharathiyar University research

scholar constitute more number with respect to more users of internet 6-8 hours per day than those of others.

The chi square test is applied for further discussion. The computed chi square value is 33.86, which is greater than its tabulated value at 5% level significance. Hence the, difference in institution status is statistically identified as significant with respect to respondents' duration of internet use per day.

It could be seen clearly from above discussion that 4-6 hours duration of internet use occupies the first position, 2-4 hours the second, 6-8 hours the third, 1-2 hours the fourth and below 1 hours duration the last.

Table - 20
Faculty wise Respondents' Duration of Internet Per Day

Faculty	Less than one hour	1 to 2 hours	2 to 4 hours	4-6 hours	6-8 hours	8-10 hours	More than ten hours	Total
Faculty of Arts	3 (2.1)	9 (6.29)	35 (24.47)	54 (37.76)	19 (13.28)	10 (6.99)	13 (9.09)	143
Faculty of Science	5 (4.16)	10 (15.83)	23 (19.16)	39 (32.5)	15 (12.5)	11 (9.16)	8 (6.66)	120
Faculty of Engineering	17 (8.06)	33 (15.64)	51 (24.17)	50 (23.69)	28 (13.27)	16 (7.58)	16 (7.58)	211
Total	25 (5.27)	61 (12.87)	109 (29.99)	143 (30.17)	62 (13.08)	37 (7.8)	37 (7.8)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	20.88
Degrees of freedom	12
Chi square table value 5%	21

A study of data in table 20 indicates the Faculty wise respondents' duration of internet use per day. The Faculty wise analysis reveals the following facts. Majority of the Arts Faculty respondents use internet 4-6 hours per day (37.76%) and also Science Faculty respondents. In general Engineering Faculty respondents constitute more number with respect to more use of internet 2-4 hours per day than those of others.

The chi square test is applied for further discussion. The computed chi square value is 20.88, which is greater than its tabulated value at 5% level significance. Hence the, difference in faculty status is statistically identified as significant with respect to respondents' duration of internet use per day.

It could be seen clearly from above discussion that Arts Faculty respondents mainly use internet 4-6 hours per day.

A study of data in table 21 indicates the Sex wise respondents' duration of internet use per day. The sex wise analysis reveals the following facts.

Table - 21
Sex wise Respondents' Duration of Internet per Day

Sex	Less than one hour	1 to 2 hours	2 to 4 hours	4-6 hours	6-8 hours	8-10 hours	More than ten hours	Total
Male	22 (5.45)	55 (13.61)	84 (20.79)	131 (32.43)	49 (12.13)	31 (7.67)	32 (7.92)	404
Female	3 (4.28)	6 (8.57)	25 (35.71)	12 (17.14)	13 (18.57)	6 (8.57)	5 (7.14)	70
Total	25 (5.27)	61 (12.87)	109 (22.99)	143 (30.17)	62 (13.08)	37 (7.8)	37 (7.8)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	13.73
Degrees of freedom	6
Chi square table value 5%	12.6

Majority of the male respondents use internet 4-6 hours per day (32.46%). In general female respondents constitute more number with respect to more use of internet 2-4 hours per day than male research scholar.

The chi square test is applied for further discussion. The computed chi square value is 13.73, which is greater than its tabulated value at 5% level significance. Hence the, difference in sex status is statistically

identified as significant with respect to respondents' duration of internet use per day.

It could be seen clearly from above discussion that male respondents mainly use internet 4-6 hours per day.

Table - 22
Institution wise respondents computer software use behaviour

Institution	Software Uses	Software Non-Uses	Level of Performance				Total	Grand Total
			Excellent	Good	Satisfactory	Poor		
University of Madras	117 (89.31)	14 (10.61)	15 (12.82)	35 (29.91)	58 (49.57)	9 (7.69)	117 (89.31)	131
Annamalai University	275 (93.53)	19 (6.47)	63 (22.09)	104 (37.81)	89 (32.36)	19 (6.09)	275 (93.53)	294
Bharathiyar University	46 (93.8)	3 (6.20)	3 (6.52)	17 (36.95)	25 (54.35)	1 (2.32)	46 (93.8)	49
Total	438 (92.4)	36 (7.59)	81 (18.49)	156 (35.61)	172 (39.26)	29 (6.62)	438 (92.4)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	20.74
Degrees of freedom	6
Chi square table value 5%	12.6

A study of data in table 22 indicates the respondents' computer software use behaviour. It could be noted that out of the total 474

respondents 92.4 per cent of them have experience on software usage and the rest 7.59 per cent of them have no such experience. An analysis of respondents' views on level of performance of software usage research following facts. This analysis confines to 438 respondents who have experience on software usage. Out of the total 438 respondents 18.49 respondents of them state that software usage is excellent, 35.61 per cent of them refer it as good, 39.26 per cent of them have satisfactory views software use are and the rest 6.62 per cent of them regard it as poor.

The Institution wise analysis reveals the following facts. Though most of the respondents of all institutions have library software use practice, the respondents of Madras University lag behind others. Majority of the respondents of Madras University (49.57%) and Bharathiyar University (54.35%) have satisfactory views on performance of library software. However, a considerable number of respondents of Annamalai University have good opinion on performance of library software (37.81%)

The chi square test is applied for further discussion. The computed chi square value is 20.74, which is greater than its tabulated value at 5% level significance. Hence the, difference in institution status is

statistically identified as significant with respect to respondents' views on performance of library software.

It could be seen clearly from the above discussion that most of the respondents have software use practice. They rate mainly satisfactory and good level performance of library software.

Table - 23
Faculty wise respondents computer software use behaviour

Institution	Software Uses	Software Non-Uses	Level of Performance				Total	Grand Total
			Excellent	Good	Satisfactory	Poor		
Faculty of Arts	120 (83.91)	23 (16.08)	21 (17.5)	45 (37.5)	49 (40.83)	5 (4.16)	120 (83.91)	143
Faculty of Science	114 (95)	6 (5)	17 (14.91)	50 (43.85)	34 (29.82)	13 (11.40)	114 (95)	120
Faculty of Engineering	204 (96.68)	7 (3.31)	43 (21.07)	61 (29.90)	89 (43.62)	11 (5.39)	204 (96.68)	211
Total	438 (92.4)	36 (7.59)	81 (18.49)	156 (35.61)	172 (39.26)	29 (6.62)	438 (92.4)	474

Source: Computed

Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	14.9
Degrees of freedom	6
Chi square table value 5%	12.6

A study of data in table 23 indicates the Faculty wise respondent's computer software use behaviour. The Faculty wise analysis reveals the following facts. Though most of the respondents of all Faculty groups have library software use practice, the respondents of Arts Faculty lag behind others. Majority of the undergraduate respondents (45.83%) and Engineering Faculty respondents (43.62%) have satisfactory views on performance of library software. However, a considerable number of Science Faculty respondents have good opinion on level of performance of library software (43.85%).

The chi square test is applied for further discussion. The computed chi square value is 14.9, which is greater than its tabulated value at 5% level significance. Hence the, difference in education status is statistically identified as significant with respect to respondents' views on level of performance of library software.

It could be seen clearly from the above discussion that most of the respondents of all Faculty groups have software use practice.

Table - 24

Sex wise respondents computer software use behaviour

Institution	Software Uses	Software Non-Uses	Level of Performance				Total	Grand Total
			Excellent	Good	Satisfactory	Poor		
Male	376 (93.06)	28 (6.93)	72 (19.14)	128 (34.04)	150 (34.04)	26 (6.91)	376 (93.06)	404
Female	62 (88.57)	8 (11.42)	9 (14.51)	22 (45.16)	22 (45.16)	3 (4.83)	62 (88.57)	70
Total	438 (92.40)	36 (7.59)	81 (18.49)	172 (35.61)	172 (35.61)	29 (6.62)	438 (92.40)	474

Source: Computed
Figures in parentheses denote percentages

Chi-square Summary Result

Chi square Calculated value	3.075
Degrees of freedom	3
Chi square table value 5%	7.81

A study of data in table 24 indicates the sex wise respondent's computer software use behaviour. The sex wise analysis reveals the following facts. Though most of the respondents of both sex groups have library software use practice, the female respondents lag behind male respondents. Majority of the female respondents (45.16%) have satisfactory views on level of performance of library software. However, a considerable number of male respondents have good opinion on level of performance of library software (34.04%).

The chi square test is applied for further discussion. The computed chi square value is 3.07, which is lesser than its tabulated value at 5% level insignificance. Hence the, difference in sex status is statistically identified as significant with respect to respondents' views on performance of library software.

It could be seen clearly from the above discussion that most of the respondents of both sex groups have software use practice.

A study of data in table 25 indicates the institution wise respondents' extent of utilization of internet resource on research purpose. It could be noted that out of the total 474 respondents 50.42 per cent of them highly

Table - 25

Institution wise Respondents Utilization of Internet Resource for Research Activities

Institution	WWW				E-Mail				
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
University of Madras	73 (55.73)	43 (32.82)	9 (6.87)	6 (4.58)	49 (37.4)	65 (49.62)	9 (6.87)	8 (6.11)	
Annamalai University	147 (50)	104 (35.37)	20 (6.80)	23 (7.82)	117 (39.79)	104 (35.37)	54 (18.37)	19 (6.46)	
Bharathiar University	19 (38.77)	14 (28.57)	8 (16.33)	8 (16.33)	5 (10.20)	9 (18.37)	12 (24.49)	23 (46.94)	
Total	239 (50.42)	161 (33.97)	37 (7.80)	37 (7.80)	171 (36.1)	178 (37.55)	75 (15.82)	50 (10.55)	
Institution	Voicemail				CDROM				
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
University of Madras	73 (55.73)	26 (19.85)	26 (19.85)	6 (4.58)	18 (13.74)	25 (19.1)	34 (25.95)	54 (41.22)	
Annamalai University	106 (36.05)	126 (42.86)	31 (10.54)	31 (10.54)	88 (29.93)	96 (32.65)	79 (26.87)	31 (10.54)	
Bharathiar University	20 (40.82)	19 (38.77)	7 (14.28)	3 (6.12)	9 (18.37)	13 (26.53)	19 (38.77)	8 (16.33)	
Total	199 (41.98)	171 (36.1)	64 (13.50)	40 (8.44)	115 (24.26)	134 (28.27)	132 (27.85)	93 (19.62)	
Institution	Printer				Fax				
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
University of Madras	31 (23.66)	77 (58.78)	9 (6.87)	15 (11.45)	6 (4.58)	13 (9.92)	23 (17.56)	89 (67.94)	
Annamalai University	50 (17.01)	146 (49.66)	79 (26.87)	19 (6.46)	33 (11.22)	27 (9.18)	40 (13.60)	194 (65.99)	
Bharathiar University	19 (38.77)	14 (28.28)	7 (14.28)	9 (18.37)	2 (4.08)	5 (10.20)	19 (38.77)	23 (46.94)	
Total	100 (21.1)	237 (50)	95 (20.04)	42 (8.86)	41 (8.65)	45 (9.49)	82 (17.29)	306 (64.56)	
Institution	DVD				Subject Specific Software				Total
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
University of Madras	4 (3.1)	12 (9.16)	98 (74.81)	17 (12.97)	10 (7.63)	10 (7.63)	85 (64.88)	26 (19.85)	131
Annamalai University	13 (4.42)	19 (6.46)	34 (11.56)	228 (77.55)	27 (9.18)	49 (16.67)	44 (14.96)	174 (59.18)	294
Bharathiar University	11 (22.45)	17 (34.69)	9 (18.37)	12 (24.49)	4 (8.16)	4 (8.16)	19 (38.77)	22 (44.89)	49
Total	28 (5.91)	48 (10.13)	141 (29.75)	259 (54.22)	41 (8.65)	63 (13.29)	148 (31.22)	222 (46.83)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	15549.08	2	7774.542	13.65737	0.000513	3.73889
Columns	14763.17	7	2109.024	3.704878	0.017725	2.764196
Error	7969.583	14	569.256			
Total	38281.83	23				

use WWW for their research purpose, 33.97 per cent of them frequently use WWW for their research purpose, 7.80 per cent of them Occasionally use WWW for their research purpose and the rest 7.80 per cent of them rarely use WWW for their research purpose. It is observed that out of the total 474 respondents 36.1 per cent of them highly use e-mail for their research purpose, 37.55 per cent of them frequently use e-mail for their research purpose, 15.82 per cent of them Occasionally use e-mail for their research purpose and the rest 10.55 per cent of them rarely use e-mail for their research purpose.

It is significant to note that out of the total 474 respondents 41.98 per cent of them highly use Voicemail for their research purpose, 36.1 per cent of them frequently use Voicemail for their research purpose, 13.50 per cent of them Occasionally use Voicemail for their research purpose and the rest 8.44 per cent of them rarely use Voicemail for their research purpose. In this study that out of the total 474 respondents 24.26 per cent of them highly use CDROM services for their research purpose, 28.27 per cent of them frequently use CDROM services for their

research purpose, 27.85 per cent of them Occasionally use CDROM services for their research purpose and the rest 19.62 per cent of them rarely use CDROM services for their research purpose.

It is seen from the table that out of the total 474 respondents 21.1 per cent of them highly use printer for their research purpose, 50 per cent of them frequently use printer for their research purpose, 20.04 per cent of them Occasionally use printer for their research purpose and the rest 8.86 per cent of them rarely use printer for their research purpose. In this study that out of the total 474 respondents 8.65 per cent of them highly use fax for their research purpose, 9.49 per cent of them frequently use fax for their research purpose, 17.29 per cent of them Occasionally use fax for their research purpose and the rest 64.56 per cent of them rarely use fax for their research purpose.

It is observed from the table that out of the total 474 respondents 5.91 per cent of them highly use DVD for their research purpose, 10.13 per cent of them frequently use DVD for their research purpose, 29.79 per cent of them Occasionally use DVD for their research purpose and the rest 54.22 per cent of them rarely use DVD for their research purpose. It is learnt from the table that out of the total 474 respondents 8.65 per cent of them highly use subject specific software for their research purpose, 13.29 per cent of them frequently use subject specific

software for their research purpose, 31.22 per cent of them Occasionally use subject specific software for their research purpose and the rest 46.81 per cent of them rarely use subject specific software for their research purpose.

The institution wise analysis reveals the following facts. Majority of the respondents of University of Madras highly use WWW (55.76%) and Voicemail (55.73%) towards their research purpose. A considerable number of respondents of Annamalai University frequently use Voicemail (42.86%), subject specific software (32.65%) and printer (49.66%). Majority of the BHARATHIYAR University respondents rarely use e-mail (46.94%) for their research purpose.

The anova two way model is applied for further discussion. At one point the computed ANOVA value 31.65 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to high level utilization of various ICT devices towards respondents' research purpose is statistically identified as significant. In another point the computed anova value 3.70 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation among the chosen institutions is statistically identified as significant with respect to respondents' extent of utilization of various ICT devices.

It could be seen clearly above the discussion that a considerable majority of the respondents highly use WWW, e-mail and Voicemail towards their research purpose. Majority of the respondents frequently use printer towards their research purpose. However majority of the respondents rarely use fax, DVD and subject specific software towards their research purpose.

Table - 26

Faculty wise Respondents Utilization of Information and Communication Technology for Research Activities

Faculty	WWW				E-Mail			
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely
Faculty of Arts	83 (58.04)	32 (22.37)	13 (9.09)	15 (10.49)	48 (33.56)	62 (43.36)	22 (15.38)	11 (7.69)
Faculty of Science	62 (51.66)	43 (35.83)	5 (4.16)	10 (8.33)	56 (46.66)	24 (20)	19 (15.83)	21 (17.5)
Faculty of Engineering	94 (44.55)	86 (40.76)	19 (9)	12 (5.68)	67 (31.75)	92 (43.60)	34 (16.11)	18 (8.53)
Total	239 (50.42)	161 (33.97)	37 (7.80)	37 (7.80)	171 (36.1)	178 (37.55)	75 (15.82)	50 (10.55)
Faculty	Voicemail				CDROM			
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely
Faculty of Arts	63 (44.05)	53 (37.06)	15 (10.49)	12 (8.39)	36 (25.17)	34 (23.77)	25 (17.48)	48 (33.56)
Faculty of Science	21 (17.5)	75 (62.5)	14 (11.66)	10 (8.33)	45 (37.5)	11 (9.16)	47 (39.16)	17 (14.16)
Faculty of Engineering	115 (54.50)	43 (20.38)	35 (16.59)	18 (8.53)	34 (16.11)	89 (46.45)	60 (28.44)	28 (13.27)
Total	199 (41.98)	171 (36.1)	64 (13.50)	40 (8.44)	115 (24.26)	134 (28.27)	132 (27.85)	93 (19.62)

Faculty	Printer				Fax			
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely
Faculty of Arts	31 (21.67)	71 (49.65)	13 (9.09)	28 (19.58)	9 (6.29)	13 (9.09)	25 (17.48)	96 (67.13)
Faculty of Science	26 (21.66)	62 (51.66)	21 (17.5)	11 (9.16)	15 (12.5)	9 (7.5)	18 (15)	78 (65)
Faculty of Engineering	43 (20.38)	104 (49.29)	61 (29.91)	3 (1.42)	17 (8.06)	23 (10.90)	39 (18.48)	132 (62.56)
Total	100 (21.1)	237 (50)	95 (20.04)	42 (8.86)	41 (8.65)	45 (9.49)	82 (17.29)	306 (64.56)

Faculty	DVD				Subject Specific Software				Total
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
Faculty of Arts	8 (5.59)	17 (11.88)	61 (42.66)	57 (39.86)	13 (9.09)	22 (15.38)	73 (51.05)	35 (24.47)	143
Faculty of Science	9 (7.5)	15 (12.5)	25 (20.82)	71 (59.16)	15 (12.5)	19 (15.83)	24 (20)	62 (51.66)	120
Faculty of Engineering	11 (5.21)	16 (7.58)	55 (26.06)	129 (61.14)	13 (6.16)	22 (10.43)	51 (24.17)	125 (59.24)	211
Total	28 (5.91)	48 (10.13)	141 (29.75)	257 (54.22)	41 (8.65)	63 (13.29)	148 (31.22)	222 (46.83)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	698.25	2	349.125	0.982051	0.398919	3.73889
Columns	13783.17	7	1969.024	5.538652	0.003243	2.764196
Error	4977.083	14	355.506			
Total	19458.5	23				

A study of data in table 26 indicates the Faculty wise respondents' extent of utilization of internet resource further research purpose. The Faculty wise analysis reveals the following facts. Majority of the Arts Faculty respondents highly use WWW (58.04%) and Voicemail (44.05%)

towards their research purpose. A considerable number of Science Faculty respondents frequently use Voicemail (62.5%) and printer (51.66%). Majority of the Engineering Faculty respondents rarely use fax (62.56%), DVD (61.64%) and subject specific software (59.24%) for their research purpose.

The Anova two way model is applied for further discussion. At one point the computed ANOVA value 0.98 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation with respect to highly utilization of various ICT devices towards respondents' research purpose is statistically identified as insignificant. In another point the computed anova value 5.53 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation among chosen education is statistically identified as significant with respect to respondents' extent of utilization of various ICT devices.

It could be seen clearly above the discussion that majority of the Arts Faculty respondents highly use WWW for their research purpose.

Table - 27

Sex wise Respondents Utilization of Information and Communication Technology for Research activities

Sex	WWW				E-Mail				
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
Male	215 (53.22)	147 (36.38)	31 (7.67)	11 (2.72)	159 (39.36)	159 (39.36)	55 (13.61)	31 (7.67)	
Female	24 (34.28)	14 (20)	6 (8.57)	26 (37.14)	12 (17.14)	19 (27.14)	20 (28.57)	19 (27.14)	
Total	239 (50.42)	161 (33.97)	37 (7.80)	37 (7.80)	171 (36.1)	178 (37.55)	75 (15.82)	50 (10.55)	
Sex	Voicemail				CDROM				
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
Male	185 (45.79)	157 (38.86)	44 (10.89)	18 (4.45)	108 (26.73)	105 (25.99)	112 (27.72)	79 (19.55)	
Female	14 (20)	14 (20)	20 (28.57)	22 (31.43)	7 (10)	29 (41.43)	20 (28.57)	14 (20)	
Total	199 (41.98)	171 (36.1)	64 (13.50)	40 (8.44)	115 (24.26)	134 (28.27)	132 (27.85)	93 (19.62)	
Sex	Printer				Fax				
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
Male	85 (21.03)	205 (50.74)	87 (21.53)	27 (6.68)	33 (8.17)	40 (9.90)	68 (16.83)	263 (65.09)	
Female	15 (21.43)	32 (45.71)	8 (11.43)	15 (21.43)	8 (11.43)	5 (7.14)	14 (20)	43 (61.43)	
Total	100 (21.1)	237 (50)	95 (20.04)	42 (8.86)	41 (8.65)	45 (9.49)	82 (17.29)	306 (64.56)	
Sex	DVD				Subject Specific Software				Total
	Highly	Frequently	Occasionally	Rarely	Highly	Frequently	Occasionally	Rarely	
Male	22 (5.44)	39 (9.65)	122 (30.19)	221 (54.70)	36 (8.91)	54 (13.36)	119 (29.45)	195 (48.27)	404
Female	6 (8.57)	9 (12.86)	19 (27.14)	36 (51.43)	5 (7.14)	9 (12.86)	29 (41.43)	27 (38.57)	70
Total	28 (5.91)	48 (10.13)	141 (29.75)	257 (54.22)	41 (8.65)	63 (13.29)	148 (31.22)	222 (46.83)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	35344	1	35344	14.73281	0.006388	5.59146
Columns	22144.75	7	3163.536	1.318689	0.362186	3.787051
Error	16793	7	2399			
Total	74281.75	15				

A study of data in table 27 indicates the sex wise respondents' extent of utilization of internet resource for their research purpose. The sex wise analysis reveals the following facts. Majority of the male respondents highly use WWW (53.22%) and Voicemail (45.79%) towards their research purpose. A considerable number of female respondents frequently use CDROM service (41.43%) and printer (45.71%) for their research purpose.

The anova two way model is applied for further discussion. At one point the computed ANOVA value 14.73 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to highly utilization of various ICT devices towards respondents' research purpose is statistically identified as significant. In another point the computed anova value 1.31 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation among chosen sex groups is statistically identified as insignificant with respect to respondents' extent of utilization of various ICT devices.

It could be seen clearly above the discussion that majority of the male respondents highly use WWW for their research purpose.

Table - 28

Institution wise Respondents Satisfaction of ICT

Institution	WWW				E-Mail				
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
University of Madras	30 (22.90)	56 (42.75)	34 (25.95)	11 (8.40)	58 (44.27)	29 (22.14)	32 (24.43)	12 (9.16)	
Annamalai University	62 (21.1)	197 (67.1)	23 (7.82)	12 (4.1)	92 (31.29)	156 (53.1)	27 (9.18)	19 (6.46)	
Bharathiar University	8 (16.33)	27 (55.10)	9 (18.37)	5 (10.20)	2 (4.1)	31 (63.26)	7 (14.28)	9 (18.37)	
Total	100 (21.11)	280 (59.1)	66 (13.92)	28 (5.91)	152 (32.1)	216 (45.57)	66 (13.92)	40 (8.44)	
Institution	Voicemail				CDROM				
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
University of Madras	17 (12.98)	27 (20.61)	50 (38.17)	37 (28.24)	69 (52.67)	31 (23.66)	10 (7.63)	21 (16.03)	
Annamalai University	57 (19.39)	73 (24.83)	89 (30.27)	75 (25.51)	123 (41.84)	132 (44.90)	19 (6.46)	20 (6.80)	
Bharathiar University	12 (24.49)	16 (32.65)	13 (26.53)	8 (16.33)	28 (57.14)	11 (22.45)	6 (12.24)	4 (8.16)	
Total	86 (18.14)	116 (24.47)	152 (32.1)	120 (25.32)	220 (46.41)	174 (36.71)	35 (7.38)	45 (9.50)	
Institution	Printer				Fax				
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
University of Madras	34 (25.95)	33 (25.19)	28 (21.37)	36 (27.48)	16 (12.21)	15 (11.45)	27 (20.61)	73 (55.73)	
Annamalai University	61 (20.75)	98 (33.33)	72 (24.49)	63 (21.43)	23 (7.82)	20 (6.80)	109 (37.1)	142 (48.30)	
Bharathiar University	19 (38.77)	20 (40.82)	4 (8.16)	6 (12.24)	4 (8.16)	3 (6.12)	23 (46.93)	19 (38.77)	
Total	114 (24.05)	151 (31.86)	104 (21.94)	105 (22.15)	43 (9.1)	38 (8.02)	159 (33.54)	234 (49.37)	
Institution	DVD				Subject Specific Software				Total
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
University of Madras	7 (5.34)	11 (8.39)	38 (29)	75 (57.25)	52 (39.69)	27 (20.61)	19 (14.5)	33 (25.19)	131
Annamalai University	15 (5.10)	22 (7.48)	144 (48.98)	113 (38.43)	25 (8.50)	35 (11.90)	65 (22.11)	169 (57.48)	294
Bharathiar University	9 (18.37)	24 (4.81)	8 (16.33)	8 (16.33)	6 (12.24)	9 (18.37)	16 (32.65)	18 (36.73)	49
Total	31 (6.54)	57 (12.02)	190 (40.1)	196 (41.35)	83 (17.51)	71 (14.98)	100 (21.1)	220 (46.41)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	8564.583	2	4282.292	12.00943	0.000918	3.73889
Columns	8563.292	7	1223.327	3.430749	0.023668	2.764196
Error	4992.083	14	356.5774			
Total	22119.96	23				

A study of data in table 28 indicates the institution wise respondents' satisfaction of internet resource facilities available in their institutions. It could be noted that out of the total 474 respondents 21.11 per cent of them are highly satisfied with WWW facilities available in their institutions, 59.1 per cent of them are partially satisfied with WWW facilities available in their institutions, 13.92 per cent of them are normally satisfied with WWW facilities available in their institutions and the rest 5.91 per cent of them are dissatisfied with WWW facilities available in their institutions. It is observed that out of the total 474 respondents 36.1 per cent of them are highly satisfied with e-mail facilities available in their institutions, 45.57 per cent of them are partially satisfied with e-mail facilities available in their institutions, 13.92 per cent of them are normally satisfied with e-mail facilities available in their institutions and the rest 8.44 per cent of them are dissatisfied with e-mail facilities available in their institutions.

It is significant to note that out of the total 474 respondents 18.14 per cent of them are highly satisfied with Voicemail facilities available in

their institutions, 24.47 per cent of them are partially satisfied with Voicemail facilities available in their institutions, 32.1 per cent of them are normally satisfied with Voicemail facilities available in their institutions and the rest 25.32 per cent of them are dissatisfied with Voicemail facilities available in their institutions. In this study that out of the total 474 respondents 46.41 per cent of them are highly satisfied with CDROM services facilities available in their institutions, 36.71 per cent of them are partially satisfied with CDROM services facilities available in their institutions, 7.38 per cent of them are normally satisfied with CDROM services facilities available in their institutions and the rest 9.50 per cent of them are dissatisfied with CDROM services facilities available in their institution.

It is seen from the table that out of the total 474 respondents 24.05 per cent of them are highly satisfied with printer facilities available in their institutions, 31.86 per cent of them are partially satisfied with printer facilities available in their institutions, 21.94 per cent of them are normally satisfied with printer facilities available in their institutions and the rest 22.91 per cent of them are dissatisfied with printer facilities available in their institutions. In this study that out of the total 474 respondents 9.11 per cent of them are highly satisfied with fax facilities available in their institutions, 8.02 per cent of them are partially satisfied with fax facilities available in their institutions, 33.54 per cent of them

are normally satisfied with fax facilities available in their institutions and the rest 49.37 per cent of them are dissatisfied with fax facilities available in their institutions.

It is observed from the table that out of the total 474 respondents 6.54 per cent of them are highly satisfied with DVD facilities available in their institutions, 12.02 per cent of them are partially satisfied with DVD facilities available in their institutions, 40.1 per cent of them are normally satisfied with DVD facilities available in their institutions and the rest 41.35 per cent of them are dissatisfied with DVD facilities available in their institutions. It is learnt from the table that out of the total 474 respondents 17.51 per cent of them are highly satisfied with subject specific software facilities available in their institutions, 14.98 per cent of them are partially satisfied with subject specific software facilities available in their institutions, 21.1 per cent of them are normally satisfied with subject specific software facilities available in their institutions and the rest 46.41 per cent of them are dissatisfied with subject specific software facilities available in their institutions.

The institution wise analysis reveals the following facts. Majority of the Madras University respondents are highly satisfied with e-mail (44.27%), CDROM services (52.67%) and subject specific software (39.69%) facilities available in their institutions. A considerable number

of respondents of Annamalai University are partially satisfied with WWW, e-mail and CDROM services facilities available in their institutions. Majority of the Bharathiyar University respondents are highly satisfied with CDROM services(57.14%) and printer (38.77%) facilities available in their institutions.

The anova two way model is applied for further discussion. At one point, the computed ANOVA value 12.00 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to highly satisfaction of various ICT devices available in their institution is statistically identified as significant. In another point the computed anova value 3.43 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation among chosen institutions is statistically identified as significant with respect to respondents' extent of satisfaction of various internet resource devices.

It could be seen clearly above the discussion that majority of the respondents are partially satisfied with WWW and e-mail facilities available in their institutions. Majority of the respondents are highly satisfied with CDROM services. Contrastingly majority of the respondents are dissatisfied with fax, DVD, subject specific software facilities available in their institutions.

Table - 29

Faculty wise Respondents Satisfaction of ICT

Faculty	WWW				E-Mail			
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied
Faculty of Arts	29 (20.28)	94 (65.73)	12 (8.39)	8 (5.59)	39 (27.27)	75 (52.44)	19 (13.28)	10 (6.99)
Faculty of Science	35 (29.16)	70 (58.33)	10 (8.33)	5 (4.16)	35 (29.16)	67 (55.83)	9 (7.5)	9 (7.5)
Faculty of Engineering	36 (17.06)	116 (78.67)	44 (20.85)	15 (7.10)	78 (36.96)	74 (35.07)	38 (18)	21 (99.52)
Total	100 (21.1)	280 (59.1)	66 (13.92)	28 (5.91)	152 (32.1)	216 (45.57)	66 (13.92)	40 (8.44)
Faculty	Voicemail				CDROM			
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied
Faculty of Arts	31 (21.68)	25 (17.48)	49 (34.26)	38 (26.57)	71 (49.65)	53 (37.06)	11 (7.69)	8 (5.59)
Faculty of Science	19 (15.83)	49 (40.83)	8 (6.66)	44 (36.66)	43 (35.83)	55 (45.83)	8 (6.66)	14 (11.66)
Faculty of Engineering	36 (17.06)	42 (19.90)	95 (45.02)	38 (18)	106 (50.23)	66 (31.27)	16 (7.58)	23 (10.90)
Total	86 (18.14)	116 (24.47)	152 (32.1)	120 (25.32)	220 (46.41)	174 (36.71)	35 (7.38)	45 (9.50)
Faculty	Printer				Fax			
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied
Faculty of Arts	35 (24.47)	61 (42.66)	15 (10.49)	32 (22.38)	12 (8.39)	8 (5.59)	45 (31.47)	28 (54.54)
Faculty of Science	49 (40.83)	3 (2.5)	19 (15.83)	49 (40.83)	15 (12.5)	14 (11.66)	63 (52.5)	28 (23.33)
Faculty of Engineering	30 (14.21)	87 (41.23)	70 (33.17)	24 (11.37)	16 (7.58)	16 (7.58)	51 (24.17)	128 (60.66)
Total	114 (24.05)	151 (31.86)	104 (21.94)	105 (22.15)	43 (9.1)	38 (8.02)	159 (33.54)	234 (49.37)

Faculty	DVD				Subject Specific Software				Total
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
Faculty of Arts	78 (5.59)	12 (8.39)	63 (44.05)	60 (41.96)	6 (4.19)	33 (23.08)	25 (17.48)	79 (55.24)	143
Faculty of Science	12 (10)	25 (20.83)	42 (35)	41 (34.16)	42 (35)	25 (20.83)	19 (15.83)	34 (28.33)	120
Faculty of Engineering	11 (5.21)	20 (9.47)	85 (40.28)	95 (45.02)	35 (16.58)	13 (6.16)	56 (24.54)	107 (50.71)	211
Total	31 (6.54)	57 (12.02)	190 (40.1)	196 (41.35)	83 (17.51)	71 (14.98)	100 (21.1)	220 (46.41)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	600.5833	2	300.2917	0.638716	0.54268	3.73889
Columns	6603.292	7	943.3274	2.006444	0.126695	2.764196
Error	6582.083	14	470.1488			
Total	13785.96	23				

A study of data in table 29 indicates the Faculty wise respondents' satisfaction of ICT facilities available in their institutions. The Faculty wise analysis reveals the following facts. Majority of the Arts Faculty respondents are partially satisfied with e-mail (52.44%), printer (42.66%) and subject specific software (39.69%) facilities available in their institutions.

The anova two way model is applied for further discussion. At one point the computed ANOVA value 0.63 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation with respect to

highly satisfaction of various ICT devices available in their institution is statistically identified as insignificant. In another point the computed anova value 2.00 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation among chosen education groups is statistically identified as insignificant with respect to respondents' extent of satisfaction of various ICT devices.

It could be seen clearly above the discussion that majority of the Engineering Faculty respondents are dissatisfied with Fax, DVD and subject specific software facilities available in their institution.

Table - 30
Sex wise Respondents Satisfaction of ICT

Sex	WWWw				E-Mail				
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
Male	87 (21.53)	267 (66.08)	33 (8.16)	17 (4.20)	133 (32.92)	199 (44.25)	44 (10.89)	28 (6.93)	
Female	13 (18.57)	13 (18.57)	33 (47.14)	11 (15.71)	19 (27.14)	17 (24.28)	22 (31.43)	12 (17.14)	
Total	100 (21.1)	280 (59.1)	66 (13.92)	28 (5.91)	152 (32.1)	216 (45.57)	66 (13.92)	40 (8.44)	
Sex	Voicemail				CDROM				
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
Male	71 (17.57)	84 (20.79)	144 (35.64)	105 (25.99)	216 (53.46)	122 (30.19)	26 (6.43)	40 (9.90)	
Female	15 (21.42)	32 (45.71)	8 (11.42)	15 (21.42)	4 (5.71)	52 (74.28)	9 (12.85)	5 (7.14)	
Total	86 (18.14)	116 (24.47)	152 (32.1)	120 (25.32)	220 (46.41)	174 (36.71)	35 (7.38)	45 (9.50)	
Sex	Printer				Fax				
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
Male	95 (23.51)	140 (34.65)	80 (19.80)	89 (22.02)	31 (7.67)	30 (7.42)	140 (34.65)	203 (50.24)	
Female	19 (27.14)	11 (15.71)	24 (34.28)	16 (22.85)	12 (17.14)	8 (11.42)	19 (27.14)	31 (44.28)	
Total	114 (24.05)	151 (31.86)	104 (21.94)	105 (22.15)	43 (9.1)	38 (8.02)	159 (33.54)	234 (49.37)	
Sex	DVD				Subject Specific Software				Total
	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	Highly Satisfied	Partially satisfied	Normally satisfied	Unsatisfied	
Male	23 (5.69)	35 (8.66)	169 (41.83)	177 (43.81)	64 (15.84)	52 (12.87)	89 (22.02)	199 (49.25)	404
Female	8 (11.42)	22 (31.42)	21 (30)	19 (27.14)	19 (27.14)	19 (27.14)	11 (15.71)	21 (30)	70
Total	31 (6.54)	57 (12.02)	190 (40.1)	196 (41.35)	83 (17.51)	71 (14.98)	100 (21.1)	220 (46.41)	474

Source: Computed
Figures in parentheses denote percentages

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	23332.56	1	23332.56	11.55328	0.011458	5.59146
Columns	12844.94	7	1834.991	0.908608	0.548681	3.787051
Error	14136.94	7	2019.563			
Total	50314.44	15				

A study of data in table 30 indicates the sex wise respondents' satisfaction of internet resource facilities available in their institutions. The sex wise analysis reveals the following facts. Majority of the male respondents are partially satisfied with WWW (66.08%), e-mail (44.25%) and printer (34.68%) facilities available in their institutions. Majority of the female respondents normally satisfied with WWW (47.14%) , e-mail (31.43%) and printer (34.28%).

The anova two way model is applied for further discussion. At one point the computed ANOVA value 11.53 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to highly satisfaction of various ICT devices available in their institution is statistically identified as significant. In another point the computed anova value 0.90 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation among chosen sex groups is statistically identified as insignificant with respect to respondents' extent of satisfaction of various ICT devices.

It could be seen clearly above the discussion that majority of the male respondents are dissatisfied with Fax, DVD and subject specific software facilities available in their institution.

Table -31
Institution wise Respondents depends upon showing ideas of ICT with colleague / Friends

Institution	WWW					E-Mail				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
University of Madras	8 (6.11)	6 (4.58)	21 (16.03)	31 (23.66)	65 (49.62)	53 (40.46)	29 (22.14)	33 (25.19)	8 (6.11)	8 (6.11)
Annamalai University	13 (4.42)	19 (6.46)	43 (14.83)	79 (26.87)	140 (47.62)	108 (36.73)	69 (23.47)	63 (21.43)	35 (11.90)	19 (6.46)
Bharathiar University	2 (4.81)	3 (6.12)	2 (4.81)	5 (10.20)	37 (75.51)	7 (14.28)	22 (44.89)	9 (18.37)	7 (14.28)	4 (8.16)
Total	23 (4.85)	28 (5.93)	66 (13.92)	115 (24.26)	242 (51.05)	168 (35.44)	120 (25.32)	105 (22.15)	50 (10.55)	31 (6.54)
Institution	Voicemail					CDROM				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
University of Madras	33 (25.19)	51 (38.93)	25 (19.1)	10 (7.63)	12 (9.16)	43 (32.82)	51 (38.93)	26 (19.85)	4 (3.1)	7 (5.35)
Annamalai University	108 (36.73)	135 (45.92)	27 (9.18)	11 (9.48)	13 (4.42)	98 (33.33)	45 (15.31)	55 (18.71)	69 (23.47)	27 (9.18)
Bharathiar University	15 (30.61)	14 (28.57)	9 (18.37)	6 (12.24)	5 (10.20)	14 (28.57)	22 (44.90)	9 (18.36)	2 (4.08)	2 (4.08)
Total	156 (32.91)	200 (42.19)	61 (12.90)	27 (56.96)	30 (6.33)	155 (32.70)	118 (24.89)	90 (18.99)	75 (15.82)	36 (7.59)
Institution	Printer					Fax				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
University of Madras	39 (29.77)	31 (23.66)	15 (11.45)	22 (16.79)	24 (18.32)	6 (4.58)	10 (7.63)	13 (9.92)	31 (23.66)	71 (54.20)
Annamalai University	33 (11.22)	58 (19.73)	29 (9.86)	99 (33.67)	75 (25.51)	12 (4.08)	21 (7.14)	19 (6.46)	31 (10.54)	211 (71.77)
Bharathiar University	3 (6.12)	19 (38.77)	11 (22.45)	9 (18.37)	7 (14.28)	4 (8.16)	3 (6.12)	2 (4.81)	11 (22.45)	29 (59.18)
University of Madras	75 (15.82)	108 (22.78)	55 (11.60)	130 (27.43)	106 (22.36)	22 (4.64)	34 (7.17)	34 (7.17)	73 (15.40)	311 (65.61)

Institution	DVD					Subject Specific Software					Total
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
University of Madras	5 (3.82)	5 (3.82)	4 (3.1)	6 (4.58)	111 (84.73)	4 (3.1)	4 (3.1)	3 (2.29)	4 (3.1)	116 (88.55)	131
Annamalai University	3 (1.02)	2 (0.68)	5 (1.7)	9 (3.06)	275 (93.54)	2 (0.68)	2 (0.68)	2 (0.68)	3 (1.02)	285 (96.94)	294
Bharathiar University	4 (8.16)	4 (8.16)	3 (6.12)	5 (10.20)	33 (67.35)	1 (2.04)	1 (2.04)	2 (4.81)	2 (4.81)	43 (87.75)	49
Total	12 (2.53)	11 (2.32)	12 (2.53)	20 (4.22)	419 (88.40)	7 (1.48)	7 (1.48)	7 (1.48)	9 (1.89)	444 (93.67)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	6725.25	2	3362.625	6.081154	0.012565	3.73889
Columns	11891.83	7	1698.833	3.072263	0.035102	2.764196
Error	7741.417	14	552.9583			
Total	26358.5	23				

A study of data in table 31 indicates the institution wise respondents' dependence of internet resource facilities to share and exchange of ideas and values with their coresearchers and friends. It could be noted that out of the total 474 respondents 4.85 per cent of them have high dependence on WWW facilities to share and exchange of ideas and values with their coresearchers and friends, 5.93 per cent of them have frequent dependence on WWW facilities to share and exchange of ideas and values with their coresearchers and friends, 13.92 per cent of them have occasional dependence on WWW facilities to share and exchange of ideas and values with their coresearchers and friends.

24.26 per cent of them have rare dependence on WWW facilities to share and exchange of ideas and values with their coresearchers and friends and the rest 51.05 per cent of them have no dependence on WWW facilities to share and exchange of ideas and values with their coresearchers and friends. It is observed that out of the total 474 respondents 35.44 per cent of them have high dependence on e-mail facilities to share and exchange of ideas and values with their coresearchers and friends, 25.32 per cent of them have frequent dependence on e-mail facilities to share and exchange of ideas and values with their coresearchers and friends, 22.15 per cent of them have occasional dependence on e-mail facilities to share and exchange of ideas and values with their coresearchers and friends. 10.55 per cent of them have rare dependence on e-mail facilities to share and exchange of ideas and values with their coresearchers and friends and the rest 6.54 per cent of them have no dependence on e-mail facilities to share and exchange of ideas and values with their coresearchers and friends.

It is significant to note that out of the total 474 respondents 32.91 per cent of them have high dependence on Voicemail facilities to share and exchange of ideas and values with their coresearchers and friends, 42.19 per cent of them have frequent dependence on Voicemail facilities to share and exchange of ideas and values with their coresearchers and friends, 12.90 per cent of them have occasional dependence on Voicemail

facilities to share and exchange of ideas and values with their coresearchers and friends. 56.96 per cent of them have rare dependence on Voicemail facilities to share and exchange of ideas and values with their coresearchers and friends and the rest 6.33 per cent of them have no dependence on Voicemail facilities to share and exchange of ideas and values with their coresearchers and friends. In this study that out of the total 474 respondents 32.70 per cent of them have high dependence on CDROM facilities to down load their research information 24.89 per cent of them have frequent dependence on CDROM facilities to down load their research data and friends, 18.99 per cent of them have occasional dependence on CDROM facilities to obtain their research data and friends. 15.82 per cent of them have rare dependence on CDROM facilities to obtain their research data and friends and the rest 7.59 per cent of them have no dependence on CDROM facilities to down load their research information.

It is seen from the table that out of the total 474 respondents 15.8 per cent of them have high dependence on printer facilities to take copy of the internet data, 22.78 per cent of them have frequent dependence on printer facilities to take hard copy of the information, 11.60 per cent of them have occasional dependence on printer facilities to take hard copy of the research information. 27.43 per cent of them have rare dependence on printer facilities to take hard copy of the information rest

22.36 per cent of them have no dependence on printer facilities to share and exchange of ideas and values with their coresearchers and friends. In this study that out of the total 474 respondents 4.64 per cent of them have high dependence on fax facilities to take hard copy of the research information, 7.17 per cent of them have frequent dependence on fax facilities to share and exchange of ideas and values with their coresearchers and friends, 7.17 per cent of them have occasional dependence on fax facilities to share and exchange of ideas and values with their coresearchers and friends. 15.40 per cent of them have rare dependence on fax facilities to share and exchange of ideas and values with their coresearchers and friends and the rest 65.61 per cent of them have no dependence on fax facilities to share and exchange of ideas and values with their coresearchers and friends.

It is observed from the table that out of the total 474 respondents 2.53 per cent of them have high dependence on DVD facilities to elicit the research information, 2.32 per cent of them have frequent dependence on DVD facilities to get the research information, 2.53 per cent of them have occasional dependence on DVD facilities to obtain the research information. 4.22 per cent of them have rare dependence on DVD facilities to get the research information and the rest 88.40 per cent of them have no dependence on DVD facilities to collect research information. It is observed from the table that out of the total 474

respondents 1.48 per cent of them have high dependence on subject specific software facilities to collect the research data, 1.48 per cent of them have frequent dependence on subject specific software facilities to collect the research data, 1.48 per cent of them have occasional dependence on subject specific software facilities to collect the research data. 1.89 per cent of them have rare dependence on subject specific software facilities to collect the research data and the rest 93.67 per cent of them have no dependence on subject specific software facilities to collect the subject specific research data.

The institution wise analysis reveals the following facts. Majority of the Madras University respondents have no dependence on WWW (49.62%), fax (54.20%), DVD (84.73%) and subject specific software (88.5%). A considerable number of respondents of Annamalai University have high dependence on e-mail (36.73%), Voicemail (36.73%) and CDROM (33.33%) for their research work. Majority of the respondents of Bharathiyar University have frequent dependence on e-mail (44.89%) and CDROM (44.90%) for their research wok.

The anova two way model is applied for further discussion. At one point the computed ANOVA value 6.08 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to high dependence of various ICT devices available in their

institution is statistically identified as significant. In another point, the computed anova value 3.07 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation among chosen institutions is statistically identified as significant with respect to respondents' high dependence of various ICT devices.

It could be seen clearly above the discussion that majority of the respondents have either high dependence or frequent dependence on e-mail, Voicemail and CDROM for their research work. In general majority of the respondents have no dependence on fax, DVD and subject specific software.

Table - 32

Faculty wise Respondents depends upon showing ideas of ICT with colleague / Friends

Faculty	WWW					E-Mail				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
Faculty of Arts	9 (6.29)	8 (5.59)	29 (20.28)	37 (25.87)	60 (41.96)	46 (32.17)	62 (43.36)	11 (7.69)	12 (8.39)	12 (8.39)
Faculty of Science	11 (9.16)	9 (7.5)	21 (17.5)	36 (30)	43 (35.83)	6 (5)	48 (40)	43 (35.83)	15 (12.5)	8 (6.66)
Faculty of Engineering	3 (1.42)	11 (5.21)	16 (7.58)	42 (19.91)	139 (65.87)	116 (54.97)	10 (4.74)	51 (24.17)	23 (10.90)	11 (5.21)
Total	23 (4.85)	28 (5.93)	66 (13.92)	115 (24.26)	242 (51.05)	168 (35.44)	120 (25.32)	105 (22.15)	50 (10.55)	31 (6.54)
Faculty	Voicemail					CDROM				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
Faculty of Arts	45 (31.47)	68 (47.55)	19 (13.28)	6 (4.19)	5 (3.49)	65 (45.45)	11 (7.69)	31 (21.68)	25 (17.48)	11 (7.69)
Faculty of Science	35 (29.16)	54 (45)	21 (17.5)	8 (6.66)	2 (1.66)	37 (30.83)	32 (26.66)	32 (26.66)	7 (5.83)	12 (10)
Faculty of Engineering	76 (36.01)	78 (36.96)	21 (99.54)	13 (6.16)	23 (10.90)	53 (25.12)	75 (35.55)	27 (12.79)	43 (20.83)	13 (6.16)
Total	156 (32.91)	200 (42.19)	61 (12.90)	27 (59.96)	30 (6.33)	155 (32.70)	118 (24.89)	90 (18.99)	75 (15.82)	36 (7.59)
Faculty	Printer					Fax				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
Faculty of Arts	20 (13.98)	25 (17.48)	18 (12.58)	53 (37.06)	27 (18.88)	11 (7.69)	22 (15.38)	4 (2.79)	27 (18.88)	79 (55.24)
Faculty of Science	33 (27.5)	21 (17.5)	24 (20)	17 (14.16)	25 (20.83)	5 (4.17)	5 (4.17)	10 (8.33)	14 (11.66)	86 (71.66)
Faculty of Engineering	22 (10.43)	62 (29.38)	13 (6.16)	60 (28.44)	54 (25.59)	6 (2.84)	7 (3.32)	20 (9.42)	32 (15.16)	146 (69.19)
Total	75 (15.82)	108 (22.78)	55 (11.60)	130 (27.43)	106 (22.36)	22 (4.64)	34 (7.17)	34 (7.17)	73 (15.40)	311 (65.61)

Faculty	DVD					Subject Specific Software					Total
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Under Graduate	5 (3.49)	6 (4.19)	3 (2.09)	5 (3.49)	124 (86.71)	2 (1.40)	3 (2.09)	3 (2.09)	2 (1.40)	133 (93.01)	143
Post graduate	5 (4.17)	3 (2.5)	7 (5.83)	6 (5)	99 (82.5)	2 (1.66)	2 (1.66)	2 (1.66)	2 (1.66)	112 (93.33)	120
Research Degree	2 (0.95)	2 (0.95)	2 (0.95)	9 (4.26)	196 (92.89)	3 (1.42)	2 (0.95)	2 (0.95)	5 (2.37)	199 (94.31)	211
Total	12 (2.53)	11 (2.32)	12 (2.53)	20 (4.22)	419 (88.40)	7 (1.48)	7 (1.48)	7 (1.48)	9 (1.89)	444 (93.67)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	1352.25	2	676.125	1.498595	0.257191	3.73889
Columns	11891.83	7	1698.833	3.765373	0.016652	2.764196
Error	6316.417	14	451.1726			
Total	19560.5	23				

A study of data in table 32 indicates the Faculty wise respondents' dependence of ICT facilities to share and exchange of ideas and values with their coresearchers and friends. The faculty wise analysis reveals the following facts. Majority of the Arts Faculty respondents have no dependence on WWW (41.96%), fax (55.24%), DVD (86.71%) and subject specific software (93.01.5%). A considerable number of Engineering Faculty respondents have high dependence on e-mail (54.97%), Voicemail (36.01%) and CDROM (25.12%) for their research work. Majority of the Science Faculty respondents have frequent dependence on e-mail (40%) and Voicemail (48%) for their research work.

The anova two way model is applied for further discussion. At one point the computed ANOVA value 1.49 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation with respect to high dependence of various ICT devices available in their institution is statistically identified as insignificant. In another point the computed anova value 3.76 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation among chosen education groups is statistically identified as significant with respect to respondents' high dependence of various ICT devices.

It could be seen clearly above the discussion that majority of the Engineering faculty respondents have high dependence on e-mail and voicemail for their research work.

Table - 33

Sex wise Respondents depends upon showing ideas of ICT with colleague / Friends

Sex	WWW					E-Mail					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	15 (3.71)	23 (5.69)	44 (10.89)	85 (21.04)	237 (58.66)	136 (33.66)	109 (26.98)	96 (23.76)	40 (9.9)	23 (5.69)	
Female	8 (11.43)	5 (7.14)	22 (31.43)	30 (42.86)	5 (7.14)	32 (45.71)	11 (15.71)	9 (12.86)	10 (14.28)	8 (11.43)	
Total	23 (4.85)	28 (5.93)	66 (13.92)	115 (24.26)	242 (51.05)	168 (35.44)	120 (25.32)	105 (22.15)	50 (10.55)	31 (6.54)	
Sex	Voicemail					CDROM					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	132 (32.67)	182 (45.05)	49 (12.13)	19 (4.70)	22 (5.45)	138 (34.16)	107 (26.48)	70 (17.33)	64 (15.41)	25 (6.188)	
Female	24 (34.28)	18 (25.71)	12 (17.14)	8 (11.43)	8 (11.43)	17 (24.28)	11 (15.71)	20 (28.57)	11 (15.71)	11 (15.71)	
Total	156 (32.91)	200 (42.19)	61 (12.90)	27 (59.96)	30 (6.33)	155 (32.70)	118 (24.89)	90 (18.99)	75 (15.82)	36 (7.59)	
Sex	Printer					Fax					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	66 (16.34)	98 (24.26)	46 (11.37)	107 (26.48)	87 (21.53)	19 (4.70)	29 (7.18)	25 (6.19)	58 (14.36)	273 (67.57)	
Female	9 (12.86)	10 (14.28)	9 (12.86)	23 (32.86)	19 (27.14)	3 (4.28)	5 (7.14)	9 (12.86)	15 (21.43)	38 (54.28)	
Total	75 (15.82)	108 (22.78)	55 (11.60)	130 (27.43)	106 (22.36)	22 (4.64)	34 (7.17)	34 (7.17)	73 (15.40)	311 (65.61)	
Sex	DVD					Subject specific software					Total
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	10 (2.47)	8 (1.98)	9 (2.23)	16 (3.96)	361 (89.36)	5 (1.24)	5 (1.24)	4 (0.99)	6 (1.48)	384 (95.05)	404
Female	2 (2.86)	3 (4.28)	3 (4.28)	4 (5.71)	58 (82.86)	2 (2.86)	2 (2.86)	3 (4.28)	3 (4.28)	60 (85.71)	70
Total	12 (2.53)	11 (2.32)	12 (2.53)	20 (4.22)	419 (88.40)	7 (1.48)	7 (1.48)	7 (1.48)	9 (1.89)	444 (93.67)	474

Source: Computed
 Figures in parentheses denote percentages

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	11236	1	11236	8.607135	0.021906	5.59146
Columns	17837.75	7	2548.25	1.952041	0.198658	3.787051
Error	9138	7	1305.429			
Total	38211.75	15				

A study of data in table 33 indicates the sex wise respondents' dependence of internet resources facilities to share and exchange of ideas and values with their coresearchers and friends and downloading their reference data. The sex wise analysis reveals the following facts. Majority of male respondents have no dependence on internet (58.66%), CDROM (61.88%), fax (67.57%), DVD (89.36%) and subject specific software (95.05%). A considerable number of female respondents have high dependence on e-mail (45.71%), voicemail (34.28%) and CDROM (24.28%) for their research purposes.

The anova two way model is applied for further discussion. At one point the computed ANOVA value 8.60 which is greater than its tabulated value at 5 per cent level significance. Hence, variation with respect to high dependence of various ICT devices available in their institution is statistically identified as significant. In another point the computed anova value 1.95 which is lesser than its tabulated value at 5 per cent level significane. Hence, variation among chosen sex groups is

statistically identified as insignificant with respect to respondents' high dependence of various ICT devices.

It could be seen clearly above the discussion that majority of female respondents have high dependence on e-mail and voicemail for their research.

Table - 34
Institution wise Respondents

Institution	To make review of literature collection				For participation in seminar/ conference etc			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
University of Madras	36 (27.48)	19 (14.5)	26 (19.85)	50 (38.60)	66 (50.38)	30 (22.9)	14 (10.68)	21 (16.1)
Annamalai University	19 (6.46)	96 (32.65)	106 (36.05)	73 (24.83)	107 (36.39)	35 (11.90)	37 (12.58)	115 (39.11)
Bharathiar University	30 (61.22)	2 (4.08)	2 (4.08)	15 (30.61)	15 (30.61)	10 (20.41)	2 (4.08)	22 (44.90)
Total	85 (17.93)	117 (24.68)	134 (28.27)	138 (29.11)	188 (39.66)	75 (15.82)	53 (11.18)	158 (33.33)
Institution	To collect secondary data				To write and publish paper			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
University of Madras	42 (32.1)	31 (23.66)	46 (35.11)	12 (9.16)	29 (22.14)	36 (27.48)	51 (38.93)	15 (11.45)
Annamalai University	119 (40.48)	85 (28.91)	35 (11.90)	55 (18.71)	66 (22.45)	75 (25.51)	104 (35.37)	49 (16.66)
Bharathiar University	9 (18.37)	14 (28.57)	6 (12.24)	20 (40.82)	20 (40.82)	19 (38.77)	4 (8.16)	6 (12.24)
Total	170 (35.86)	130 (27.45)	87 (18.35)	87 (18.35)	115 (24.26)	130 (27.43)	159 (33.54)	70 (14.77)

Institution	To update the latest development in the subject				Discussion with experts				
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest	
University of Madras	25 (19.1)	27 (20.61)	27 (20.61)	52 (39.69)	11 (8.39)	19 (14.50)	34 (25.95)	67 (51.14)	
Annamalai University	84 (28.57)	36 (12.24)	75 (25.51)	99 (33.67)	56 (19.05)	42 (14.28)	104 (35.37)	92 (31.29)	
Bharathiar University	5 (10.20)	16 (32.65)	19 (38.77)	9 (18.37)	15 (30.16)	19 (38.77)	8 (16.33)	7 (14.28)	
Total	114 (24.05)	79 (16.66)	121 (25.53)	160 (33.75)	82 (16.88)	80 (17.29)	146 (30.80)	166 (35.02)	
Institution	Govt. decision on tech. Policy funding				Self-fulfilment and self-satisfaction				
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest	
University of Madras	25 (19.1)	48 (36.64)	35 (26.72)	23 (17.56)	9 (6.87)	21 (16.03)	29 (22.14)	72 (54.96)	
Annamalai University	47 (15.98)	95 (32.31)	120 (40.82)	32 (10.88)	25 (8.50)	160 (54.42)	34 (11.56)	75 (25.51)	
Bharathiar University	13 (26.53)	12 (24.49)	5 (10.20)	19 (38.77)	4 (8.16)	5 (10.20)	17 (34.69)	23 (46.94)	
Total	85 (17.93)	155 (30.70)	160 (33.75)	74 (15.61)	38 (8.02)	186 (39.24)	80 (16.88)	170 (35.86)	
Institution	Scientific and technical News				Current developments				Total
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest	
University of Madras	40 (30.5)	30 (22.90)	46 (35.11)	15 (11.45)	61 (46.56)	42 (32.06)	24 (18.32)	14 (10.16)	131
Annamalai University	93 (31.63)	115 (39.12)	64 (21.77)	22 (7.48)	75 (25.51)	120 (40.82)	97 (32.99)	2 (0.68)	294
Bharathiar University	12 (24.49)	9 (18.37)	9 (18.37)	19 (38.77)	16 (32.65)	12 (24.49)	3 (6.12)	18 (36.73)	49
Total	145 (30.59)	154 (32.49)	119 (25.10)	56 (11.81)	152 (32.07)	174 (36.71)	114 (20.05)	34 (71.73)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	15571.27	2	7785.633	19.67523	2.96E-05	3.554561
Columns	6461.467	9	717.9407	1.814322	0.134838	2.456282
Error	7122.733	18	395.7074			
Total	29155.47	29				

A study of data in table 34 indicates the institution wise respondents' motivation towards utilization of ICT to collect information. It could be noted that out of the total 474 respondents 17.93 per cent of them have strongest motivation to collect information towards collection of review of literature, 24.68 percent of them have fair motivation, 28.27 per cent of them have average motivation, the rest 29.11 per cent of them biggest motivation. It is seen from the table that out of the total 474 respondents 39.66 per cent of them have strongest motivation to collect information towards participation in seminars and conference, 15.82 percent of them have fair motivation, 11.18 per cent of them have average motivation, the rest 33.33 per cent of them biggest motivation.

A keen observation of data in table reveals that out of the total 474 respondents 39.66 per cent of them have strongest motivation to collect information towards conducting in seminars and conference, 15.82 percent of them have fair motivation, 11.18 per cent of them have average motivation, the rest 33.33 per cent of them biggest motivation.

It is significant to note that out of the total 474 respondents 35.86 per cent of them have strongest motivation to collect secondary data, 27.45 percent of them have fair motivation, 18.35 per cent of them have average motivation, the rest 18.35 per cent of them biggest motivation.

It is significant to note that out of the total 474 respondents 24.26 per cent of them have strongest motivation to collect information towards writing and publishing research papers, 27.43 percent of them have fair motivation, 33.54 per cent of them have average motivation, the rest 14.77 per cent of them biggest motivation.

It is interesting to note that out of the total 474 respondents 24.05 per cent of them have strongest motivation to update the latest development in the subject, 16.66 percent of them have fair motivation, 25.53 per cent of them have average motivation, the rest 33.75 per cent of them biggest motivation. It is seen from the table data that out of the total 474 respondents 16.88 per cent of them have strongest motivation to make discussion with experts, 17.29 percent of them have fair motivation, 30.80 per cent of them have average motivation, the rest 35.02 per cent of them biggest motivation. In this study that out of the total 474 respondents 17.93 per cent of them have strongest motivation to collect information towards governments' decision on technology and policy of funding, 30.70 percent of them have fair motivation, 33.75 per cent of them have average motivation, the rest 15.61 per cent of them biggest motivation.

It is observed from the table that out of the total 474 respondents 8.02 per cent of them have strongest motivation to collect information

towards self fulfillment and self satisfaction, 39.24 percent of them have fair motivation, 16.88 per cent of them have average motivation, the rest 35.86 per cent of them biggest motivation. It could be noted that out of the total 474 respondents 30.59 per cent of them have strongest motivation to collect information towards scientific and technical notes, 32.49 percent of them have fair motivation, 25.10 per cent of them have average motivation, the rest 11.81 per cent of them Weakest motivation.

It is remarkable to observe that out of the total 474 respondents 32.07 per cent of them have strongest motivation to collect information towards current developments, 36.71 percent of them have fair motivation, 20.05 per cent of them have average motivation, the rest 71.73 per cent of them weakest motivation.

The institution wise analysis reveals the following facts. Majority of the respondents of Madras University have strongest motivation towards collection of information to participate in seminars and conferences (50.38%), to conduct seminars and conferences (32.1%), to know about scientific and technical notes (30.5%) and current developments (46.56%). A considerable number of respondents of Annamalai University have average motivation towards collecting information relating to preparation of class teaching (36.05), writing and

publishing research papers (35.37%), question paper setting (35.37%) and governments' decision on technology and policy of funding.

The anova to a model is applied for further discussion. At one point the computed ANOVA value 19.67 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to strong motivation towards collection of various type of is statistically identified as significant. In another point the computed anova value 1.81 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation among chosen institutions is statistically identified as insignificant with respect to respondents' strong motivation towards collection of various information.

It could be seen clearly above the discussion that majority of the respondents either have strongest motivation or fair motivation towards collection of information relating to participation and conducting seminars and conferences, writing and publishing research papers, information about scientific and technical use and current developments.

Table - 35

Faculty wise Respondents motivation for ICT seek and collect Information

Faculty	To make review of literature collection				For participation in seminar/ conference etc			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Arts	28 (19.58)	69 (48.25)	37 (25.87)	9 (6.29)	40 (27.97)	18 (12.58)	21 (14.68)	64 (44.75)
Science	19 (15.83)	32 (26.66)	18 (15)	51 (42.5)	47 (39.16)	29 (24.16)	19 (15.83)	25 (20.83)
Engineering	38 (18.01)	16 (7.58)	79 (37.44)	78 (36.96)	101 (47.86)	28 (13.27)	13 (6.16)	69 (32.70)
Total	85 (17.93)	117 (24.68)	134 (28.27)	138 (29.11)	188 (39.66)	75 (15.82)	53 (11.18)	158 (33.33)
Faculty	To collect secondary data				To update the latest development in the subject			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Arts	50 (34.96)	42 (29.37)	22 (19.38)	29 (20.28)	35 (24.47)	40 (27.97)	47 (32.87)	21 (14.68)
Science	9 (7.5)	51 (42.5)	35 (29.16)	25 (20.83)	42 (35)	50 (41.66)	3 (2.5)	25 (20.83)
Engineering	111 (52.61)	37 (17.54)	30 (14.22)	33 (15.64)	38 (18.01)	40 (18.96)	109 (51.66)	24 (12.37)
Total	170 (35.86)	130 (27.45)	87 (18.35)	87 (18.35)	115 (24.26)	130 (27.43)	159 (33.54)	70 (14.77)
Faculty	Discussion with experts				To setting up question paper etc			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Arts	53 (37.06)	41 (28.67)	10 (6.99)	39 (27.27)	33 (23.07)	38 (26.57)	31 (21.68)	41 (28.67)
Science	32 (26.66)	18 (15)	39 (32.5)	31 (25.83)	27 (22.5)	25 (20.83)	42 (35)	26 (21.66)
Engineering	29 (13.74)	20 (9.48)	72 (34.12)	90 (42.65)	22 (10.43)	17 (8.06)	73 (34.59)	99 (46.92)
Total	114 (24.05)	79 (16.66)	121 (25.53)	160 (33.75)	82 (16.88)	80 (17.29)	146 (30.80)	166 (35.02)

Faculty	Govt. decision on tech. Policy funding				Self-fulfilment and self-satisfaction				
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest	
Arts	46 (32.17)	35 (24.47)	40 (27.97)	22 (15.38)	15 (10.49)	68 (47.55)	19 (13.29)	41 (28.67)	
Science	14 (11.66)	32 (26.66)	41 (34.16)	33 (27.5)	15 (12.5)	37 (30.83)	19 (15.83)	49 (40.83)	
Engineering	25 (11.85)	88 (41.71)	79 (37.44)	19 (9)	8 (3.79)	81 (38.38)	42 (19.91)	80 (37.91)	
Total	85 (17.93)	155 (30.70)	160 (33.75)	74 (15.61)	38 (8.02)	186 (39.24)	80 (16.88)	170 (35.86)	
Faculty	Scientific and technical News				Current developments				Total
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest	
Arts	32 (22.37)	58 (40.56)	28 (19.58)	25 (17.48)	56 (39.16)	24 (16.78)	58 (40.46)	5 (3.49)	143
Science	41 (34.16)	41 (31.16)	26 (21.66)	12 (10)	32 (26.66)	39 (32.5)	34 (28.33)	15 (12.5)	120
Engineering	72 (34.12)	55 (26.06)	65 (30.81)	19 (9)	64 (30.33)	111 (52.61)	22 (10.43)	14 (6.64)	211
Total	145 (30.59)	154 (32.49)	119 (25.10)	56 (11.81)	152 (32.07)	174 (36.71)	114 (20.05)	34 (71.73)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	2649.267	2	1324.633	3.242794	0.062699	3.554561
Columns	6528.967	9	725.4407	1.775929	0.143258	2.456282
Error	7352.733	18	408.4852			
Total	16530.97	29				

A study of data in table 37 indicates the faculty wise respondents motivation towards utilization of ICT to collect information. The faculty wise analysis reveals the following facts. Majority of the engineering faculty respondents have strongest motivation towards collection of

information to participate in seminars and conferences (47.86%), to conduct seminars and conferences (52.61%), to know about scientific and technical notes (34.12%) and current developments (30.33%). A considerable number of arts faculty respondents have average motivation towards collecting information relating to write and publish research papers (32.87), and governments' decision on technology and policy of funding (27.97).

The anova to a model is applied for further discussion. At one point the computed ANOVA value 3.24 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation with respect to strong motivation towards collection of various type of is statistically identified as insignificant. In another point the computed anova value 1.77 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation among chosen education is statistically identified as insignificant with respect to respondents' strong motivation towards collection of various information.

It could be seen clearly above the discussion that engineering faculty respondents mainly have strongest motivation to collect information relating to participate in seminars and conferences, to conduct seminars and conferences, to know about scientific and technical notes and current developments.

Table - 36

Sex wise Respondents motivation for ICT seek and collect Information

Sex	To make review of literature collection				For participation in seminar/ conference etc			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Male	76 (18.81)	96 (23.76)	122 (30.19)	110 (27.23)	174 (23.07)	53 (13.14)	45 (11.14)	132 (32.67)
Female	9 (12.86)	21 (30)	12 (17.14)	28 (40)	14 (20)	22 (31.43)	8 (11.43)	26 (37.14)
Total	85 (17.93)	117 (24.68)	134 (28.27)	138 (29.11)	188 (39.66)	75 (15.82)	53 (11.18)	158 (33.33)
Sex	To collect secondary data				To write and published paper			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Male	150 (37.13)	122 (30.19)	65 (16.08)	67 (16.58)	84 (20.79)	119 (29.45)	151 (37.37)	50 (12.37)
Female	20 (28.51)	8 (11.43)	22 (31.43)	20 (28.57)	31 (44.28)	11 (15.71)	8 (11.43)	20 (28.57)
Total	170 (35.86)	130 (27.45)	87 (18.35)	87 (18.35)	115 (24.26)	130 (27.43)	159 (33.54)	70 (14.77)
Sex	To update the latest development in the subject				Discussion with experts			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Male	92 (22.77)	67 (16.58)	97 (20.01)	148 (36.63)	67 (16.58)	72 (17.82)	120 (29.70)	145 (35.89)
Female	22 (31.43)	12 (17.14)	24 (34.28)	12 (17.17)	15 (21.43)	8 (11.43)	26 (37.14)	21 (30)
Total	114 (20.05)	79 (16.66)	121 (23.53)	160 (33.75)	82 (16.88)	80 (17.29)	146 (30.80)	166 (35.02)
Sex	Govt. decision on tech. Policy funding				Self-fulfilment and self-satisfaction			
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest
Male	68 (16.83)	130 (32.18)	147 (36.38)	59 (14.60)	29 (7.18)	170 (42.08)	56 (13.86)	149 (36.88)
Female	17 (24.28)	25 (35.71)	13 (18.57)	15 (21.43)	9 (12.83)	16 (22.86)	24 (34.28)	21 (30)
Total	85 (17.93)	155 (30.70)	160 (33.75)	74 (15.61)	38 (8.02)	186 (39.24)	80 (16.88)	170 (35.86)

Sex	Scientific and technical News				Current developments				Total
	Strongest motivator	Fairly	Average	Weakest	Strongest motivator	Fairly	Average	Weakest	
Male	124 (30.69)	126 (31.18)	106 (26.24)	48 (11.88)	127 (31.14)	156 (38.61)	92 (22.77)	29 (7.18)	404
Female	21 (30)	28 (40)	13 (18.57)	8 (11.43)	25 (35.71)	18 (25.71)	22 (31.43)	5 (7.43)	70
Total	145 (30.59)	154 (32.49)	119 (25.10)	56 (11.81)	152 (32.07)	174 (36.71)	114 (20.05)	34 (71.73)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	32643.2	1	32643.2	36.42853	0.000194	5.117357
Columns	9692.2	9	1076.911	1.20179	0.394351	3.178897
Error	8064.8	9	896.0889			
Total	50400.2	19				

A study of data in table 38 indicates the sex wise respondents motivation towards utilization of ICT to collect information. The sex wise analysis reveals the following facts. A considerable number of male respondents have strongest motivation towards collection of information to participate in seminars and conferences (23.07%), to collect secondary data (37.13%), to know about scientific and technical notes (30.69%) and current developments (31.14%). Majority of the female respondents have average motivation towards collecting information relating to update the latest development in the subject (34.88%), and discussion with experts (37.14%).

The anova to a model is applied for further discussion. At one point the computed ANOVA value 36.42 which is greater than its tabulated value at 5 per cent level of significant. Hence, variation with respect to strong motivation towards collection of various type of is statistically identified as significant. In another point the computed anova value 1.20 which is lesser than its tabulated value at 5 per cent level of significant. Hence, variation among chosen sex groups is statistically identified as insignificant with respect to respondents' strong motivation towards collection of various information.

It could be seen clearly above the discussion that male respondents mainly have strongest motivation to collect information relating to participate in seminars and conferences, to collect secondary data, to know about scientific and technical notes and current developments.

Table - 37

Institution wise Respondents depends on ICT sources getting Relevant Reference of our requirement

Institution	WWW					E-Mail					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
University of Madras	27 (20.61)	24 (18.32)	29 (22.14)	27 (22.14)	27 (20.61)	7 (5.34)	27 (20.61)	44 (33.58)	10 (7.63)	43 (32.82)	
Annamalai University	29 (9.86)	106 (36.05)	42 (14.28)	97 (32.99)	20 (6.80)	66 (22.45)	42 (14.28)	105 (35.71)	26 (8.84)	55 (18.71)	
Bharathiar University	2 (4.08)	5 (10.20)	10 (20.41)	26 (53.06)	6 (12.24)	2 (4.08)	3 (6.12)	5 (10.20)	12 (24.49)	27 (55.10)	
Total	58 (12.24)	135 (28.48)	81 (17.1)	152 (32.1)	48 (10.13)	75 (15.82)	72 (15.19)	154 (32.49)	48 (10.13)	125 (26.37)	
Institution	Voicemail					CDROM					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
University of Madras	12 (9.16)	27 (20.61)	59 (45.04)	22 (16.79)	11 (8.39)	15 (11.45)	69 (52.67)	11 (8.39)	16 (12.21)	20 (15.26)	
Annamalai University	18 (61.22)	86 (29.25)	129 (43.88)	43 (14.63)	18 (61.22)	9 (3.06)	13 (4.42)	22 (7.48)	125 (45.52)	125 (42.52)	
Bharathiar University	25 (51.02)	4 (8.16)	12 (24.49)	5 (10.20)	3 (6.12)	4 (8.16)	7 (14.25)	9 (18.36)	12 (24.49)	17 (34.69)	
Total	55 (11.60)	117 (24.68)	200 (42.19)	70 (14.77)	32 (6.75)	28 (5.91)	89 (18.77)	42 (8.86)	153 (32.28)	162 (34.18)	
Institution	Printer					Fax					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
University of Madras	17 (12.97)	45 (34.35)	42 (32.06)	16 (12.21)	9 (6.87)	8 (6.11)	17 (12.97)	25 (19.1)	51 (38.93)	29 (22.14)	
Annamalai University	84 (28.57)	32 (10.88)	106 (36.05)	33 (11.22)	39 (13.26)	21 (7.14)	19 (6.46)	5 (1.7)	79 (26.87)	170 (57.82)	
Bharathiar University	5 (10.20)	9 (18.36)	20 (40.82)	11 (22.45)	4 (8.16)	2 (4.08)	2 (4.08)	4 (8.16)	8 (16.32)	33 (67.35)	
Total	106 (22.36)	86 (18.14)	168 (35.44)	62 (13.08)	52 (10.97)	31 (6.54)	38 (8.02)	35 (7.38)	138 (29.11)	232 (48.95)	
Institution	DVD					Subject specific software					Total
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
University of Madras	7 (5.34)	4 (3.1)	21 (16.03)	8 (6.11)	91 (69.46)	8 (6.11)	6 (4.58)	14 (10.68)	75 (57.25)	22 (16.79)	131
Annamalai University	13 (4.42)	21 (7.14)	20 (6.80)	47 (15.99)	193 (65.65)	8 (2.72)	23 (7.82)	22 (7.48)	132 (44.90)	109 (37.07)	294
Bharathiar University	12 (24.49)	12 (24.49)	2 (4.08)	9 (18.37)	14 (28.57)	5 (10.20)	15 (30.61)	15 (30.61)	9 (18.36)	5 (10.20)	49
Total	32 (6.75)	37 (7.81)	43 (9.07)	64 (13.50)	298 (62.87)	21 (4.43)	44 (9.28)	51 (10.76)	216 (45.57)	142 (29.96)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	2501.083	2	1250.542	3.915882	0.044594	3.73889
Columns	1951.833	7	278.8333	0.873124	0.550481	2.764196
Error	4470.917	14	319.3512			
Total	8923.833	23				

A study of data in table 37 indicates the Institution wise respondents' literature collection behaviour through ICT. It could be noted that out of the total 474 respondents 44.30 per cent of them collect literature through WWW and 38.40 per cent of them have no practice to collect literature through WWW. Moreover 17.30 per cent of them are not aware of collecting literature through WWW. It is observed that out of the total 474 respondents 11.18 per cent of them collect literature through e-mail and 72.36 per cent of them have no practice to collect literature through e-mail. Moreover 16.45 per cent of them are not aware of collecting literature through e-mail.

In this study that out of the total 474 respondents 9.28 per cent of them collect literature through voicemail and 65.61 per cent of them have no practice to collect literature through voicemail. Moreover 25.11 per cent of them are not aware of collecting literature through voicemail. It is observed that out of the total 474 respondents 20.67 per cent of them collect literature through CDROM and 43.67 per cent of them have

no practice to collect literature through CDROM. Moreover 35.65 per cent of them are not aware of collecting literature through CDROM. It is significant note that out of the total 474 respondents 56.11 per cent of them collect literature through Printers and 24.47 per cent of them have no practice to collect literature through Printers. Moreover 19.41 per cent of them are not aware of collecting literature through Printers. It is observed that out of the total 474 respondents 12.45 per cent of them collect literature through Fax and 67.93 per cent of them have no practice to collect literature through Fax. Moreover 19.62 per cent of them are not aware of collecting literature through Fax.

It could be noted that out of the total 474 respondents 4.85 per cent of them collect literature through DVD and 77.45 per cent of them have no practice to collect literature through DVD. Moreover DVD per cent of them are not aware of collecting literature through DVD. It is seen from the table that out of the total 474 respondents 6.96 per cent of them collect literature through subject specific software and 64.98 per cent of them have no practice to collect literature through subject specific software. Moreover 28.06 per cent of them are not aware of collecting literature through subject specific software.

The Institution wise analysis reveals the following facts. Majority of the respondents of University of Madras make use of internet (44.27%)

and printer (74.81%) towards literature collection. A considerable number of respondents of Bharathiyar University make use of internet (55%), CDROM services (38.77%) and printers (44.90%) towards literature collection.

It could be seen clearly from the above discussion that use of WWW towards literature collection occupies the first position, Printer the second and CDROM the third. In general, respondents less make use of e-mail, voicemail, Fax, DVD and subject specific software towards the literature collection.

Table - 38

Faculty wise Respondents depends on ICT sources getting Relevant Reference of our requirement

Educational	WWW					E-Mail				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
Faculty of Arts	22 (15.38)	26 (18.18)	30 (20.98)	49 (34.26)	16 (11.18)	32 (22.38)	14 (9.79)	67 (46.85)	7 (4.89)	23 (16.08)
Faculty of Science	13 (10.83)	30 (25)	19 (15.83)	37 (30.83)	21 (17.5)	24 (20)	23 (19.16)	31 (25.83)	13 (10.83)	29 (24.16)
Faculty of Engineering	23 (10.9)	79 (34.44)	32 (15.16)	66 (31.28)	11 (5.21)	19 (9)	35 (16.58)	56 (26.54)	28 (13.27)	73 (34.59)
Total	58 (12.24)	135 (28.48)	81 (17.1)	152 (32.1)	48 (10.13)	75 (15.82)	72 (15.19)	154 (32.49)	48 (10.13)	125 (26.37)
Educational	Voicemail					CDROM				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
Faculty of Arts	12 (8.39)	39 (27.27)	68 (47.55)	21 (14.68)	3 (2.09)	9 (6.29)	30 (20.98)	12 (8.39)	38 (26.57)	54 (37.76)
Faculty of Science	12 (10)	18 (15)	62 (51.66)	23 (19.17)	5 (4.16)	8 (6.67)	34 (28.33)	19 (15.83)	45 (37.5)	14 (11.66)
Faculty of Engineering	31 (14.69)	60 (28.44)	70 (33.17)	26 (12.32)	24 (11.37)	11 (5.21)	25 (11.85)	11 (5.21)	70 (33.17)	94 (44.55)
Total	55 (11.60)	117 (24.68)	200 (42.19)	70 (14.77)	32 (6.75)	28 (5.91)	89 (18.77)	42 (8.86)	153 (32.28)	162 (34.18)
Educational	Printer					Fax				
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent
Faculty of Arts	54 (37.76)	30 (20.98)	22 (15.38)	22 (15.38)	15 (10.49)	14 (9.79)	15 (10.49)	19 (13.28)	39 (27.27)	56 (39.16)
Faculty of Science	14 (11.66)	28 (23.33)	42 (35)	18 (15)	18 (15)	9 (7.5)	15 (12.5)	7 (5.83)	29 (24.16)	60 (50)
Faculty of Engineering	38 (18.01)	28 (13.27)	104 (49.29)	22 (10.43)	19 (9)	8 (3.79)	8 (3.79)	9 (4.26)	70 (33.17)	116 (54.97)
Total	106 (22.36)	86 (18.14)	168 (35.44)	62 (13.08)	52 (10.97)	31 (6.54)	38 (8.02)	35 (7.38)	138 (29.11)	232 (48.95)

Educational	DVD					Subject specific software					Total
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Faculty of Arts	18 (12.58)	20 (13.98)	7 (4.89)	13 (9.09)	85 (59.44)	11 (7.69)	21 (14.68)	12 (8.39)	74 (51.75)	25 (17.48)	143
Faculty of Science	9 (7.5)	9 (7.5)	15 (12.5)	20 (16.67)	67 (55.83)	5 (4.16)	13 (10.83)	7 (5.83)	41 (34.14)	54 (45)	120
Faculty of Engineering	5 (2.37)	8 (3.79)	21 (9.95)	31 (14.69)	146 (69.19)	5 (2.37)	10 (4.47)	32 (15.16)	101 (47.87)	63 (29.56)	211
Total	32 (6.75)	37 (7.81)	43 (9.07)	64 (13.50)	298 (62.87)	21 (4.43)	44 (9.28)	51 (10.76)	216 (45.57)	142 (29.96)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	384.3333	2	192.1667	2.82697	0.093057	3.73889
Columns	1951.833	7	278.8333	4.101926	0.011869	2.764196
Error	951.6667	14	67.97619			
Total	3287.833	23				

A study of data in table 38 indicates the Faculty wise respondents' literature collection behaviour through ICT. The Faculty wise analysis reveals the following facts. Majority of the Arts Faculty respondents make use of internet (48.95%) and printer (53.1%) towards literature collection. A considerable number of Engineering Faculty respondents make use of internet (47.39%), CDROM (27.96%) and printers (56.87%) towards literature collection.

It could be seen clearly from the above discussion that Science Faculty respondents lag behind others in collection of literature through ICT devices.

Table - 39

Sex wise Respondents depends on ICT sources getting Relevant Reference of our requirement

Sex	WWW					E-Mail					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	50 (12.38)	122 (30.19)	76 (18.81)	118 (29.21)	38 (9.41)	64 (15.81)	53 (13.14)	139 (34.41)	39 (9.65)	109 (26.98)	
Female	8 (11.43)	13 (18.57)	5 (7.14)	34 (48.57)	10 (14.28)	11 (15.71)	19 (27.14)	15 (21.43)	9 (12.86)	16 (22.86)	
Total	58 (12.24)	135 (28.48)	81 (17.1)	152 (32.1)	48 (10.13)	75 (15.82)	72 (15.19)	154 (32.49)	48 (10.13)	125 (26.37)	
Sex	Voicemail					CDROM					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	49 (12.13)	93 (23.1)	188 (46.53)	53 (13.14)	21 (5.20)	21 (5.20)	77 (19.06)	23 (5.69)	134 (34.17)	149 (36.88)	
Female	6 (8.57)	24 (34.28)	12 (17.14)	17 (24.28)	11 (15.71)	7 (10)	12 (17.14)	19 (27.14)	19 (27.14)	13 (18.57)	
Total	55 (11.60)	117 (24.68)	200 (42.19)	70 (14.77)	32 (6.75)	28 (5.91)	89 (18.77)	42 (8.86)	153 (32.28)	162 (34.18)	
Sex	Printer					Fax					
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	91 (21.52)	77 (19.06)	151 (37.37)	48 (11.88)	37 (9.16)	26 (6.44)	27 (6.68)	27 (6.68)	124 (30.70)	200 (49.5)	
Female	15 (21.43)	9 (12.86)	17 (24.28)	14 (20)	15 (21.43)	5 (7.14)	11 (15.71)	8 (11.43)	14 (20)	32 (45.71)	
Total	106 (22.36)	86 (18.14)	168 (35.44)	62 (13.08)	52 (10.97)	31 (6.54)	38 (8.02)	35 (7.38)	138 (29.11)	232 (48.95)	
Sex	DVD					Subject specific software					Total
	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	High Dependent	Frequent Dependent	Occasional Dependent	Rare Dependent	Non-Dependent	
Male	28 (6.93)	33 (8.17)	28 (6.94)	50 (12.37)	265 (65.59)	18 (4.45)	39 (9.65)	46 (11.38)	180 (44.55)	121 (29.05)	404
Female	4 (5.71)	4 (5.71)	15 (21.43)	14 (20)	33 (47.14)	3 (4.28)	5 (7.14)	5 (7.14)	36 (51.43)	21 (30)	70
Total	32 (6.75)	37 (7.81)	43 (9.07)	64 (13.50)	298 (62.87)	21 (4.43)	44 (9.28)	51 (10.76)	216 (45.57)	142 (29.96)	474

Source: Computed

Figures in parentheses denote percentages

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	5184	1	5184	22.20808	0.002176	5.59146
Columns	2927.75	7	418.25	1.791769	0.229788	3.787051
Error	1634	7	233.4286			
Total	9745.75	15				

A study of data in table 39 indicates the sex wise respondents' literature collection behaviour through ICT. The sex wise analysis reveals the following facts. Majority of female respondents make use of WWW (50%) and CDROM (38.57%) towards their literature collection. A considerable number of male respondents make use of WWW (43.32%), and printer (58.17%) towards their literature collection.

It could be seen clearly from the above discussion that male respondents lag behind female respondents in collection of literature through ICT devices.