Chapter - 6
Findings
&
Conclusion
CHAPTER 6
FINDINGS AND CONCLUSION

6.0 INTRODUCTION

This chapter presents the major findings, which have been drafted on the basis of data collected from the universities under the study. Tenability of the hypotheses is checked with the help of One-way ANOVA as a statistical tool and suggestions are provided to improve the maximum utilization of web resources. The findings based on the analysis and interpretations of the previous chapter are as follows:

6.1 FINDINGS

6.1.1 Awareness and Use

For evaluating the awareness and use of the web resources among the researchers the study examined all the concerned areas such as; finding out the sources which were helpful in acquainting the researchers to web resources, to know about the places from where the researchers generally accessed web resources, to examine the importance of various web resources in researcher’s academic work. Major findings on the awareness and use of web resources are summarized below:

a) Search engines were identified as the leading source to give information about the web resources to the researchers. 93.44 percent researchers in DU, 93.25 percent in JMI and 93.32 percent in JNU admitted that they become aware about the web resources through the search engines. While, some other sources that were crucial in imparting knowledge about the web resources included social networking websites, communication with colleagues, teachers, and library websites etc.

b) Departments of the institution along with the homes/hostels were identified as two of the popular location for accessing the web resource. The highest number of researchers who usually accessed web resources from their Departments were reported from DU (60.18 %) followed by JMI (57.54 %) and JNU (50.40 %).

c) A high percentage of researchers from DU (59.30%), JMI (62.30%), and (50.40%) admitted accessing web resources from the home however, a high percentage of respondents from JNU (65.99%) preferred to access web resources from the university library than DU (41.14 %) and JMI (33.33 %).
d) Weighted Mean scores obtained regarding the importance of various web resources in the select universities under the study revealed that there is a consensus on the importance of top four web resources. Results revealed that e-journals were found to be the most important web resource for research and academic work in DU (WM=4.85; R=1), JMI (WM=4.79; R=1), and JNU (WM=4.86; R=1) followed by e-books, online databases and e-reference sources such as online encyclopaedias, thesaurus and dictionaries.

6.1.2 Purpose of Use

Study explored the various purposes for which the web resources are used by the researchers of DU, JMI and JNU. Study found that the web resources are satisfactorily fulfilling the purposes for which they are used by the researchers. A summary of the result based on the purpose of using web resources is presented below:

a) The major purpose of using web resources was found to be using them for research work. Majority of researchers in DU (96.72%), JMI (96.03%) and JNU (96.15%) affirmed that they use web resources for research work. The study also found that a very high percentage of researchers in DU (82.06%) made use of web resources for writing research papers followed by JNU (77.94%) although, in JMI (68.65%) the percentage of researchers who accepted using web resources for writing research papers was low as compared to DU and JNU.

b) Analyzing the level of satisfaction with the use of web resources among researchers is very important. The study observed a high level of satisfaction among the researchers with the use of web resources for fulfilling the purpose of use as the majority of the respondents in DU (62.36%), JMI (49.60%) and JNU (57.09%) were highly satisfied with the use of web resources. Moreover, a good percentage of them were satisfied i.e. 46.43 percent researchers from JMI, 35.83 percent from JNU and 33.48 percent from DU are satisfied with the use of web resources. The Weighted Mean range obtained for the level of satisfaction with the use of web resources also depicts a consensus on the satisfaction level with the use of web resources in DU (WM=4.60), JMI (WM=4.44), and JNU (WM=4.48).
6.1.3 Frequency of Use

a) The study reveals that majority of the researchers in DU, JMI and JNU used web resources very frequently. 64.11 percent in DU, 60.71 percent in JMI and 54.86 percent in JNU said that they make use of web resources very frequently. On the other hand it was noticed that a very less percentage of respondents used web resources less frequently.

6.1.4 Features

The study presented a list of popular features of web resources to the researchers for the purpose of examining the features that are high on researcher’s priority as well as to know about the ones that are low on priority. The summarized results are presented below:

a) Availability of full text on the web resources was identified as the highest rated feature as depicted by their Weighted Means in DU (WM=4.75; R=1), JMI (WM=4.61; R=1) and JNU (WM=4.66; R=1) followed by ‘Open access’ or the free availability of web resources in DU (WM=4.59; R=2), JMI (WM=4.54; R=2) and JNU (WM=4.61; R=2). Downloading facility provided by the web resources was placed at rank third in DU (WM=4.54) and JNU (WM=4.56) followed by JMI (WM=4.45; R=4).

b) Whereas, alerting services, multimedia/ graphic capabilities and the interaction through the provision of commenting facility were not rated very high on importance by the researchers from DU, JMI, and JNU as depicted by their Weighted Means.

6.1.5. Hindrances and Problems

The study made a detailed analysis of all the hindrances and problems that the users faced while using and accessing the web resources. It included a look up into the factors that deter the researchers from using the web resources as well as the problems that the researchers face while using web resources. Major findings on the hindrances and problems faced by the researchers are summarized below:

a) It was found that poor Internet connectivity caused hindrance to majority of researchers irrespective of the universities they belonged to. Poor Internet
connectivity was revealed as a cause of hindrance to 69.44 percent researchers from JMI, 68.02 percent from JNU and 63.02 percent from DU.

b) Limited access to full text was identified as the major problem among researchers of DU, JMI and JNU while searching and accessing web resources. The study observed that a higher percentage of researchers in JMI (62.30%) stated that limited access to full text caused problems as compared to DU (53.61%) and JNU (56.48%). Moreover, the other prominent problems included lack of effective searching skills, downloading problems and information overload.

6.1.6 Search and Access

The study tried to cover all the areas relating to search and access of web resources i.e. to know about the preferred means and ways of searching and accessing web resources, the type of simple and advanced search strategy that the researchers generally use, the amount of time spent in searching and accessing web resources. Summarized results are presented below:

a) The study established that the highest percentage of researchers from DU, JMI and JNU searched and accessed web resources using the links provided through the search engines. It was found that 89.68 percent researchers in JMI, 88.62 percent in DU 87.65 percent in JNU get accessed web resources using links through search engines.

b) It is heartening to see that a good percentage of researchers in JNU made use of library websites for gaining access to web resources. Furthermore, Publisher’s websites and hyperlinked references in e-resources were also revealed as two of the popular means for getting access to web resources among the researchers of the select universities.

c) The study identified keyword searching as the most frequently used simple search technique as majority of researchers affirmed their preference for keyword searching. 76.72 percent researchers from JNU, 75.49 percent from DU and 73.02 percent from JMI made use of keyword searching.

d) Phrase searching was revealed as the most preferred form of advanced search technique used by the researchers of DU, JMI and JNU followed by the Boolean
operators. 43.65 percent respondents from JMI, 42.91 percent from JNU and 39.82 percent from DU made use of phrase searching.

e) Study reveals that majority of researchers on an average spend 1-3 hours searching for web resources daily in DU, JMI and JNU. 59.31 percent respondents in JNU, 56.75 percent in JMI, and 56.02 percent in DU searched web resources for 1-3 hours daily. Moreover, a very small number of respondents searched the web resources for more than seven hours.

6.1.7 Impact of Web Resources

Use of web resources has changed the way in which the researches are done now a day. Study assessed the ways in which the use of web resources has impacted the researcher’s scholarly and academic work namely to determine the level of dependency on web resources, to assess the researcher’s level of agreement on the positive impact of web resources on their research work also, to know about the areas in which the web resources largely influenced the researcher’s research tasks. Major findings on the impact of web resources are summarized below:

a) The study analyzed the level of dependency on web resources based on the Likert Scale ranking and it was found that the researchers from DU, JMI and JNU were extremely dependent on web resources for their research and academic tasks. The weighted mean obtained for DU, JMI, and JNU was 4.13, 4.23, and 4.12 respectively on a five point Likert Scale ranging from 1 (Not very dependent) to 5 (Very dependent).

b) A significant percentage of researchers in DU (42.23%) JMI (40.08%) and JNU (39.88%) affirmed that they were extremely dependent on web resources. Furthermore, 45.63 percent respondents in JMI, 37.04 percent in JNU and 36.32 percent in DU opined that they are very dependent on web resources.

c) The study reveals that the researchers from DU, JMI and JNU strongly agreed to the positive impact of web resources on their research and academic work. The weighted mean scores obtained in DU, JMI and JNU are 4.58, 4.54 and 4.55 on a five point Likert Scale ranging from 5 (strongly agree) to 1 (strongly disagree) which signified a strong level of agreement among the researchers regarding the positive impacts of web resources on their research and academic work.
d) Majority of researchers in DU, JMI and JNU believed that the greatest impact that
the web resources have on their research work and academic efficiency is that
they have made it easier to find the needed material. 78.56 percent researchers
from DU, 81.75 percent users from JMI and 81.98 percent researchers from JNU
stated that the easy availability of the needed material was the greatest influence
of the web resources.

e) A good number of researchers agreed that uses of web resources are crucial in
improving the quality of their work, also that the web resources played a
significant role in increasing their research output.

6.1.8 Evaluation of Web Resources

The study made a thorough analysis of the areas included in the evaluation of web
resources and for this purpose the study identified the criteria which the researchers
preferred in the evaluation of web resources, the study also analysed the researcher’s
satisfaction level with the quality of information retrieved through the web resources,
it also checked the researcher’s level of evaluation skills as well as researcher’s
perception about the credibility of information retrieved through the subscribed web
resources versus the open access web resources.

a) Authority of the web resources was revealed to be the most important criteria in
the evaluation of web resources among researchers of DU and JNU i.e. the
researchers checked the Author’s and Publishers’ credentials for evaluating the
authority of web resources however, in JMI evaluating the accuracy represented
by peer reviewed/ scholarly information was found to be the top criteria with rank
one while the authority was ranked second.

b) Analysis of the satisfaction level of researchers with the quality of information
retrieved through the web resources revealed that a significant percentage of
researchers were satisfied with the quality of information retrieved through the
web in the select universities under the study i.e. 43.72 percent researchers from
JNU, 42.86 percent from JMI and 40.92 percent from DU were satisfied with the
quality of information retrieved through the web.

c) The study revealed that a very low percentage of researchers in all the three
universities under the study claimed that they possessed excellent evaluation skills
i.e. they were able to judge the quality of information retrieved through the web. Data shows that 7.29 percent respondents from JNU stated that they possessed excellent skills for evaluating the web resources followed by DU (6.78%) and JMI (5.56%). However, a decent percentage of researchers considered themselves good at evaluating the quality of information retrieved through the web resources. 44.42 percent respondents from DU, 41.50 percent from JNU and 36.90 percent researchers in JMI claimed themselves good at evaluating web resources.

d) An ambiguity was observed among the researchers of DU, JMI and JNU regarding the credibility of the web resources. A significant percentage of researchers in DU (36.54%) and JNU (35.62%) admitted that subscribed web resources are more credible or authoritative than the open access web resources while, in JMI (30.15%) majority of respondents stated that open access web resources are more credible.

e) The study also shows that a fair percentage of researchers from DU, JMI and JNU believed that both subscribed and open access resources are equally credible.

6.1.9 Training and Guidance

Training and guidance are absolutely necessary for the optimum utilization of web resources. Thus it is very necessary to ascertain the need for user training.

a) The study reveals that majority of researchers in DU, JMI and JNU accepted that user training can be very helpful i.e. 39.68 percent researchers in JMI, 38.51 percent in DU and 37.25 percent in JNU considered user training to be very helpful for the productive utilization of web resources. In addition to this it can also be observed that a considerable percentage of respondents considered user training to be extremely helpful for the better search and access of web resources. 33.20 percent researchers in JNU, 31.35 percent in JMI and 30.41 percent in DU stated that user training can be extremely helpful in the better search and retrieval of web resources.

b) The study reveals that that majority of researchers in DU, JMI and JNU exhibited a preference for hands on training/workshop. 45.30 percent researchers in DU, 44.74 percent in JNU and 43.25 percent in JMI asserted on the need for hands on
training/ workshops. Some of the other preferred form of training included orientation lectures, information-retrieval training and discipline-specific training.

6.2 TENABILITY OF HYPOTHESES

A thorough analysis of previous research investigations and related literature has been significant in formulating the hypothesis for the present study. In the light of findings the tenability of hypothesis is checked and is presented below:

Hypothesis 1

**H0:** There is no significant difference in the purpose of using web resources among the researchers of DU, JMI, and JNU.

**Ha:** There is significant difference in the purpose of using web resources among the researchers of DU, JMI, and JNU.

The response regarding the purpose of using web resources among the respondents in Table number 5.5 reveals that variation is observed in the purpose of using web resources for writing research papers. Results revealed that higher percentage of researchers in DU (82.06%) and JNU (77.94%) accepted that they made use of web resources for writing research papers than JMI where a contrast was observed i.e. the percentage of researchers who used web resources for writing research papers was a slightly lower in JMI (68.65%) as compared to DU and JNU.

**Table 6.1: One-Way ANOVA Test Results for Purpose of Using Web Resources**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>100684.111</td>
<td>2</td>
<td>50342.056</td>
<td>8.627</td>
<td>.003</td>
</tr>
<tr>
<td>Within Groups</td>
<td>87532.167</td>
<td>15</td>
<td>5835.478</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>188216.278</td>
<td>17</td>
<td></td>
<td>8.627</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis was tested by performing one way ANOVA to determine if there is any statistically significant difference in the purpose of using web resources among the researchers of DU, JMI, and JNU. Result of ANOVA test reveals that the obtained p value is .003 which is less than the significance level of 0.05 i.e. (p<0.05) that denotes that there is significant difference in the purpose of using web resources among the researchers.
researchers of DU, JMI and JNU. *Hence, the null hypothesis is rejected and alternative hypothesis is accepted.*

**Hypothesis 2**

**H0:** *There is no significant difference among the researchers of DU, JMI, and JNU in considering e-journals the most important form of the web resources used.*

**Ha:** *There is significant difference among the researchers of DU, JMI, and JNU in considering e-journals the most important form of the web resources used.*

It is evident from the Table number 5.4 that e-journals were found to be the most important web resource for research and academic work. E-journals obtained the highest Weighted Mean in all the select universities under the study i.e. in DU (WM=4.85), JMI (WM=4.79), and JNU (WM= 4.86). E-journals were thus placed at rank one on the level of importance by the researchers of all the select universities clearly making it the most important form of the web resources used by the researchers of DU, JMI, and JNU.

**Table 6.2: One-Way ANOVA Test Results for Importance of the E-journals**

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>6797.200</td>
<td>2</td>
<td>3398.600</td>
<td>.141</td>
</tr>
<tr>
<td>Within Groups</td>
<td>290005.200</td>
<td>12</td>
<td>24167.100</td>
<td>.141</td>
</tr>
<tr>
<td>Total</td>
<td>296802.400</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On applying ANOVA test for checking the presence of any significant difference among the researchers of DU, JMI and JNU in considering e-journals as the most important form of the web resources used, it was found that the calculated p value is .870 which is more than the significance level of 0.05 i.e. (p>0.05) and indicates that there is no significant difference among the researchers of DU, JMI, and JNU in considering e-journals the most important form of the web resources used. *Therefore, the null hypothesis is accepted and the alternative hypothesis is rejected.*

**Hypothesis 3**

**H0:** *There is no significant difference in the level of satisfaction with the use of web resources among the researchers of DU, JMI, and JNU.*
Chapter 6  

Findings and Conclusion

**Ha:** There is significant difference in the level of satisfaction with the use of web resources among the researchers of DU, JMI, and JNU.

Responses regarding level of satisfaction with the use of web resources in Table number 5.6 makes it clear that majority of respondents in DU (62.36%), JMI (49.60%) and, JNU (57.09%) are highly satisfied with the use of web resources. Moreover, a good percentage of them are satisfied i.e. 46.43 percent researchers from JMI, 35.83 percent from JNU and 33.48 percent from DU are satisfied with the use of web resources. The Weighted Mean range obtained for the level of satisfaction with the use of web resources also depicts a consensus on the satisfaction level with the use of web resources in DU (WM=4.60), JMI (WM=4.44), and JNU (WM=4.48).

<table>
<thead>
<tr>
<th>Table 6.3: One-Way ANOVA Test Results for Level of Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Squares</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Between Groups</td>
</tr>
<tr>
<td>Within Groups</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Results of the ANOVA reveals that the calculated p value is .756 which is more than the significance level of 0.05 i.e. (p>0.05) which shows that there is no significant difference in the level of satisfaction with the use of web resources among the researchers of DU, JMI and JNU. **Hence, the null hypothesis is accepted and the alternative hypothesis is rejected.**

Hypothesis 4

**H0:** Use of web resources has not positively impacted the research and scholarly work of the researchers in DU, JMI, and JNU.

**Ha:** Use of web resources has positively impacted the research and scholarly work of the researchers in DU, JMI, and JNU.

The analysis and discussions in Table number 5.15. Table number 5.16 and Table number 5.17 clearly shows that use of web resources has positively impacted the research and scholarly work of the researchers in DU, JMI, and JNU. Table number 5.15 makes it apparent that researchers in all the select universities under the study exhibited a high level of dependency on the web resources. A significant percentage
of researchers in DU (42.23%) JMI (40.08%) and JNU (39.88%) affirmed that they are extremely dependent on web resources. Furthermore, 45.63 percent respondents in JMI, 37.04 percent in JNU and 36.32 percent in DU opined that they are very dependent on web resources.

Responses on level of agreement on positive impact of web resources in Table number 5.16 make it evident that use of web resources is positively impacting the researcher’s research work as majority of researchers in all the select universities under the study strongly agreed that the use of web resources has had a positive impact on their research work. 62.58 percent in DU, 60.53 percent in JNU and 59.92 percent in JMI strongly agreed that web resources have positively impacted their research work. The Weighted Mean scores obtained by the findings of the select universities exhibited a concurrence among the researchers of DU (WM=4.58), JMI (WM=4.54), and JNU (WM=4.55) regarding the positive impact of web resources on their research work.

Table 5.17 illustrates that the use of web resources have impacted researcher’s academic and research work in variety of ways such as it has made it easier to find the needed material, improved the quality of work, extended the range of the material that is available. Though, Table number 5.17 clearly shows that the ease of use prevailed over all the other factors. Hence, the null hypothesis is rejected and alternative hypothesis is accepted.

Hypothesis 5

**H0**: Majority of the researchers from DU, JMI, and JNU do not consider user training helpful for better search and access of the web resources.

**Ha**: Majority of the researchers from DU, JMI, and JNU consider user training helpful for better search and access of the web resources.

Table 5.22 depicts that majority of researchers in DU, JMI and JNU accepted that user training can be very helpful i.e. 39.68 percent researchers in JMI, 38.51 percent in DU and 37.25 percent in JNU considered user training to be very helpful for the productive utilization of web resources. In addition to this it can also be observed that a considerable percentage of respondents considered user training to be extremely helpful for the better search and access of web resources. 33.20 percent researchers in
JNU, 31.35 percent in JMI and 30.42 percent in DU stated that user training can be extremely helpful for better search and retrieval of web resources. On the basis of the analysis, it can be conclude that majority of the researchers from DU, JMI, and JNU consider user training helpful for better search and access of the web resources. Hence, the null hypothesis is rejected and alternative hypothesis is accepted.

6.3 SUGGESTIONS AND RECOMMENDATIONS

On the basis of findings derived from the study following suggestions are made for improving and ensuring the productive use of web resources by the researchers:

i. The study found that subject gateways/portals, institutional repositories, online indexing and abstracting sources, in spite of being valuable information sources were rated low on popularity among the researchers of DU, JMI, and JNU as compared to the other web resources thus; the study suggests that awareness about these sources should be created highlighting their importance in research and scholarly work.

ii. The efficacy of social networking websites in today’s age is undeniable thus social networking websites can be significantly helpful in serving as an important platform for creating awareness about the web resources.

iii. The study found that library website was identified as a major source to provide information about the web resources in JNU; hence the necessary efforts can be made for highlighting the importance of library websites among the researchers of DU and JMI also serving as a pivotal channel for accessing high quality scholarly web resources.

iv. Faculty members were revealed as an important source of familiarizing students to web resources in DU, JMI and, JNU hence, the faculty members can play a vital role in acquainting and guiding their students to pertinent web resources.

v. The study revealed that accessing web resources from the university library was not on priority among the researchers from DU, and JMI as compared to JNU. Hence the necessary efforts can be made in DU and JMI to ensure that the library becomes a preferred place for accessing web resources.

vi. Study found that the researchers from the select university under the study preferred to make use of Boolean operators and phrase searching while the other
advanced searching techniques were underutilized. Therefore, measures can be taken to ensure search and information retrieval training programs for the researchers where they can learn to search literature by utilizing different searching techniques. As the use of advanced searching techniques can very effectively retrieve the required information from the deep web.

vii. Study identified information overload as a common problem among the researchers of the select universities therefore designing and disseminating information literacy tutorials among the user group can be very helpful to them in identifying, locating, evaluating, and effectively using the pertinent information from the vast amount of information retrieved.

viii. The study established the popularity of open access web resources among the researchers of DU, JMI and JNU therefore, notifying researchers of various open access resources and websites may be a great way of familiarizing them to a number of open access quality resources available on web.

ix. Live demonstration and special lectures by the publishers of scholarly literature can be arranged exhibiting features, search and retrieval techniques of the various web resources in the different disciplines.

x. Circulation of various training resources such as self help guides, manuals along with the supplementary material such as video tutorials may be very useful in enhancing the awareness about various web resources. Circulating the material can be particularly helpful to those who are unable to attend the workshops due to time constraints or some other reasons.

xi. Well trained and skilled staff, who are well aware of the functioning of both software and hardware, and can help the users in areas like accessing, downloading, and proper exploitation of web resources can be recruited by the universities.

xii. Study revealed that poor internet connectivity was a major factor that hindered the use of web resources among the researchers of DU, JMI, and JNU hence, higher bandwidths should be sought to alleviate the problem of internet connectivity so as to provide faster access to web resources that will save valuable time of the researchers.
xiii. An adequate number of the respondents showed preference for user training/workshop hence, to ensure proficient and productive use of web resources by the researchers, hands on training, workshops, and orientation programs can be provided to them at regular intervals.

xiv. A significant percentage of researchers in DU, JMI and JNU exhibited preference for discipline-specific training therefore, training pertaining to searching and retrieving of web resources related to a specific disciplines can be arranged for catering to the information of these specific users.

xv. Proper feedback system should be introduced to analyze the pros and cons of the web resource usage so that the problem areas can be identified and necessary steps can be taken to solve them effectively.

6.4 AREAS FOR FURTHER RESEARCH

The present study depicts the current state of scholarly use of web resources and explores the factors related to the use of web resources. The study can be replicated in various other ways. Based on the findings, the following recommendations have been made for further research:

- The present study was conducted among the central universities of Delhi; the study can be extended to other central universities of India.
- The study can be replicated among the premier higher learning institutes in India in the field of Science and Technology, Management and Medical Sciences.
- A comparative study can be undertaken to assess the scholarly use of web resources in various disciplines in order to determine the gap in the use of web resources across different disciplines.
- A comparative analysis examining the use of web resources from gender perspective i.e. the study addressing the gender variation in the use of web resources by male and female users can be researched.

6.5 CONCLUSION

Study revealed excellent awareness about the web resources among the respondents as hundred percent of the researchers in DU, JMI and JNU were aware about the web resources, which is quite obvious that in this age of information and communication
technology where the web resources have become the lifeline for researchers in helping them with their research tasks. A considerable percentage of respondents depended on the sources which involved interaction and communication with each other, whether through social networking sites or personally with colleagues and peers or with the communication between the teachers and students for gathering information about the web resources.

No clear consensus was observed among the researchers of the select universities under the study on the place of accessing web resources, apart from for cyber cafe which was found to be an exception. The lack of consensus on a single popular choice for accessing web resources clearly depicts the urgency of staying connected to the web, as well as remaining updated with all the current developments in the researcher’s realm and, it is only possible if they access web resources whenever the need arises irrespective of the place.

E-journals have very competently served as a pivotal channel for scholarly communication since its inception. Study made it evident that e-journals are considered as the most important form of the web resources used among the researchers of all the select universities. E-books, online databases and e-reference sources such as online encyclopaedias, thesaurus and dictionaries were also deemed important by the researchers of the select universities.

The study revealed that web resources are strikingly used for research purposes among the researchers. A higher percentage of faculty members used web resources for keeping up with current developments as compared to the research scholars indicating faculty member’s ardour for remaining updated with all the recent and current developments in their research realms. Study observed a high level of satisfaction among the researchers with the use of web resources. A clear consensus was observed about the frequency of using web resources among the researchers of DU, JMI and JNU i.e. a very frequent usage of web resources was seen among the respondents of the select universities.

The importance of web resources in present day research scenario is undeniable among the scholarly community owing to the various features possessed by the web resources. The user’s response relating to the importance of various features of web resources revealed that ‘availability of full text’ was the highest rated feature of web resources and it is quite obvious too, as researchers will only be
benefitted by a web resource that provides access to full text to cater to their rigorous information needs. A consensus was observed among all the three universities under the study on open access (restriction free access to research outputs) again emphasizing on the necessity of restriction free availability of full text scholarly output to researchers.

Poor internet connectivity was identified as a common major hindrance in the use of web resources. Moreover, limited access to full text was the major problem that researchers faced while using the web resources.

Search engines were apparently the most popular means of accessing web resources. Apart from search engines both the publisher’s websites and the library websites were revealed to be valuable means for exploring and getting access to a plethora of web resources at a single place. Keyword searching and searching by title were identified as two of the most popular simple search techniques among the researchers. Phrase searching followed by the Boolean operators were identified as the two most popular advanced searching techniques. Besides, a fair number of respondents also refined their search results by applying the search filters. Majority of researchers on an average spend 1-3 hours searching for web resources daily in all the select universities under the study. Moreover, a very small number of respondents search web resources for more than seven hours.

Researchers in all the select universities under study exhibited a high level of dependency on the web resources which is quite inevitable in today’s age. On the contrary, a very low percentage of respondents stated that they were slightly dependent. A consensus was observed on the positive impact of web resources among the researchers of all the three universities. Furthermore, the percentage of researchers negating the positive impact of web resources was found to be negligible. Researchers stated ease of use as the greatest impact of web resources hence, ease of use prevailed over all the other factors that impacted researcher’s academic work. Web resources can thus be accredited of having a huge impact on researcher’s tasks and making their life easier by making available all the needed materials on their laptops on a single click of mouse.

Analysis of various evaluation criteria revealed that authority of the web resources was the most important criteria in the evaluation of web resources among researchers of DU and JNU i.e. the researchers checked the Author’s and Publishers’
credentials for evaluating the authority of web resources however, in JMI evaluating the accuracy represented by peer reviewed/scholarly information was found to be the top criteria with followed by the authority. A general level of satisfaction was observed among the respondents with the quality of information retrieved through the web resources apart from a few who were dissatisfied. Besides, a fair percentage of researchers were undecided that is they were ‘neither satisfied nor dissatisfied’ on the quality of information retrieved through the web it may perhaps be that they were unable to judge and evaluate the quality of information retrieved through the web resources. Majority of researchers from DU and JNU stated that they possessed good evaluation skills on contrary to JMI where the majority of researchers affirmed that they were fair at evaluating the web resources. No clear consensus was observed among the researchers of all the select universities under the study about the credibility of web resources i.e. the respondents were unable to decide between the credibility of subscribed or open source resources by a clear margin moreover, a fair number of them stated both open access and subscribed web resources to be equally credible although, a consensus was noticed among the faculty members of DU, JMI and JNU where the majority of them considered the subscribed resources to be more credible.

Agreement was observed among the researchers of the DU, JMI and JNU regarding usefulness of user training as a large number of respondents affirmed its helpfulness. A higher percentage of faculty members believed that user training may not be very helpful to them as compared to the responses from the research scholars of their respective universities. Besides majority of faculty members thought that user training may be ‘somewhat helpful’ to them rather than ‘very helpful’ or ‘extremely helpful’. It may be an indication that the faculty members do not really feel the need for user training and believe that they possess good information literacy skills and are capable of effectively searching and retrieving the required information. Majority of users in all the select universities under the study exhibited preference for hands on training/workshop and orientation lectures. Data reveals that users also believed that information-retrieval training might also be helpful to them. Data revealed that that a few of the respondents did not feel the need for user training. Amongst those who believed that they do not need any training regarding the usage of web resources the
percentage of faculty members was higher than the research scholars in the select universities under study.