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# Study on Gender Differences in Information Literacy Skills among Research Scholars of Alagappa University, Karaikudi, Tamil Nadu

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## 0. Abstract

*The study investigates the gender differences in information literacy skills among research scholars of Alagappa University. We collected 430 samples was from a population of 812 using simple random sampling. The questionnaire designed based on Big6 Skills and data were collected by using structured questionnaire. Descriptive statistics of frequency counts, simple percentages, mean, standard deviation and Independent 't' Test were used for data analysis. The analysis found that "Information task definition skills is 4.26 with S.D. of 0.18", "Information seeking strategy skills is 4.02 with S.D. of 0.32", and "Location and Access Skills is 3.82 with S.D. of 0.386". "Information Use Skills is 4.02 with S.D. 0.184", "Synthesis Skills is 3.94 with S.D. of 0.317", "Fair Use of Information Skills is 3.98 with S.D. of 0.205", Skills for the Evaluation of Collected / Downloaded Information is 3.94 with S.D. of 0.271". The study reveals that gender differences exist between male and female research scholars of Alagappa University as far as most of information literacy skills are concerned. Further, the study show that male professionals revealed a slightly higher mean score in their Information Literacy skills. The paper suggests that some special programmes/workshops on information literacy skills are concerned. The university with the help of UGC may develop Indian Standards of Information Literacy skills while many developed countries have their own information literacy standards.*

**Keywords:** Information Literacy Skills, Big6, Information Task, Location and Access Skills, Information Use Skills, Information Seeking Strategy Skills, Information Synthesis Skills and Evaluation Skills.

1. **Introduction**

The concept of information literacy was first introduced in 1974 by Paul Zurkowski (1974), president of the US Information Industry Association, in a proposal submitted to the National Commission on Libraries and Information Science (NCLIS). According to Zurkowski, "People trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for utilizing the wide range of information tools as well as primary sources in moulding information solutions to their problems" Behrens (1994) and Bruce (1997). In this definition Zurkowski suggested that information resources are applied in a work situation, techniques and skills are needed for using information tools and primary sources; and information is used in problem solving. He recommended that a national program can be established to achieve universal information literacy within the next decade.

"Information literate individuals improve the society's quality of life in general and academically. Information literacy helps us in our day to day life such as buying a house, choosing a school, making an investment, voting for the election and many more. Information literacy skills are of prime importance in order to achieve every body's academic goals. Truly information literacy is the foundation of the democratic society. A society that is capable to access, evaluate, use and communicate information in an effective and efficient manner is called an information literate society. When we educate our children with the necessary information literacy skills, consequently, the society becomes information literate" Ranaweera (2010).

"Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use, and communicate it in an ethical manner" (CILIP, 2004). In the present situation one is to find, locate and access, use and evaluate information from the electronic environment. Information and Computer Literacy is

needed to identify what is real and relevant for learning, life and work. In an information economy, research scholars' need information and computer literacy skills to be successful in the workplace.

An information literate person is able to identify, locate, access effectively and ethically use needed information from the computer-based information system for the issue or problem at hand. The present study aims at assessing the information and computer literacy skills of research scholars of Alagappa University, Karaikudi, Tamil Nadu. This study is also to examine whether different demographic features of the research scholars affect the level/degree of their information and computer literacy skills.

## 2. Review of Literature

Knight (2006) reported on a study conducted to understand the undergraduate students' achievement of information literacy learning outcomes in a first year research and writing course. The librarian and other faculty members created a scoring rubric based on course learning objectives and the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education. The rubric was used to score the bibliographies to determine the students' levels of mastery of the objectives, their use of library licensed *vs.* freely available web sources, and differences among the classroom learning environments. The study found that students' academic work is a useful gauge of their achievement of information literacy based learning outcomes.

Kulkarni (2007) explained the importance of information literacy in the transformation of rural India. He stressed that in the advent of information age, the role of information in the knowledge powered society has become inevitable. It is suggested that (a) successful guidance was needed to get the needed information of any kind in whatever format and at any time and (b) information skills and competencies are to be developed. Ranaweera[7] described the IL Programmes Conducted by the universities in Sri Lanka and recommended that the librarians and teaching staff need to work in collaboration to develop the information literacy

programmes with instructional strategies and assessment techniques applying an information literacy model.

Ramesh Babu (2010) narrated Information Literacy (IL) as an area of interest to librarians and Information professionals and it is pivotal to the pursuit of lifelong learning process. He explained the concept of IL and brings out its standards and performance indicators enunciated by IFLA and UNESCO in the context of school libraries and higher education and importance of IL for school libraries, public libraries are highlighted. It discussed the IL scenario at international level and in India and enumerates the UNESCOs declaration at Prague towards the Information Literate Society. Finally, it stresses for the development of IL policy in the Indian education system.

Isenberg (2008) explained Information literacy (IL) as the set of skills and knowledge that allows us to find, evaluate, and use the information we need, as well as to filter out the information we don't need. IL skills are the necessary tools that help us successfully navigate the present and future landscape of information. Information and technology affects every person in every possible setting-work, education, recreation. And the author offered an overview of IL focusing on three contexts for successful IL learning and teaching: (i) the information process itself, (ii) technology in context, and (iii) implementation through real needs in real situations. The author emphasizes conceptual understandings of IL, the range of IL standards and models, technology within the IL framework, and practical strategies for effective IL skills learning and instruction in a range of situations.

The Singh and Klingenberg[10] discussed the role of university libraries in promoting and developing information skills of students' activators of life-long learning. It explained information literacy and identifies major information literacy skills required by students, and highlights information literacy initiatives in India, particularly the role of agricultural university libraries in imparting information literacy courses as part of the course curriculum. The researcher suggested information competency programmes of German universities and basic models of teaching information literacy skills by subject librarians at some German universities.

The difficulties faced in incorporating information literacy into regular course curriculum are mentioned.

Singh & Klingenberg (2008) assessed the approach of Indian agricultural universities in enhancing students' information and research skills and found that more than 90.0 % of them offer credit bearing information literacy through curriculum approach by different names like Research Methodology and Library Use, Technical writing and User Education, Storage and Retrieval of Scientific Information, Agricultural Information system etc. Jeyshankar (2013) studied about the most important consortium providing access to a large array of e-resources to all academic universities and colleges in India, and thus facilitates the prompt access and efficient and effective usage of e-resources for teaching and research activities. It facilitates free access to scholarly journals and databases in all areas of learning to the research and academic community

Quinn and Leligdon (2014) explored Executive MBA (EMBA) students' information-seeking skills and knowledge in academic and workplace environment. The study consisted of a survey and 12 qualitative interviews, sampled from two University of New Mexico EMBA cohorts. The themes that emerged included EMBA's specific skills and knowledge of their own industry's information, difficulty in finding new information, several barriers, and lack of transferability. The study suggested that students should be helped to acknowledge and transfer their information skills and knowledge between academics and work.

Vellaichamy and Jeyshankar (2017) studied information literacy needs, search and evaluation competencies at Mother Teresa Women's University and its affiliated colleges. They evaluated the information literacy needs; information needs assessment competency and competency of information literacy evaluation. A total of 290 questionnaires were distributed among users and 254 duly filled in questionnaires were received, thus resulting into a response rate of 87.59 per cent.

Vellaichamy and Jeyshankar (2018) investigated awareness of library rules, use of library services and information access competency of the women faculty members of Mother Teresa Women's University and its affiliated colleges was for

their opinions and experiences about assorted techniques of information access. This study showed that 242 (95.2%) respondents agree/strongly agree that 'they can access printed and electronic reference sources. They analyzed and empirically validated the ten information access competency variables.

Balakrishnanan and Jeyshankar (2019) examined Digital literacy skills of competitive exam aspirants in Anna Centenary Library at Chennai. Random sampling and questionnaire method has been used to collect the data from 315 respondents. They found that 50% of male and female respondents have high level of digital literacy skills; they are good at using MS word, MS Excel and MS Power Point; they don't possess good skills in using MS Access; they mainly use internet for general browsing, attending online coaching classes and attending online mock tests ; half of them possess good internet search skills. It is recommended that required training sessions / workshops may be organized to enrich the digital literacy skills of the aspirants of competitive examinations.

## 3.  Methodology

The present study includes all the full time M.Phil scholars and Part-time & Full-time Ph.D Scholars of Alagappa University, Karaikudi, Tamil Nadu. This university offers M.Phil and Ph.D programmes in various disciplines coming under different faculties. There are 218 M.Phil and 594 Ph.D scholars pursuing research in different departments of the University. The researcher collected data from the full time M.Phil and part-time & full-time Ph.D scholars of the university. A sample of 484 research scholars were selected for the study and questionnaires were distributed to them. This research designed a questionnaire based on Big6 Skills (Eisenberg & Berkowitz[17]. As per the university records, there are 812 research scholars doing research in the university who were taken as the respondents of the study. 484 questionnaires were distributed to the research scholars and 430 duly filled in questionnaires were received back.

## 4.  Objectives
- ❖ To examine the present level of information Task Definition, Information Seeking Strategy, Location and Access, Information Use,  Synthesis Skills, Fair

Use of Information and Evaluation of Collected Information literacy skills and gender of research scholars in Alagappa University.

## 5. Hypotheses

❖ There is no significant difference between the information Task Definition, Information Seeking Strategy, Location and Access, Information Use, Synthesis Skills, Fair Use of Information and Evaluation of Collected Information literacy skills and gender of research scholars in Alagappa University.

**Verification of the hypotheses**

For the verification of the above hypothesis, it is split up into various components of the information literacy skills as given below:

❖ There is no significant difference between the Information Task Definition Skills and the gender of the respondents

❖ There is no significant difference between the Information Seeking Strategy skills and the gender of the respondents

❖ There is no significant difference between the Location and Access Skills and the gender of the respondents

❖ There is no significant difference between the Information Use Skills and the gender of the respondents

❖ There is no significant difference between the Synthesis Skills and the gender of the respondents

❖ There is no significant difference between the Fair Use of Information skills and the gender of the respondents

❖ There is no significant difference between the Skills for Evaluation of Collected Information and the gender of the respondents

## 6. Data Analysis and Interpretation

The analysis and interpretation of the data collected from the research scholars in the Alagappa University. The data collection tool used for the study was questionnaire. The Collected data were analysed and presented in the form of tables

and graphs with necessary explanation. Appropriate statistical techniques were used for providing descriptive statistics.

**Table 1: Gender-wise Distribution of Respondents**

| S. No | Attributes | Classification | Gender | | Total (%) |
|---|---|---|---|---|---|
| | | | Male (%) | Female (%) | |
| 1 | | <24 | 54 (26.47) | 102 (45.13) | 156 (36.28) |
| 2 | Age | 25-27 | 98 (48.04) | 84 (37.17) | 182 (42.33) |
| 3 | | 28-30 | 35 (17.16) | 30 (13.27) | 65 (15.12) |
| 4 | | >31 | 17 (8.33) | 10 (4.42) | 27 (6.28) |
| Total | | | 204 (100.00) | 226 (100.00) | 430 (100.00) |

Table 1 shows gender wise distribution of demographic data. It is found that huge number of the respondents belonging to 25-27 years age group account for 42.33%, followed by <24 years age group accounting for 36.28%, 28-30 years age group accounting for 15.12% and the least number of respondents belonging to >31 years age group accounting for 6.21% of the sample. Gender-wise analysis shows that there are 102 female respondents (45.13%) and 54 male respondents (26.47%) in <24 years age group, followed by 98 male respondents and 84 female respondents in 25-27 years age group, 35 (17.16%) male respondents and 30 (13.27%) female respondents in the 28-30 years age group. It is obvious that the number of respondents belonging to the age group of >31 years are very less wherein there are 17 male and 10 female respondents. It is observed from the Table that the percentage of male respondents who continues their higher education is more than that of female respondents.

**Table 2: Gender-wise Information Task Definition Skills**

| S.No | Information Task Definition Skills | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | S.D |
| 1 | I can read the text and understand the main objectives from the text | 4.58 | 0.619 | 4.60 | 0.566 | **4.59** | 0.591 |
| 2 | I feel confident in using the Internet to communicate with people | 4.21 | 1.027 | 4.29 | 1.007 | 4.25 | 1.016 |
| 3 | Generate topics and define problems among group of students locally & globally using electronic communication | 3.99 | 0.955 | 4.02 | 0.995 | **4.00** | 0.975 |
| 4 | Communicate with subject experts | 4.21 | 0.842 | 4.12 | 0.933 | 4.16 | 0.891 |
| 5 | Use general online information sources such as Wikipedia to get an overview and clarify the research subject | 4.25 | 0.872 | 4.24 | 0.892 | 4.24 | 0.882 |
| 6 | Able to send and receive emails, and chat with friends, colleagues using messenger to discuss the research topic | 4.39 | 0.832 | 4.40 | 0.905 | 4.39 | 0.870 |
| 7 | Define & refine research questions and problems relevant to my topic or study | 4.25 | 0.825 | 4.40 | 0.743 | 4.33 | 0.786 |
| 8 | Communicate with research supervisor through e-mail regarding the selection of research topic | 4.10 | 1.094 | 4.08 | 1.179 | 4.09 | 1.138 |
| | **Mean of mean** | **4.25** | **0.178** | **4.27** | **0.195** | **4.26** | **0.18** |

Table 2 shows that the mean score value of respondents' information task definition skills is 4.27 for female and 4.25 for male. It clearly shows that the maximum number of respondents agree with the above skills. The mean value of respondents with female is high compared to that of male. It can be seen in the Table 2 that the skill, *"I can read the text and understand the main objectives from the text"* has highest mean score of female respondents (4.60 (S.D. 0.566)) and the highest mean score of male respondents (4.58 (S.D. 0.619)) while *"Generate topics and define problems among group of students locally & globally using electronic communication"* has the lowest mean score of male respondents (3.99 (S.D. 0.955)) and the lowest mean score of female respondents (4.02 (S.D. 0.995)). The overall mean value of respondents' information task definition skills is 4.26 with S.D. of 0.18. It clearly shows that the maximum number of respondents agree with the above skills. It can be seen in the Table 2 that the skill, "*I can read the text and understand the main objectives from the text*" has the highest mean score of respondents (4.59 (S.D. 0.591)) while "*Generate topics and define problems among group of students*

*locally & globally using electronic communication*" has the lowest mean score of respondents (4.00 (S.D. 0.975)).

Further it can be observed that the maximum numbers of respondents are familiar with the above skills at high level. The respondents are able to read text, understand the concept, define research questions & problems and use internet for communication.

**Testing of Hypothesis:** There is no significant difference between the information task definition skills and the gender of the respondents:

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further, the information task definition skills which consist of eight statements were concatenated using the compute variable option in SPSS into a single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 3.

**Table 3: Test of Significant Difference in the Information Task Definition Skills between Male and Female Respondents**

| Information Task Definition Skills | Levene's Test | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Dif. | |
|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Dif. | Lower | Upper |
| Equal variances assumed | .574 | .449 | -.365 | 428 | .715 | -.17495 | .47902 | -1.11647 | .76657 |
| Equal variances not assumed | | | -.366 | 426.813 | .714 | -.17495 | .47779 | -1.11407 | .76417 |

As the p-value of Levene's test for the information task definition skills (.449) is greater than .05, it accepts the null hypothesis and concludes that the variance in information task definition skills of male is not significantly different from female. It can assume that the population variances are relatively equal. Thus, the researcher should look at the "equal variance assumed" row for the t-test results. The two-tail significance for information task definition skills shows that the p-value of .715 is greater than 0.05, and so the null hypothesis is accepted. However, there is 95 percent chance that the population mean difference falls somewhere between -1.11647 and

.76657. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference between information task definition skills and gender of the respondents. The information task definition skills between male and female respondents are same.

**Table 4: Gender-wise Information Seeking Strategy Skills**

| S. No | Information Seeking Strategies | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | S.D |
| 1 | I can differentiate among various information resources which are available on the web. | 4.42 | 0.793 | 4.41 | 0.813 | **4.42** | 0.803 |
| 2 | I am familiar with the various types of electronic resources | 3.87 | 1.102 | 3.94 | 1.122 | 3.91 | 1.112 |
| 3 | Identify the purpose of using electronic information sources and services | 3.95 | 1.086 | 4.15 | 0.945 | 4.06 | 1.018 |
| 4 | Identify various formats (.pdf, .doc, .txt, .xls) of electronic resources | 4.32 | 0.937 | 4.39 | 0.794 | 4.36 | 0.865 |
| 5 | Read, View and listen for information presented in any format (textual, visual, multimedia and digital) in order to draw valid inferences | 3.60 | 1.062 | 3.66 | 0.891 | 3.63 | 0.975 |
| 6 | I feel confident in using the Internet to find needed information | 4.26 | 0.918 | 4.29 | 0.926 | 4.28 | 0.921 |
| 7 | Able to search for the information on the internet using search engines, directories … etc. | 4.09 | 0.986 | 4.16 | 1.000 | 4.13 | 0.993 |
| 8 | Know how to search for scholarly information | 4.22 | 0.948 | 4.22 | 0.990 | 4.22 | 0.969 |
| 9 | Identify the differences between free and subscription based online databases | 4.08 | 1.048 | 4.00 | 1.102 | 4.03 | 1.076 |
| 10 | Collect information from open access e-resources / databases | 3.89 | 1.199 | 3.89 | 1.194 | 3.89 | 1.195 |
| 11 | Subscribe to RSS feeds & listserv to gather web information | 3.25 | 1.137 | 3.33 | 1.088 | **3.29** | 1.111 |
| 12 | Use social networks and information tools to gather and share information | 3.94 | 1.132 | 4.15 | 0.980 | 4.05 | 1.059 |
| | **Mean of mean** | **3.99** | **0.326** | **4.05** | **0.313** | **4.02** | **0.32** |

Table 4 shows that the mean score value of respondents' information seeking strategy skills is 4.05 for female and 3.99 for male. It clearly illustrates that the maximum number of respondents agree with the above skills. The mean value of female respondents is high compared to that of male respondents in information seeking strategy skills. It can be seen that the skill, *"I can differentiate among various*

*information resources which are available on the web"* has the highest mean score among male respondents (4.42 (S.D: 0.793)) and female respondents (4.41 (S.D: 0.813)) while *"Subscribe to RSS feeds & listserv to gather web information"* has the lowest mean score among male respondents (3.25 (S.D. 1.137)) and female respondents (3.33 (S.D. 1.088)).

The overall mean value of respondents' information seeking strategy skills is 4.02 with S.D. of 0.32. It clearly illustrates that the maximum number of respondents agree with the above skills. It can be seen that the skill, "*I can differentiate among various information resources which are available on the web*" has the highest mean score of respondents (4.42 (S.D. 0.803)) while "*Subscribe to RSS feeds & listserv to gather web information*" has the lowest mean score of respondents (3.29 (S.D. 1.111)). Further it can be observed that the maximum numbers of respondents are familiar with the above skills at high level. The respondents are able to seek information from web, identify formats of electronic resources, find information from internet, search scholarly information, use social networks; subscription based online databases and open access e-resources / databases.

**Testing of Hypothesis:** There is no significant difference between the information seeking strategy skills and the gender of the respondents

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further, the information seeking strategies which consist of twelve statements were concatenated using the compute variable option in SPSS into a single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 5.

**Table 5: Test of Significant Difference in the Information Seeking Strategy Skills between the Male and Female Respondents**

| Information Seeking Strategy Skills | Levene's Test | | t-test for Equality of Means | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Diff. | 95% Confidence Interval of the Diff. | | |
| | | | | | | | | Lower | Upper | |

| Equal variances assumed | .040 | .842 | -.821 | 428 | .412 | -.70124 | .85389 | -2.37957 | .97709 |
|---|---|---|---|---|---|---|---|---|---|
| Equal variances not assumed | | | -.820 | 420.476 | .413 | -.70124 | .85525 | -2.38234 | .97986 |

As the p-value of Levene's test for the Information Seeking Strategy Skills is greater than .05, it accepts the null hypothesis and concludes that the variance in Information Seeking Strategies Skills of male is not significantly different from female. It can assume that the population variances are relatively equal. So, the researcher should look at the "equal variance assumed" row for the t-test results.

The two-tail significance for Information Seeking Strategy Skills shows that the p-value of .412 is greater than 0.05 and so the null hypothesis is accepted. However, there is 95 percent chance that the population mean difference falls somewhere between -2.37957 and .97709. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference between Information Seeking Strategy Skills and gender of the respondents. The information seeking strategy skills of both the male and female respondents are same.

**Table 6: Gender-wise Location and Access Skills**

| S.No | Location and Access | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | SD |
| 1 | Locate and use suitable information resources and systems available on the internet | 4.18 | 0.937 | 4.29 | 0.895 | **4.24** | 0.916 |
| 2 | Use online catalogues, indexing & abstracting sources & online Journals | 3.28 | 1.076 | 3.20 | 1.075 | **3.24** | 1.075 |
| 3 | Use electronic reference materials available through internet (e.g., electronic encyclopaedias, dictionaries, biographical reference sources, e-books) | 4.08 | 0.989 | 4.20 | 0.957 | 4.14 | 0.973 |
| 4 | Use search engines, tools and commands for searching subscribed databases and services (paid information) | 3.88 | 1.081 | 4.07 | 0.959 | 3.98 | 1.022 |
| 5 | Know how to search the web information using Boolean operators (AND, OR, NOT) | 3.45 | 1.188 | 3.55 | 1.127 | 3.50 | 1.156 |
| 6 | Use advanced search tools and commands that limit searches by date, location, format etc. | 3.73 | 1.093 | 3.94 | 1.007 | 3.84 | 1.053 |
| **Mean of Mean** | | **3.77** | **0.353** | **3.88** | **0.419** | **3.82** | **0.386** |

Table 6 shows that the mean score value of respondents' Location and Access Skills is 3.88 for female and 3.77 for male. It clearly shows that the maximum number of respondents agree with the above skills. The mean value of female respondents is high compared to that of male respondents as far as location and access skills are concerned. It can be seen that the skill, *"Locate and use suitable information resources and systems available on the internet"* has the highest mean score of female respondents (4.29 (S.D. 0.895)) and male respondents (4.18 (S.D. 0.937)) while *"Use online catalogues, indexing & abstracting sources & online Journals"* has the lowest mean score of female respondents (3.20 (S.D. 1.075)) and male respondents (3.28 (S.D. 1.076)).

The overall mean value of respondents' Location and Access Skills is 3.82 with S.D. of 0.386. It clearly shows that the maximum number of respondents agree with the above skills. It can be seen that the skill, "*Locate and use suitable information resources and systems available on the internet*" has the highest mean score of respondents (4.24 (S.D. 0.916)) while "Use online catalogues, indexing & abstracting sources & online Journals" has the lowest mean score of respondents (3.24 (S.D. 1.075)). Further it can be observed that the maximum numbers of respondents are quiet familiar with the above skills. The respondents are able to use online catalogues, use electronic reference materials available through internet, use search engines, searching techniques and advanced search tools and commands.

**Testing of hypothesis:** There is no significant difference between the Location & Access Skills and the gender of the respondents;

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further, the location and access skills which consist of six statements were concatenated using the compute variable option in SPSS into a single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 7.

**Table 7: Test of Significant Difference in the Location & Access Skills between the Male and Female Respondents**

| Information Location and Access | Levene's Test | | t-test for Equality of Means | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Dif. | 95% Confidence Interval of the Dif. | | |
| | | | | | | | | Lower | Upper | |
| Equal variances assumed | 1.031 | .311 | -1.498 | 428 | .135 | -.65417 | .43656 | -1.51223 | .20389 | |
| Equal variances not assumed | | | -1.493 | 415.821 | .136 | -.65417 | .43810 | -1.51534 | .20699 | |

The p-value of Levene's test for the information location and access skills which is greater than .05 accepts the null hypothesis and concludes that the variance in information location and access skills of male is not significantly different from female. It can assume that the population variances are relatively equal. So, the researcher should look at the "equal variance assumed" row for the t-test results.

Since, the two-tail significance for information location and access skills shows that the p-value of .135 is greater than 0.05, the null hypothesis is accepted. However, there is a 95 percent chance that the population mean difference falls somewhere between -1.51223 and .20389. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference between the information location and access skills and the gender of the respondents. The information location & access skills of both male and female respondents are same.

**Table 8: Gender-wise Information Use Skills**

| S. No | Use of Information | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | SD |
| 1 | Know how to take notes, outlines, abstracts with a word processor from databases and other information sources | 4.31 | 0.971 | 4.35 | 0.964 | **4.33** | 0.967 |
| 2 | Know how to filter the electronic information by author, title, year & subject etc. | 3.75 | 0.973 | 3.65 | 1.014 | 3.70 | 0.995 |
| 3 | Use the software & hardware needed to view, download & open the electronic documents from World Wide Web (WWW) | 4.16 | 1.073 | 4.25 | 1.007 | 4.21 | 1.038 |
| 4 | Use electronic Excel & SPSS to process and analyze statistical data | 3.95 | 1.152 | 3.91 | 1.305 | 3.93 | 1.234 |
| 5 | Construct a simple spreadsheet, enter data and interpret the information | 3.93 | 1.162 | 3.89 | 1.183 | 3.90 | 1.172 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6 | Save & backup retrieved information to an external and/or internal storage device | 4.02 | 1.066 | 4.17 | 0.970 | 4.10 | 1.018 |
| 7 | Create and use separate folder for maintaining the research documents | 4.09 | 1.128 | 4.08 | 1.132 | 4.08 | 1.129 |
| 8 | Use cut/copy/paste information from an electronic source into a personal document | 4.22 | 1.058 | 4.27 | 0.991 | 4.25 | 1.022 |
| 9 | Use computer applications to modify information independently and/or collaboratively | 3.95 | 0.922 | 4.00 | 0.902 | 3.98 | 0.911 |
| 10 | Use application software to create graphics, tables, figures, charts etc… | 3.91 | 1.141 | 4.12 | 1.024 | 4.02 | 1.085 |
| 11 | Use presentation software to create & set slideshows and multi-media presentations | 3.93 | 1.236 | 4.10 | 1.055 | 4.02 | 1.146 |
| 12 | Use e-mail, shared documents and other telecommunications capabilities to publish the results of the information | 4.05 | 1.211 | 4.15 | 1.015 | 4.10 | 1.112 |
| 13 | Use websites and social media services to create and share the information. (YouTube, Twitter, Facebook etc.) | 4.03 | 1.174 | 4.02 | 1.093 | 4.03 | 1.131 |
| 14 | Use application software to create & modify documents at least twice | 3.59 | 1.126 | 3.76 | 1.085 | **3.68** | 1.107 |
| **Mean of mean** | | **3.99** | **0.182** | **4.05** | **0.197** | **4.02** | **0.184** |

Table 8 depicts that the mean score value of respondents' Information use Skills is 4.05 for female and 3.99 for male. It clearly shows that the maximum number of respondents agree with the above skills. The mean value of female respondents is high while the mean value of male respondents is low with regard to the Information use Skills. It can be seen that the skill, *"Know how to take notes, outlines, abstracts with a word processor from databases and other information sources"* has the highest mean value for female respondents (4.35 (S.D. 0.964)) and male respondents (4.31 (S.D. 0.971)) while *"*Use application software to create & modify documents at least twice" has the lowest mean score of male respondents (3.59 (S.D. 1.126)) and female respondents (3.76 (S.D. 1.085)).

The overall mean value of respondents' Information Use Skills is 4.02 with S.D. 0.184. It clearly shows that the maximum number of respondents agree with the above skills. It can be seen that the skill, "*Know how to take notes, outlines, abstracts with a word processor from databases and other information sources*" has the highest mean value of the respondents 4.33 (S.D. 0.967) while "*Use application software to create & modify documents at least twice*" has the lowest mean score of respondents

(3.68 (S.D. 1.107)). Further it can be observed that the maximum numbers of respondents are very well familiar with the above skills. The respondents are able to use the Information sources, software's & hardware's, MS-Excel, SPSS, computer applications to modify information, presentation software, websites, social media services and application software and are able to save and backup retrieved information.

**Testing of Hypothesis:** There is no significant difference between the Information Use Skills and the gender of the respondents

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further, the information use skills which consist of fourteen statements were concatenated using the compute variable option in SPSS into a single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 9.

**Table 9:  Test of Significant Difference in the Information Use Skills between the Male and Female Respondents**

| Use of Information Skills | Levene's Test | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Dif. | 95% Confidence Interval of the Dif. | |
| | | | | | | | | Lower | Upper |
| Equal variances assumed | .015 | .902 | -.770 | 428 | .442 | -.83398 | 1.08290 | -2.96246 | 1.29449 |
| Equal variances not assumed | | | -.769 | 421.697 | .442 | -.83398 | 1.08399 | -2.96469 | 1.29672 |

As the p-value of Levene's test for the Use of Information Skills is greater than .05, null hypothesis is accepted and it is concluded that the variance in Use of Information Skills of male is not significantly different from female. It can assume that the population variances are relatively equal. So, the researcher should look at the "equal variance assumed" row for the t-test results.

The two-tail significance for Use of Information Skills shows that the p-value of .442 is greater than 0.05 and so the null hypothesis is accepted. However, there is

95 percent chance that the population mean difference falls somewhere between -2.96246 and 1.29449. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference between Information Use Skills and the gender of the respondents. The information use skills of both the male and female respondents are same.

**Table 10: Gender-wise Synthesis Skills**

| S.No | Synthesis | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|------|-----------|------|------|------|------|------|------|
| | | Mean | SD | Mean | SD | Mean | SD |
| 1 | Synthesise main ideas to construct new concepts | 4.15 | 0.927 | 4.09 | 1.003 | 4.12 | 0.967 |
| 2 | Classify and group information collected from WWW using a word processor, database or spreadsheet | 4.12 | 0.976 | 4.16 | 0.971 | 4.14 | 0.972 |
| 3 | I can find the additional information needed at the time of synthesis | 4.15 | 0.903 | 4.13 | 0.966 | 4.14 | 0.936 |
| 4 | Save the references using reference management and other software | 3.22 | 1.138 | 3.26 | 1.145 | **3.24** | 1.141 |
| 5 | I can analyse, consolidate & repack the information for further requirements | 3.82 | 1.021 | 3.88 | 1.003 | 3.85 | 1.011 |
| 6 | I can identify the different segments of the concepts collected from different sources | 3.76 | 1.125 | 3.82 | 0.988 | 3.79 | 1.054 |
| 7 | I can logically present the analysed information in the new information products | 3.89 | 1.259 | 4.14 | 1.030 | 4.02 | 1.149 |
| 8 | I can identify experts in the field for the purpose of analysis of information and synthesize the facets of analysis in the concept. | 4.11 | 1.088 | 4.27 | 0.912 | **4.20** | 1.001 |
| | **Mean of mean** | **3.90** | **0.317** | **3.97** | **0.325** | **3.94** | **0.317** |

Table 10 depicts that the mean score value of respondents' Synthesis Skills is 3.97 for female and 3.90 for male. It clearly shows that the maximum number of respondents agree with the above skills. The mean value of female respondents is high while the mean value male respondents are low as far as their Synthesis Skills are concerned. It can be seen that the skill, *"I can identify experts in the field for the purpose of analysis of information and synthesize the facets of analysis in the concept"* has the highest mean score of female respondents (4.27 (S.D. 0.912)) and male respondents (4.11 (S.D. 1.088)) while *"Save the references using reference management and other software"* has the lowest mean score of male respondents (3.22 (S.D. 1.138)) and female respondents (3.26 (S.D. 1.145)).

The overall mean value of respondents' Synthesis Skills is 3.94 with S.D. of 0.317. It clearly shows that the maximum number of respondents agree with the above skills. It can be seen that the skill, "*I can identify experts in the field for the purpose of analysis of information and synthesize the facets of analysis in the concept*" has the highest mean score of respondents (4.20 (S.D. 1.001)) while "*Save the references using reference management and other software*" has lowest score of respondents (3.24 (S.D. 1.141)). Further it can be observed that the maximum numbers of respondents are well aware of the above skills. The respondents are able to synthesize new concepts, use reference management and other software's, analyze, consolidate & repack the information and new information products.

**Hypothesis:** There is no significant difference between the Synthesis skills and the gender of the respondents

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further, the synthesis skills which consist of eight statements were concatenated using the compute variable option in SPSS into a single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 11.

**Table 11: Test of Significant Difference in the Synthesis Skills between Male and Female Respondents**

| Synthesis Skills | Levene's Test | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Dif. | 95% Confidence Interval of the Dif. | |
| | | | | | | | | Lower | Upper |
| Equal variances assumed | .000 | .983 | -.898 | 428 | .370 | -.51297 | .57137 | -1.63601 | .61007 |
| Equal variances not assumed | | | -.896 | 420.660 | .371 | -.51297 | .57223 | -1.63777 | .61182 |

Since the p-value of Levene's test for the Synthesis skills is greater than .05, it accepts the null hypothesis and concludes that the variance in Synthesis skills of male is not significantly different from female. It can assume that the population variances

are relatively equal. So, the researcher should look at the "equal variance assumed" row for the t-test results.

The two-tail significance for Synthesis skills shows that the p-value of .370 is greater than 0.05 and so the null hypothesis is accepted. However, there is 95 percent chance that the population mean difference falls somewhere between -1.63601 and .61007. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference between Synthesis skills and the gender of the respondents. The synthesis skills of both female and male respondents are same.

**Table 12: Gender-wise Fair Use of Information skills**

| S.No | Fair Use of Information | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | SD |
| 1 | I don't misuse the electronic information sources, systems and facilities | 4.26 | 1.020 | 4.31 | 0.981 | **4.29** | 0.999 |
| 2 | I Know what is Plagiarism | 4.26 | 0.962 | 4.22 | 0.968 | 4.24 | 0.964 |
| 3 | I am aware of digital copyright policy | 3.78 | 1.085 | 3.81 | 1.075 | 3.80 | 1.079 |
| 4 | I apply copyright law and ethics to use information in fair and legal ways | 3.90 | 1.162 | 3.89 | 1.092 | 3.90 | 1.124 |
| 5 | Understand the public nature of information that is published without password protection in full access media such as the internet | 3.71 | 0.987 | 3.65 | 0.863 | **3.68** | 0.924 |
| 6 | Understand the cultural, ethical, legal and socioeconomic issues surrounding information and communication technology | 3.97 | 0.853 | 4.00 | 0.830 | 3.99 | 0.840 |
| 7 | Understand the risk of using e-mail, newsgroups, listservs and other Internet tools/services for communication | 4.02 | 1.017 | 4.08 | 1.055 | 4.05 | 1.036 |
| 8 | Follow laws, regulations, institutional policies and etiquette related to the access and use of information resources | 3.75 | 1.029 | 3.88 | 1.076 | 3.81 | 1.055 |
| 9 | Know how to cite electronic / print information sources used in documents / presentations / articles in the form of footnotes, endnotes, Bibliography, References … etc. | 3.75 | 1.057 | 3.98 | 1.022 | 3.87 | 1.044 |
| 10 | I Know the importance of using e-mail, online discussion, social networking sites, … etc for fruitful purposes | 4.15 | 0.958 | 4.19 | 0.976 | 4.17 | 0.966 |
| | **Mean of mean** | **3.95** | **0.214** | **4.00** | **0.205** | **3.98** | **0.205** |

Table 7 depicts that the mean score value of respondents' Fair Use of Information Skills is 4.00 for female and 3.95 for male. It clearly shows that the maximum number of respondents agree with the above skills. The mean value of female respondents is higher than that of male respondents in the "Fair Use of Information Skills" as perceived by them. It can be seen that the skill, *"I don't misuse the electronic information sources, systems and facilities"* has the highest mean value for female respondents (4.31 (S.D. 0.981)) and male respondents (4.26 (S.D. 1.020)) while *"Understand the public nature of information that is published without password protection in full access media such as the internet"* has the lowest mean value with female respondents (3.65 (S.D. 0.863)) and male respondents (3.71 (S.D. 0.987)).

The overall mean value of respondents' Fair Use of Information Skills is 3.98 with S.D. of 0.205. It clearly shows that the maximum number of respondents agree with the above skills. It can be seen that the skill, "*I don't misuse the electronic information sources, systems and facilities*" has the highest mean score of respondents (4.29 (S.D. 0.999)) while "*Understand the public nature of information that is published without password protection in full access media such as the internet*" has the lowest mean value with respondents (3.68 (S.D. 0.924)). Further it can be observed that the maximum numbers of respondents are fully familiar with the above skills. The respondents are able to make fair use of electronic information sources, aware of Plagiarism, Copyright law and ethics, socioeconomic issues surrounding information, risk of using Internet tools/services for communication, laws, regulations, institutional policies and purpose of using social networking sites.

**Hypothesis:** There is no significant difference between the Fair Use of Information skills and the gender of the respondents

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further, the fair-use of information skills which consist of ten statements were concatenated using the compute variables option in SPSS into a

single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 13.

**Table 13: Test of Significant Difference in the Skills of Fair Use of Information between Male and Female Respondents**

| Fair Use of Information Skills | Levene's Test | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Dif. | 95% Confidence Interval of the Dif. | |
| | | | | | | | | Lower | Upper |
| Equal variances assumed | .739 | .390 | -.633 | 428 | .527 | -.45983 | .72623 | -1.88725 | .96759 |
| Equal variances not assumed | | | -.635 | 426.391 | .526 | -.45983 | .72469 | -1.88425 | .96459 |

Since the p-value of Levene's test for the Fair Use of Information is greater than .05, it accepts the null hypothesis and concludes that the variance in Fair Use of Information skills in male is not significantly different from female. It can assume that the population variances are relatively equal. So, the researcher should look at the "equal variance assumed" row for the t-test results.

The two-tail significance for Fair Use of Information shows that the p-value of .527 is greater than 0.05 and so the null hypothesis is accepted. However, there is a 95 percent chance that the population mean difference falls somewhere between -1.88725 and .96759. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference between Fair Use of Information skills and the gender of the respondents. The fair use of information skills of both male and female respondents is same.

**Table 14: Gender-wise Skills for Evaluating Collected / Downloaded Information**

| S.No | Evaluation of Collected / Downloaded Information | Male (n=204) | | Female (n=226) | | Total (n=430) | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | SD |
| 1 | Know the popularity of the publishers of information | 4.24 | 0.934 | 4.38 | 0.887 | **4.31** | 0.911 |
| 2 | Identify and apply specific criteria to evaluate computerized electronic resources. | 3.96 | 1.038 | 4.08 | 0.937 | 4.02 | 0.987 |
| 3 | Identify the authenticity of the information | 4.01 | 1.007 | 4.25 | 0.864 | 4.13 | 0.941 |

| 4 | Compare it with information available in alternative sources | 3.96 | 1.050 | 4.09 | 0.929 | 4.03 | 0.989 |
|---|---|---|---|---|---|---|---|
| 5 | Assess the creditworthiness of contents | 3.98 | 1.055 | 4.09 | 0.936 | 4.04 | 0.995 |
| 6 | Judge the relevance of information obtained | 3.96 | 1.045 | 4.05 | 1.051 | 4.01 | 1.048 |
| 7 | Ready to report the existence of misleading, outdated & obsolete information | 3.29 | 1.051 | 3.53 | 1.096 | **3.42** | 1.080 |
| 8 | Solve the issue when two sources give different information on the same topic | 3.53 | 1.129 | 3.69 | 1.103 | 3.62 | 1.117 |
| 9 | Aware of professional experts who can guide me in evaluating the sources / information | 3.90 | 1.052 | 3.83 | 1.062 | 3.86 | 1.057 |
| | **Mean of mean** | **3.87** | **0.051** | **4.00** | **0.268** | **3.94** | **0.271** |

Table 14 depicts that the mean score value of respondents' skills for the Evaluation of Collected / Downloaded Information is 4.00 for female and 3.87 for male. It clearly shows that the maximum number of respondents agree with the above skills. The mean value of female respondents is higher than that of male respondents as far as their skills in Evaluating Collected / Downloaded Information are concerned. It can be seen that the skill, *"Know the popularity of the publishers of information"* has the highest mean score of female respondents (4.38 (S.D. 0.887)) and male respondents (4.24 (S.D. 0.934)) while *"Ready to report the existence of misleading, outdated & obsolete information"* has the lowest mean score of male respondents (3.29 (S.D. 1.051)) and female respondents (3.53 (S.D. 1.096)).

The overall mean value of respondents' skills for the Evaluation of Collected / Downloaded Information is 3.94 with S.D. of 0.271. It clearly shows that the maximum number of respondents agree with the above skills. It can be seen that the skill, "*Know the popularity of the publishers of information*" has the highest mean score of respondents (4.31 (S.D. 0.911)) while "*Ready to report the existence of misleading, outdated & obsolete information*" has the lowest mean score of respondents (3.42 (S.D. 1.080)).

Further it can be analysed that the maximum number of respondents are well familiar with the above skills. The respondents are able to evaluate: a) the publishers of information, b) computerized electronic resources, c) authenticity of the information and d) the creditworthiness of contents and report misleading, outdated & obsolete information and solve the issue.

**Testing of Hypothesis:** There is no significant difference between the skills for Evaluation of Collected Information and the gender of the respondents

To verify the above hypothesis the respondents are classified into two groups namely, male and female. Further the skills for evaluation of collected information which consist of nine statements were concatenated using the compute variables option in SPSS into a single factor. To find out the significant difference, the Independent 't' Test is applied and the details are presented in the Table 15.

Since the p-value of Levene's test for the Evaluation of Collected Information is greater than .05, it accepts the null hypothesis and concludes that the variance in the skills for Evaluation of Collected Information among male is not significantly different from female. It can assume that the population variances are relatively equal. So, the researcher should look at the "equal variance assumed" row for the t-test results.

**Table 15: Test of Significant Difference in the Skills for Evaluating Collected/Downloaded Information between the Male and Female Respondents**

| Evaluation Skills | Levene's Test | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Dif. | |
|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Dif. | Std. Error Dif. | Lower | Upper |
| Equal variances assumed | .448 | .504 | -1.770 | 428 | .077 | -1.15387 | .65192 | -2.43523 | .12749 |
| Equal variances not assumed | | | -1.766 | 419.653 | .078 | -1.15387 | .65320 | -2.43783 | .13009 |

The two-tail significance for Evaluation of Collected Information shows that the p-value of .077 is greater than 0.05 and so the null hypothesis is accepted. However, there is a 95 percent chance that the population mean difference falls somewhere between -2.43523 and .12749. The confidence interval includes zero, which means that there could be no difference. Thus, the t-test concludes that there is no significant difference in the skills for Evaluation of Collected Information and

gender of the respondents. The skills for evaluations of collected information between the male and female respondents are the same.

With the help of Independent-Sample 't' Test analysis, it can conclude that there is no significant difference between the information literacy skills and the gender level of the respondents.

## 7. Major Findings and Conclusion

The percentage of male respondents who continues their higher education is more than that of female respondents. Majority (54.42%) of the respondents is pursuing Ph.D and 45.58% of respondents are pursuing M.Phil. The percentage of female respondents who continue their higher education is quite low when compared to male respondents and Most of the female respondents are married when compared to male respondents.

The mean value of respondents' information task definition skills is 4.26 with S.D. of 0.18. The maximum numbers of respondents are familiar with all the constituent skills of Information Task Definition at high level. The respondents are able to read text, understand the concept, define research questions & problems and use internet for communication.

The mean value of respondents' information seeking strategy skills is 4.02 with S.D. of 0.32. The maximum numbers of respondents are familiar with all the constituent skills of Information Seeking Strategies at high level. The respondents are able to seek information from web, identify formats of electronic resources, find information from internet, search scholarly information, use social networks; subscription based online databases and open access e-resources / databases.

The mean value of respondents' Location and Access Skills is 3.82 with S.D. of 0.386. The maximum numbers of respondents are quiet familiar with all the constituent skills of Location and Access. The respondents are able to use online catalogues, use electronic reference materials available in internet, use search engines, searching techniques and advanced search tools and commands.

The mean value of respondents' Information Use Skills is 4.02 with S.D. 0.184. The maximum numbers of respondents are very well familiar with all the components of Information Use skills. The respondents are able to use the Information sources, software's & hardware's, MS-Excel, SPSS, computer applications to modify information, presentation software, websites, social media services and application software and are able to save and backup retrieved information.

The mean value of respondents' Synthesis Skills is 3.94 with S.D. of 0.317. The maximum numbers of respondents are well aware of all the constituents Synthesis skills. The respondents are able to synthesize new concepts, use reference management and other software's, analyze, consolidate & repack the information and new information products. The overall mean value of respondents' Fair Use of Information Skills is 3.98 with S.D. of 0.205. The maximum numbers of respondents are fully familiar with all the components of Fair use of Information skills. The respondents are able to make fair use of electronic information sources, aware of Plagiarism, Copyright law and ethics, socio-economic issues surrounding information, risk of using Internet tools/services for communication, laws, regulations, institutional policies and purpose of using social networking sites.

The overall mean value of respondents' skills for the Evaluation of Collected / Downloaded Information is 3.94 with S.D. of 0.271. The maximum numbers of respondents are well familiar with these skills. The respondents are able to evaluate: a) the publishers of information, b) computerized electronic resources, c) authenticity of the information and d) the creditworthiness of contents and report misleading, outdated & obsolete information and solve the issue. The mean value of female respondents is high compared to that of male respondents in information literacy skills.

The study suggests that, the University / State Government may bring certain plans / schemes to provide laptops to all the research scholars. Majority of research scholars are good at their Information Literacy Skills. The minority group which lacks such skills need to be traced out with the help of certain interviews/surveys.

Since, the Information Literacy skills of respondents hailed from female researchers are bit low, they can be brought under some special programmes/workshops to come up to the expected level. The university with the help of UGC may develop Indian Standards of Information Literacy skills while many developed countries have their own information literacy standards.

The term Information Literacy has various definitions. All include the fact that a person should be able to locate, evaluate and use the needed information. The knowledge on information and computer literacy programme is inevitable. Thus, the library staff and faculty at Alagappa University should work together to develop IL skills and the skills are to be evaluated periodically. It is essential that the library staff and faculty at Alagappa University work together to develop a complete information literacy program supported by research scholars. At the same time, standard assessment rubrics should be developed to measure its progress in addressing the information and computer literacy needs of both post graduate students and research scholars.

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