www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 1367-1373

e-ISSN : 2583-1062
Impact Factor : 7.001

E-LITERACY COMPETENCY ASSESSMENT OF WOMEN SOCIAL SCIENTISTS IN TAMILNADU

Dr. A. Vellaichamy[1]

[1]Librarian, Pollachi College of Arts and Science, Poosaripatti, Pollachi, India.

vellaichamy19@gmail.com

ABSTRACT

This paper analyzed that the e-literacy among the female faculty members. Questionnaire was a data collection tool. 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. Out of 12 institutions, 5 are government, 5 are self-financing and 2 are aided educational institutions. Also showed that 163 (64.2%) respondents are assistant professors and 81 (31.9%) respondents are associate professors while just 10 (3.9%) respondents are professors. The paper also examined that method of learning internet, preference search engines and satisfaction of electronic resources by the women social scientists.

Keywords: E-Literacy, E-Resources, Chi-Square test, Search engines and Social scientists

1. INTRODUCTION

Information has become so important for decision making in today's world. In the present world Air, Water, Food, Shelter is the four basic needs of human beings and now information is added as the fifth need. The technology world depends upon the information for social, economic, scientific, technological and industrial development. The problem of information used to be scarcity of information but in the present century it has become abundance of information. Information technology skills enable an individual to use computers, software applications, databases, and apply related technologies to achieve a wide variety of academic, work related, and personal goals. Among these, information literacy is to focus on content, communication, analysis, information searching and evaluation; whereas information technology fluency focuses on a deep understanding of technology and graduated increasingly skilled use of it. Computers have become a necessary part of this digital society, and skills for computer use are a common prerequisite on many job applications. The educational institutions have an opportunity, and a challenge, to prepare faculty to meet the demands of the Information Age. The faculty members need to identify what graduates should know and be able to do.

2. LITERATURE REVIEW

To satisfy the information needs, the respondents resort to various online and offline resources. Most scholarly resources used were books in print format, while most non-scholarly resources referred to were in electronic format (Ali, Abu-Hassan, Daud & Jusoff, 2010) Searching is an art. The information seekers should understand various search strategies and tools that may be employed in the effective retrieval of pertinent information. Lack of search skills will really be a disastrous in information retrieval process. Most of PG students were not skilled in the use of search strategies, search tools and the evaluation of information (Sebuava, 2016). The lack of search skills has a direct impact on the use of various resources too. Low level of usage of electronic resources, in particular, full texts data bases was linked to lack of search techniques skills by many postgraduate students of the university to access the myriad of e-resources (Adeleke, Samuel & Emeahara, 2016). Mallaiah (2017) analysed that 169 (70.41%) respondents aware of IEEE e-journals. Majority 213 (88.75%) of faculty responded their IT skill in Internet. Followed by 184(76.66%) and 163 (67.91%). Also, study shows majority i.e. 208(86.66%) faculty using Search engines as a search tool. Most of 208(86.66%) faculty respondents are using search techniques for searching in web/Internet. Majority of the university faculty members have Internet knowledge; Search engines are most frequently used for browsing and searching on the web. Other tools such as subject gateways, bibliographic databases, digital libraries, etc., are used much less; Authenticity and reliability are the most important parameters for evaluation of online information (Mishra and Maharana, 2007).

3. OBJECTIVES

1. To survey the working sector-wise distribution of respondents
2. To survey the learning method of internet by the respondents
3. To survey the preference search engines by the respondents
4. To survey the preference meta search engines by the respondents and
5. To survey the satisfaction of electronic resources

www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 1367-1373

e-ISSN : 2583-1062
Impact Factor : 7.001

4. METHODOLOGY

Simple random sampling method has been adopted by the investigator which comprises of administration of questionnaire in order to assess the women faculty members' opinion about search engines use, method of learning internet and satisfaction of electronic resources. Questionnaire was a data collection tool. 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.

5. ANALYSIS AND INTERPRETATION OF DATA

Working Sector-wise Distribution of Respondents: The analysis show that, Out of 12 institutions, 5 are government, 5 are self-financing and 2 are aided educational institutions. While there are 92 (36.2%) respondents from self-financing colleges, 88 (34.6%) respondents are from Government University and government colleges. 74 (29.1%) respondents are hailed from just two self-financing colleges.

Designation, experience and educational qualification of the respondents: 163 (64.2%) respondents are assistant professors and 81 (31.9%) respondents are associate professors while just 10 (3.9%) respondents are professors. Thus, majority of the respondents of this study are Assistant Professors. About 50% of the respondents have one decade of experience and the remaining half have 10^{+} years of experience. A majority of 65 (25.6%) respondents possess 6-10 years of experience followed by 63 (24.8%) respondents with 1-5 years of experience and 50 (19.7%) respondents with more than 20 years of experience. While 48 (18.9%) respondents have 11-15 years of experience, 11 % (28) of the respondents possess 16-20 years of experience. Most of the respondents are M.Phil holders constituting 52% (132) of the sample. 91 (35.8%) respondents are doctorates while 12.2% (31) of the respondents are just post graduates.

Research Degree Guided by the Respondents: It was surprised that 234 respondents (92.1%) have not guided any Ph.D degree in their professional career. One respondent has guided 11-15 Ph.Ds deserving all appreciation. There are two respondents who have guided 6-10 Ph.Ds while 17 (6.7%) respondents have guided 1-5 Ph.Ds. Comparatively the respondents have guided more M.Phil degrees. But still 158 respondents have not guided any M.Phil degree till date. A majority of 58 (22.8%) respondents have guided 1-5 M.Phil degrees while two respondents (.8%) each have guided 16-20 and 21-25 M.Phil degrees. While 18 (7.1%) respondents have guided 6-10 M.Phil degrees, 10 respondents have guided 11-15 M.Phil degrees.

Table 1: Method of learning internet Vs. Working Sector of the Respondents

Variables	RES	Status of Institution			Total	%
		Govt.	Aided	Self-finance		
Self Instruction, Trial and Error	Yes	78	70	84	232	91.34
	No	10	4	8	22	8.66
Assistance from colleagues	Yes	81	74	60	215	84.65
	No	7	0	32	39	15.35
Online Instructions	Yes	85	74	82	241	94.88
	No	3	0	10	13	5.12
Course Taught at the University	Yes	64	39	56	159	62.60
	No	24	35	36	95	37.40
By reading Books, Articles on the Internet	Yes	88	67	82	237	93.31
	No	0	7	10	17	6.69
Formal Training programmes like short term courses, workshops etc	Yes	77	59	68	204	80.31
	No	11	15	24	50	19.69
By attending presentation-lectures organized by my library	Yes	58	49	61	168	66.14
	No	30	25	31	86	33.86

Note. RES = Response

www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 1367-1373

e-ISSN : 2583-1062
Impact Factor : 7.001

Table 1 describes that 94.88% (241) of the respondents learnt about internet with the help of online instructions followed by 93.31% (237) of the respondents who leant internet by reading books and articles on the internet and 91.34% (232) of the respondents who learnt internet by trial and error method. 84.65% (215) of the respondents took the assistance of their colleagues while 80.30% (204) of them underwent formal training programmes like short term courses, workshops etc to learn about internet. 62.6% (159) of the faculty members learnt about internet through the courses taught at their respective institutions.

Table 2: Method of learning internet Vs. Educational Qualification of the Respondents

Variables	RES	EQ			Total	%
		PG	M.Phil	Ph.D		
Self Instruction, Trial and Error	Yes	27	121	84	232	91.34
	No	4	11	7	22	8.66
Assistance from colleagues	Yes	28	102	85	215	84.65
	No	3	30	6	39	15.35
Online Instructions	Yes	31	123	87	241	94.88
	No	0	9	4	13	5.12
Course Taught at the University	Yes	22	75	62	159	62.60
	No	9	57	29	95	37.40
By reading Books, Articles on the Internet	Yes	31	120	86	237	93.31
	No	0	12	5	17	6.69
Formal Training programmes like short term courses, workshops etc	Yes	22	104	78	204	80.31
	No	9	28	13	50	19.69
By attending presentation-lectures organized by my library	Yes	19	81	68	168	66.14
	No	12	51	23	86	33.86
Total		31	132	91	254	100.00

Note. EQ=Educational Qualification; RES = Response

Table 2 briefs about the methods adopted by the respondents to learn internet in terms of their qualifications. Out of 31 respondents with PG qualification, 31 of them learnt internet with the help of online instructions and by reading books and articles on the Internet. While 28 of them took the assistance of their colleagues, 27 of them learnt internet by trial and error method. 22 respondents learnt internet through the courses taught at universities while 19 by attending presentation-lectures organized by their libraries. Out of 132 respondents with M.Phil qualification, 123 learnt internet through online instructions followed by 121 respondents who learnt it by trial and error method and 120 respondents who learnt internet by reading books and articles on the Internet. While 102 respondents sought the help of their colleagues to learn Internet, 104 respondents learnt it by attending formal training programmes like short term course, workshops etc. The least number of 81 respondents learnt internet by attending presentation-lectures organized by their libraries. Out of 91 doctorates, a majority of 87 respondents learnt internet with online instructions followed by 86 respondents who learnt internet by reading, book and articles on Internet and 85 respondents who learnt it with the assistance of their colleagues. While 78 of them undertook formal training programmes like short term courses, workshops etc., 68 of them depended on presentation-lectures organized by their libraries to learn Internet. The least number of 62 respondents learnt internet by doing some courses taught at the universities.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 1367-1373
www.ijprems.com
editor@ijprems.com
e-ISSN : 2583-1062
Impact Factor : 7.001

Table 3: Chi-Square Analysis of method of learning internet by the respondents

Variables	Qualification			Sector		
	Chi	df	p	Chi	df	p
Self Instruction, Trial and Error	.831	2	.660	1.804	2	.406
Assistance from colleagues	11.664	2	.003	43.850	2	.000
Online Instructions	2.556	2	.279	10.788	2	.005
Course Taught at the University	4.001	2	.135	7.069	2	.029
By reading Books, Articles on the Internet	3.648	2	.161	9.789	2	.007
Formal Training programmes like short term courses, workshops etc	3.586	2	.166	5.274	2	.072
By attending presentation-lectures organized by my library	4.665	2	.097	.003	2	.998

Preferences in the use of Search Engines

Table 4 shows the preference of search engines among the respondents. Google is the most favoured search engine among the respondents as it is highly preferred by 192 respondents and preferred by 61 respondents. The second most favored search engine is Yahoo as it is highly preferred by 184 respondents and preferred by 69 respondents.

Table.4 Preference in use of search engines among the Respondents

I know how to search in	Response					
	Highly Preferable	Preferable	Cannot Say	Not Preferable	Never Used	Total
Google	192	61	0	1	0	254
Yahoo	184	69	0	1	0	254
Infoseek	1	3	52	153	45	254
Rediff	2	130	33	54	35	254
Hotpot	2	144	17	51	40	254
MSN	1	132	23	54	44	254

Table 5: Ranking of Preferred Search Engines Vs. Designation of the Respondents

Variables	Assistant Professor (n = 163)			Associate Professor & Professor (n=91)		
	Mean	SD	Rank	Mean	SD	Rank
Google	4.70	.499	**I**	4.84	.373	**I**
Yahoo	4.66	.512	**II**	4.81	.392	**II**
Infoseek	2.04	.728	**VII**	2.11	.586	**VII**
Rediff	2.85	1.182	**III**	3.37	.996	**V**
Hotpot	2.80	1.243	**IV**	3.55	.934	**III**
MSN	2.71	1.226	**V**	3.43	1.013	**IV**

Table 5 shows that 'Google' is ranked first with the mean value of 4.70 followed by Yahoo (4.66) and Rediff (2.85). The sixth rank goes to Lycos (2.65) and the last rank goes to Infoseek (2.04).

The search engine 'Google' is ranked first with the mean value of 4.84 followed by Yahoo (4.81) and Hotpot (3.55). Though there is not much preference difference between the Assistant Professors and Associate Professors & Professors in their ranking of preferences over the use of search engines, Associate Professors and Professors are more strong in their preferences as the weighted average mean for all the search engines are more for them than that for Assistant Professors.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 1367-1373
www.ijprems.com
editor@ijprems.com
e-ISSN : 2583-1062
Impact Factor : 7.001

Table 6 depicts that preference of the respondents in the use of deep web / meta search engines. The most preferred web/meta search engine is Clusty (112) followed by Surfwax (106) and Dogpile (99). 88 respondents prefer to use 'Zapmeta' while 69 respondents prefer 'Ixquick' and 66 respondents prefer 'Scirus'. The least preferred web/meta search engine is Lexis-nexis (45). The web/meta search engine 'Lexis-nexis' is never used by 118 respondents followed by Flickr (117), Icq (110), Scirus (109) and USA.gov (107.) 97 respondents had not used Ixquick while 92 respondents never used Zapmeta. Thus, most of the deep web/meta search engines are not used and preferred by the respondents.

Table 6: Preference in the use of Deep web/meta search engines among the Respondents

I know how to use	Response				
	Highly Preferable	Preferable	Cannot Say	Not Preferable	Never Used
Clusty	9	112	30	39	64
Surfwax	5	106	35	34	74
Dogpile	3	99	30	38	84
Zapmeta	1	88	44	29	92
Ixquick	2	69	54	32	97
USA.gov	2	57	62	26	107
Scirus	1	66	52	26	109
Icq	0	58	63	23	110
Flickr	0	59	60	18	117
Lexis- nexis	0	45	73	18	118

Table 7: Level of Satisfaction of E-Resources Vs. Working Sector of the Respondents

Variables	Govt. (n = 88)			Aided (n=74)			Self-finance (92)		
	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank
SPRINGER	4.65	.526	I	4.57	.499	I	4.54	.653	I
EMERALD	4.63	.510		4.55	.500		4.53	.670	
Science Direct	4.43	.603	II	4.43	.551	II	4.41	.632	II
SAGE	4.38	.574		4.36	.610		4.27	.665	
JSTOR	4.25	.592		4.20	.682		4.08	.615	
EBSCO	4.10	.662		4.09	.686		3.97	.670	III
OAlster	3.91	.768	III	3.91	.686	III	3.76	.732	
Pro Quest	3.92	.731		3.74	.741		3.73	.697	
INDEST	3.80	.949		3.66	.688		3.63	.737	
ASCE	3.77	.919		3.59	.660		3.41	.841	IV
Wiley Inter Science	3.75	.820		3.54	.706		3.40	.785	
OXFORD Uni. Press	3.56	.856		3.51	.687		3.37	.794	
Cambridge Uni. press	3.61	.780		3.43	.795	IV	3.36	.764	
IEEE	3.39	.823	IV	3.32	.778		3.36	.806	
NIST Data Gateway	3.48	.816		3.42	.662		3.38	.724	
American Chemical Society	3.43	.841		3.55	.622	III	3.32	.769	

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 1367-1373
www.ijprems.com
editor@ijprems.com
e-ISSN : 2583-1062
Impact Factor : 7.001

Ovid Data Bases	3.41	.942		3.38	.735	**IV**	3.32	.645	
INSPEC (Science Abstract)	3.58	.784	**III**	3.50	.667	**III**	3.37	.658	
Oxford Journals	3.64	.761		3.47	.667	**IV**	3.39	.610	
ASME	3.52	.773		3.43	.621		3.30	.569	

Note: 4.5 and above – I; 4.0 to 4.4 – II; 3.5 to 3.9 = III; 3.0 to 3.4 = IV

Table 7 shows the weighted average mean indicating the level of satisfaction of respondents of three different working sectors with regard to various e-databases. The level of satisfaction is grouped into four levels namely very high level, high level, moderate level and low level. The respondents from Government sector are more satisfied with the above listed e-databases than that of private and Self-financing sector respondents. The faculty members of all the three different working sectors, though in varying degrees, have shown very high level of satisfaction with regard to 'Springer' and 'Emerald' with the WAM of 4.5 and above. While GSR and ASR have high level of satisfaction with regard to 'Science Direct', 'SAGE', 'JSTOR' and 'EBSCO', the self-financing sector respondents have shown high level of satisfaction with regard to 'Science Direct', 'SAGE' and 'JSTOR'. While GSR have moderate level of satisfaction with regard to 10 databases, PSR have shown moderate level of satisfaction with 8 databases and SSR are so with just 4 databases. GSR has shown low level of satisfaction for 4 databases while PSR have low level of satisfaction with 6 databases. But SSR have shown low level of satisfaction with 11 databases.

Table 8: Ranking of E-Resources Vs. Designation of the Respondents

Variables	**Assistant Professor (n = 163)**			**Associate Professor & Professor (n=91)**		
	Mean	**SD**	**Rank**	**Mean**	**SD**	**Rank**
SPRINGER	4.53	.601	**I**	4.68	.492	
EMERALD	4.51	.612		4.68	.469	**I**
Science Direct	4.37	.599		4.52	.584	
SAGE	4.26	.627	**II**	4.46	.583	
JSTOR	4.10	.605		4.30	.658	**II**
EBSCO	3.99	.643		4.15	.714	
OAlster	3.79	.700		3.98	.774	
Pro Quest	3.70	.695	**III**	3.98	.745	
INDEST	3.59	.791		3.89	.795	
ASCE	3.47	.841		3.81	.773	
Wiley Inter Science	3.47	.788		3.74	.758	
OXFORD Uni. Press	3.39	. 789		3.63	.770	
Cambridge Uni. press	3.39	.764		3.62	.800	
IEEE	3.25	.817		3.56	.733	**III**
NIST Data Gateway	3.35	.766	**IV**	3.56	.670	
American Chemical Society	3.31	.790		3.63	.661	
Ovid Data Bases	3.25	.794		3.58	.716	
INSPEC	3.34	.679		3.73	.700	
Oxford Journals	3.41	.682		3.66	.670	
ASME	3.36	.637		3.52	.705	

Table 8 shows that the Associate Professors and Professors are more satisfied than the assistant professors in respect of all the above listed databases. While Associate Professors & Professors have very high level of satisfaction with 'Springer', 'Emerald' and 'Science Direct' databases, Assistant Professors show high level of satisfaction with 'Springer' and 'Emerald' databases.

6. FINDINGS AND CONCLUSION

It was unearthed in the study that 94.88% (241) of the respondents learnt about internet with the help of online instructions followed by 93.31% (237) of the respondents who leant internet by reading books and articles on the internet and 91.34% (232) of the respondents who learnt internet by trial and error method. 84.65% (215) of the respondents took the assistance of their colleagues while 80.30% (204) of them underwent formal training programmes like short term courses, workshops etc to learn about internet. 62.6% (159) of the faculty members learnt about internet through the courses taught at their respective institutions. Google was the most favoured search engine among the respondents as it is highly preferred by 192 respondents and preferred by 61 respondents. The study also found that a majority of 157 respondents are highly satisfied with 'Springer' followed by 152 respondents who are highly satisfied with 'Emerald' database. 121 respondents each are satisfied and highly satisfied with Science Direct database. 103 respondents are highly satisfied with SAGE while 75 are highly satisfied with JSTOR. While 153 respondents are satisfied with EBSCO, 149 respondents are satisfied with 'JSTOR' and 142 are satisfied with Pro Quest database. 141 respondents are satisfied with OAlster and 135 respondents are satisfied with SAGE database.

7. REFERENCES

[1] Adeleke, D. S., Samuel, D., & Emeahara, E. N. (2016). Relationship between Information Literacy and Use of Electronic Information Resources by Postgraduate Students of the University of Ibadan. Library Philosophy and Practice (e-journal). Paper 1381.

[2] Alagarsamy, V., & Ramalingam, J. (2017). An Assessment of women faculty members' opinions about information literacy needs, search and evaluation competencies. Library Philosophy and Practice, 1-44.

[3] Ali, R., Abu-Hassan, N., Daud, M. Y. M., & Jusoff, K. (2010). Information literacy skills of engineering students. International Journal of Research and Reviews in Applied Sciences, 5(3), 264-270

[4] Jeyshankar, R., & Vellaichamy, A. (2018). An analysis of women faculty attitudes, perceptions and experiences of information access competency. Library Philosophy and Practice, 1-34.

[5] Mallaiah, T. (2017). Digital information literacy skills among faculty members of engineering colleges in Manalore, Karnataka: a study. International Journal of Digital Library Services, 7(1), 28-37.

[6] Mishra, C., & Maharana, B. (2007). A survey of digital information literacy of faculty at Sambalpur University. Library Philosophy and Practice, 9(2).

[7] Sebuava, S. (2016). Information Literacy among Post Graduate Students of the University of Ghana. (e-journal). Library Philosophy and Practice, Paper 1392.

[8] Vellaichamy, A., & Jeyshankar, R. (2015). Impact of information and communication technology among the physical education students in Alagappa University, Tamilnadu. In Handbook of Research on Inventive Digital Tools for Collection Management and Development in Modern Libraries (pp. 340-360). IGI Global.

[9] Vellaichamy, A. (2021). A bibliometric analysis of Journal of Advances in Library and Information Science (JALIS) from 2016-2020: an international online journal. (e-journal). Library Philosophy and Practice, 5128, 1-14.