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## Understanding and Utilization of Electronic Resources among Faculty Members in University Libraries of Tamil Nadu

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**P. Viji**

Librarian

Ambai Arts College, Ambasamudram-627 401

Tamil Nadu, India.

E-mail: [vijistowell@gmail.com](mailto:vijistowell@gmail.com)

### Abstract

*The researcher analyzed the understanding and utilization of electronic resources among faculty members at Manonmaniam Sundaranar University in Tirunelveli, Tamil Nadu. The study aimed to assess their usage and satisfaction with the availability of electronic resources in the university library. A comprehensive questionnaire was developed, and 125 faculty members were selected for participation. After obtaining 113 responses, the researcher concluded that the university library's electronic resources are valuable for faculty members.*

### Keywords

Utilization, Electronic Resources, Faculty Members, University Libraries

### Electronic access

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## 1. Introduction

Electronic resources refer to digital materials accessed through the Internet or computer networks. These resources encompass a wide range of content, including e-books, e-journals, databases, multimedia, software, websites, online portals, courses and tutorials, and repositories. They are utilized for various purposes: education, research, entertainment, and professional development. Electronic resources have profoundly impacted multiple areas, such as education, research, business, and daily life.

In education, electronic resources offer increased accessibility, enhance the learning experience, prove cost-effective, and allow personalized learning. In the research context, they contribute to improved efficiency, facilitate collaboration, assist in data management, and advocate for open access. Electronic resources enhance productivity, support marketing efforts, revolutionize e-commerce, and facilitate data analytics within the business sphere. Furthermore, they ensure easy access to information, offer diverse entertainment options, improve communication, and provide convenient online services daily.

Compared to traditional print resources, electronic resources present numerous advantages, including accessibility from anywhere with an internet connection, advanced search functions, interactivity through multimedia content and hyperlinks, availability in various formats, remote collaboration, customization and personalization options, and support for sustainable practices by reducing paper usage. Electronic resources have significantly transformed library services by elevating their offerings. These resources provide powerful search and retrieval tools, making literature searches more efficient and effective. Additionally, most electronic resources are available via the web, enabling users to access them conveniently from their desktops.

Major initiatives such as UGC-INFONET and INDEST-Consortium have provided access to scholarly resources such as peer-reviewed journals, databases, abstracts, and proceedings to support academic libraries further. In today's digital library information system, organizing electronic resources is crucial to providing effective library services to users. Professionals in the field must possess the necessary computing, database management, networking, and IT management skills to effectively navigate the ever-evolving IT environment.

## 2. Profile of sample unit

Manonmaniam Sundaranar University (MSU) was established in 1990 in Tirunelveli, Tamil Nadu, India, with the motto "In Pursuit of Excellence." The university has various faculties and schools offering diverse academic programs. MSU is known for its dedicated research centres on nanotechnology, environmental sciences, biotechnology, and renewable energy. The university provides extensive facilities, including a library, well-equipped laboratories, separate hostels for men and women, and a sports complex. It affiliates with numerous colleges in southern districts of Tamil Nadu and holds accreditation from NAAC and recognition from the UGC. MSU actively engages in community services and outreach programs and aims to enhance its academic and research capabilities. You can visit the official Manonmaniam Sundaranar University website for more detailed information.

## 3. Review of Literature

Baro E. E. (2020) studied undergraduate students' information needs, sources, and search strategies using a descriptive survey method. The study found that males and females have different sources for information-seeking and searching strategies. George (2021) explored graduate students' information-seeking behavior in Carnegie Mellon University, focusing on their practice of inquiry and academic activities. The study found that students typically contact professors for guidance, suggestions, and support finding resources. The internet played the most significant role, but print resources were also used. Convenience and ease of finding resources and course necessities affected their information behavior. Libraries can impact students' information behavior by reassessing training programs and providing resources and services. Wilson, T.D. (2021) surveyed on human information behavior, highlighting recent advances in computer science and information systems. The study of human information-seeking behavior is a well-defined field of research within information science, with models and methods used to explore behavior.

## 4. Statement of Problem

E-Resources are one of the emerging environments in libraries and information communication services. They mainly comprise e-books, e-journals, articles, newspapers, theses, dissertations, databases, and CD-ROMs, now becoming an alternative to print media.

All updated information is published in these E-Resources. E-Resources are electronic products that deliver data collection, be it text, multimedia products, images, or numerical, graphical or time-based data, as a commercially available source that has been published to be marketed. They can be delivered on CD-ROM, online, or via the Internet. The role of library professionals in collection development and management has become more restricted in the new situation, where libraries not only acquire printed books and journals but also provide access to various learning resources in electronic form. The library and information services of the 21st century are rapidly changing due to the development of electronic publishing. The researcher initiated a study titled "Utilisation and Access Level of E-resources in University Libraries of Tamilnadu.

## 5. Objectives of the study

- ✓ To assess the utilization and accessibility of electronic resources by faculty of the study unit.
- ✓ To evaluate the respondents' level of satisfaction regarding the electronic resources accessible within the sample unit.

## 6. Null and Alternative Hypotheses

**H<sub>0</sub>**: There is no significant association between the benefits of e-resources and the satisfaction of Respondents in the study area.

**H<sub>1</sub>** There is a significant association between the benefits of e-resources and the satisfaction of Respondents in the study area.

## 7. Scope of the study

The researcher has chosen Manonmaniam Sundaranar University, Tirunelveli, as the study's sample unit, focusing on the university's faculty members as the targeted population. The study aims to evaluate the faculty's use and accessibility of electronic resources and their satisfaction with the availability of e-resources in the university library.

## 8. Methodology

The research investigates the contentment levels of Manonmaniam Sundaranar University Library faculty members in Tirunelveli. It involves an empirical inquiry into the faculty's use and accessibility of electronic resources and their satisfaction with the availability of such resources in the university library. The researcher devised a comprehensive

questionnaire, drawing from prior research and aligning with the current objectives of the study. 125 faculty members were chosen for the study, and the questionnaires were personally distributed. Subsequently, 113 complete responses were obtained from the participants.

**9. Limitations:**

- ✓ The research is limited to the academic staff of Manonmaniam Sundaranar University, Tirunelveli
- ✓ A simple random sampling technique is used to select the faculty for the study.

**10. Data Analysis and Interpretation**

**Table 1:** Segmentation of the Respondents based on Designation

Sl. No	Hours Spent in the Library	No. of Respondents	Percentage
1	Assistant Professor	67	59.29
2	Associate Professor	41	36.28
3	Professor	5	4.42
<b>Total</b>		<b>113</b>	<b>100</b>

Table 1 reveals the respondents' segmentation based on their Designation. It is inferred that a maximum of 59.29 per cent of the respondents are assistant professors, 36.28 per cent are associate professors and 4.42 per cent are professors.

**Table 2:** Frequency of Visit to the Library

Sl. No	Frequency of visit	No. of Respondents	Percentage
1	Daily	32	28.32
2	Once in a week	19	16.81
3	More than once in a week	18	15.93
4	Once a fortnight	22	19.47
5	Once in a Month	12	10.62
6	Occasionally	10	8.85
<b>Total</b>		<b>113</b>	<b>100</b>

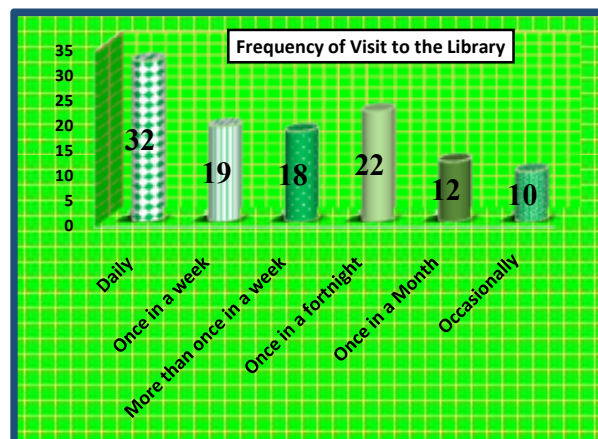


Table 2 illustrates the respondents' frequency of visits to the university library. It shows that 28.32% of the respondents visit the library daily, 19.47% visit once a fortnight, and 16.81% visit once a week. Additionally, 15.93% of the respondents visit the library more than once a week, 10.62% visit once a month, and 8.85% visit occasionally.

**Table 3:** Purpose of Visit

Sl. No	Purpose of Visit	No. of Respondents	Percentage
1	Borrowing books	9	7.96
2	Access Periodicals and Magazines	13	11.50
3	Reading Newspaper	15	13.27
4	Acquiring General knowledge	17	15.04
5	Access Online resources	16	14.16
6	Access CD/DVD Materials	12	10.62
7	Projects/Thesis/Assignments	10	8.85
8	Preparing for tests/exams	8	7.08
9	Developing Competence	7	6.19
10	Question bank	6	5.31
<b>Total</b>		<b>113</b>	<b>100</b>

Table 3 categorizes surveyed individuals based on their reasons for visiting the university library. Analysis indicates that up to 15.04 per cent of the respondents visit the library to acquire general knowledge, 14.16 per cent use the library to access online resources, and 10.62 per cent use the library to access CD/DVD materials.

**Table 4:** Preferred Type of Search

Sl. No	Preferred Type of Search	No. of Respondents	Percentage
1	Author search	24	21.24
2	Title Search	20	17.70
3	Subject Search	14	12.39
4	Keyword search	11	9.73
5	Boolean Search	12	10.62
6	Digital Object Identifier	13	11.50
7	Proximity search	10	8.85
8	Truncation search	9	7.96
<b>Total</b>		<b>113</b>	<b>100</b>

Table 4 illustrates the categorization of respondents according to their preferred search type. The analysis indicates that 21.24 per cent of the respondents favoured author searches, followed by 17.70 per cent who preferred title searches and 12.39 per cent who opted for subject-based searches.

**Table 5:** Identifying Online Resources

Sl. No	Identifying Online Resources	No. of Respondents	Percentage
1	Website	32	28.32
2	Seminar/Conference/Workshop	21	18.58
3	Professional Forum	18	15.93
4	Library Professional	27	23.89
5	Friends and Colleagues	15	13.27
<b>Total</b>		<b>113</b>	<b>100</b>

Table 5 presents the various sources through which faculty members know online resources. The data reveals that 28.32% of respondents know online resources from websites, 23.89% from library professionals, and 18.58% from Seminars, Conferences, or Workshops. Additionally, 15.93% of respondents know online resources through Professional Forums, while 13.27% rely on information from friends and colleagues.

**Table 6:** - Purpose of Using Open Access Resources

Sl. No	- Purpose of Using Open Access Resources	No. of Respondents	Percentage
1	Research Articles	19	16.81
2	Research Report	14	12.39
3	Reviews	15	13.27
4	E-Books	13	11.50
5	E-Thesis	16	14.16
6	Bibliographic	12	10.62
7	Information	11	9.73
8	Year Books	8	7.08
9	Dictionaries	6	5.31
<b>Total</b>		<b>113</b>	<b>100</b>

Table 6 indicates respondents' opinions about the purpose of using online resources. It is observed that 16.81 per cent of the respondents use online resources to write research articles, 14.16 per cent for e-thesis, and 13.27 per cent of the selected respondents use online resources for preparing reviews.

**Table 7:** Satisfaction of Respondents with E-Resources

Sl. No	Satisfaction of Respondents	No. of Respondents	Percentage
1	Extremely Satisfied	49	43.36
2	Very Satisfied	22	19.47
3	Moderately Satisfied	18	15.93
4	Slightly satisfied	14	12.39
5	No Comment/Not Trained	10	8.85
<b>Total</b>		<b>113</b>	<b>100</b>

A study conducted at the Manonmaniam Sundaranar University Library, Tirunelveli, 's results indicate the level of satisfaction among respondents regarding the available online resources. The findings reveal that 43.36% of participants expressed being extremely satisfied with the online resources, 19.47% reported being very satisfied, and 15.93% expressed moderate satisfaction. Additionally, 12.39% of the respondents reported being slightly satisfied, and 8.85% did not provide any feedback on the availability of online resources.

**Table 8:** Ranking of Factors Influencing the Satisfaction of Respondents

Variables	Mean	S. D	C.V	“t” value	Rank
Listening Educational Videos	3.414	1.692	49.568	14.374	VIII
Improve the Subject knowledge	4.481	1.426	31.830	20.227	I
Conference paper presentation	3.658	1.571	42.937	16.567	VI
Curriculum updating	4.128	1.604	38.859	18.867	II
Finding relevant subject information	3.934	1.420	36.099	19.618	IV
Guiding student project	3.640	1.522	41.815	16.910	VII
Reference of Research work	4.020	1.597	39.728	17.799	III
Reference to the funded project	3.354	1.740	51.890	14.383	IX
Teaching to Students	3.672	1.415	38.529	18.592	V
Writing journal article	3.293	1.525	46.319	13.908	X

Table 8 reveals the “t” value-based ranking of factors influencing respondents' satisfaction with electronic resources. It is observed that the first rank is allotted to the variable “Improve the Subject knowledge” with a ‘t’ value of 20.227, followed by the second rank, which is allotted to the variable “Curriculum

updating”, and the third rank allotted to the variable “Reference of Research work”. further, it is understood that the fourth rank is allotted to the variable “Finding relevant subject information” and the fifth rank given to the variable “Teaching to Students “.

**Table 9:** Association Between the Satisfaction of Respondents and Utilisation of E-resources

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1.032	.089		11.608	< 0.05
Listening Educational Videos	.154	.025	.191	6.094	< 0.05
Improve the Subject knowledge	.318	.025	.384	12.618	< 0.05
Conference paper presentation	-.439	.021	-.603	-20.603	< 0.05
Curriculum updating	.311	.039	.209	7.942	< 0.05
Finding relevant subject information	.243	.025	.268	9.848	< 0.05
Guiding student project	-.147	.007	-.228	-19.962	< 0.05
Reference of Research work	.117	.011	.152	10.885	< 0.05
Reference to the funded project	.031	.015	.033	2.150	< 0.05
Teaching to Students	.060	.010	.090	5.816	< 0.05
Writing journal article	.219	.025	.250	8.631	< 0.05
“R”				788	
“R <sup>2</sup> ”				.621	
Adjusted “R <sup>2</sup> ”				.618	
“F” value	249.841		Sig. Value 0.000		

In Table 9, the regression coefficient reveals a strong relationship between respondents' satisfaction and the utilization of E-resources. The "R", R<sup>2</sup> and adjusted "R<sup>2</sup>" values surpass the threshold level, and the corresponding "F" value is significant. This leads to rejecting the null hypothesis and accepting the alternative hypothesis. Additionally, all independent variables' "t" value exceeds 1.96, with a significance

value of less than 0.05 at a 95% confidence level. Therefore, we can conclude that the null hypothesis is rejected, and the alternative hypothesis is accepted: "There is a significant association between the satisfaction of respondents and the benefits of electronic resources."

## 11. Findings

- ✓ The study inferred that a maximum of 59.29 per cent of the respondents are assistant professors, 36.28 per cent are associate professors and 4.42 per cent are professors.
- ✓ It shows that 28.32% of the respondents visit the library daily, 19.47% visit once a fortnight, and 16.81% visit once a week. Additionally, 15.93% of the respondents visit the library more than once a week, 10.62% visit once a month, and 8.85% visit occasionally.
- ✓ Analysis indicates that up to 15.04 per cent of the respondents visit the library to acquire general knowledge, 14.16 per cent use the library to access online resources, and 10.62 per cent use the library to access CD/DVD materials.
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- ✓ It is observed that 16.81 per cent of the respondents use online resources to write research articles, 14.16 per cent for e-thesis, and 13.27 per cent of the selected respondents use online resources for preparing reviews.
- ✓ The findings reveal that 43.36% of participants expressed being extremely satisfied with the online resources, 19.47% reported being very satisfied, and 15.93% expressed moderate satisfaction. Additionally, 12.39% of the respondents reported being slightly satisfied, and 8.85% did not provide any feedback on the availability of online resources.

- ✓ It is observed that the first rank is allotted to the variable "Improve the Subject knowledge" with a 't' value of 20.227, followed by the second rank, which is allotted to the variable "Curriculum updating", and the third rank allotted to the variable "Reference of Research work". further, it is understood that the fourth rank is allotted to the variable "Finding relevant subject information" and the fifth rank given to the variable "Teaching to Students".
- ✓ The "R", R<sup>2</sup> and adjusted "R<sup>2</sup>" values surpass the threshold level, and the corresponding "F" value is significant. This leads to rejecting the null hypothesis and accepting the alternative hypothesis. Additionally, all independent variables' "t" value exceeds 1.96, with a significance value of less than 0.05 at a 95% confidence level. Therefore, we can conclude that the null hypothesis is rejected, and the alternative hypothesis is accepted: "There is a significant association between the satisfaction of respondents and the benefits of electronic resources."

## 12. Conclusion

Electronic resources, including education, research, business, and personal life, have significantly impacted society. Their integration across different sectors has been crucial, bringing advantages and challenges. This includes their impact on education, research, business, personal life, healthcare, and the environment. Notable benefits include improved access to information, interactive learning opportunities, enhanced efficiency, convenience, and better healthcare services. However, challenges such as the digital divide, privacy and security concerns, and information overload must be addressed. Electronic resources have fundamentally changed how we learn, conduct research, communicate, and do business, bringing many benefits while presenting new challenges that require careful consideration. In conclusion, it is important to emphasize electronic resources' significant and evolving role in shaping the future.

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