



# E-Resources And Use Pattern Among Medical College Library Users In Chengalpattu District: A User Study

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## ARTICLE INFO

## ABSTRACT

This study examines the use patterns and impact of e-resources among medical college library users in Chengalpattu district. With the rapid proliferation of digital technologies, libraries have transitioned from traditional collections to offering a wide range of e-resources, including e-books, e-journals, databases, and digital repositories. The study employs a mixed-method approach, combining surveys and interviews to analyze how students, faculty, and researchers utilize these resources for academic, research, and professional purposes. Findings reveal trends in preferred e-resources, frequency of use, challenges faced, and the role of library support services in promoting effective utilization. The study highlights the significance of user training programs and improved ICT infrastructure to enhance access and satisfaction. Insights gained will inform library management and policymakers in optimizing e-resource services to meet diverse user needs effectively.

**Keywords:** E-resources, Medical College Libraries, User Study, Chengalpattu District, Information Access, Digital Resources, Library Usage Patterns, ICT in Libraries.

## Introduction

The advent of Information and Communication Technology (ICT) has revolutionized the way information is created, accessed, and disseminated, profoundly influencing academic and research environments. Medical college libraries, being pivotal in supporting education, research, and clinical decision-making, have increasingly adopted e-resources to cater to the dynamic information needs of their users. E-resources, including e-books, e-journals, online databases, and digital repositories, provide medical students, faculty, and researchers with instant access to a vast array of scholarly content, often surpassing the limitations of traditional library collections.

In Chengalpattu district, the integration of e-resources into medical college libraries has transformed user behaviors and expectations. While these digital tools offer numerous advantages, such as remote accessibility, cost-effectiveness, and updated information, challenges persist in terms of infrastructure, digital literacy, and user engagement. Understanding how users interact with e-resources and identifying barriers to effective utilization are critical to enhancing their academic and professional outcomes.

This study investigates the e-resource usage patterns among medical college library users in Chengalpattu district, focusing on their preferences, frequency of use, and satisfaction levels. Additionally, it examines the challenges users face and the role of library services in promoting e-resource adoption. By providing actionable insights, the study aims to assist library administrators and policymakers in improving e-resource access and ensuring that these resources align with the diverse and evolving needs of medical professionals and students.

### Review of Literature:

Mahadevan, B, Vadivel .K & Balusamy Nachiappan (2023). The present paper makes a specialty of acquisition of e-sources in libraries. In the preceding pages of this bankruptcy, this paper defines creation to the acquisition coverage, clarification of important terminology, and objective of acquisition. In this paper defined technique of acquisition and characteristic of acquisition. In this paper highlighted factors of E-resources.

Cotton, N. K., Kalarithara, S., & Villongco, C (2022). This article examines how MGMRC students use information literacy skills and tools. Medical students used Bentham Sciences, ProQuest, PubMed, and MedlinePlus. Ganesan, P., & Gunasekaran, M. (2022). This article examines how MGMRC students use information literacy skills and tools. The study's participants, usually medical students, used these resources extensively.

Veeraramu, K; Sivankalai, S (2022). The research aims to assess e-resource awareness and utilization. SRIHER and MMC students, researchers, and faculty utilized E-resources well for academics. Respondents use Science Direct, Ovid Database, Medline, and ProQuest. OKIKI, O. C., & IREKO, B. Z. (2022) this research examined Nigerian private university students' usage of digital educational databases. College seniors utilize digital educational databases. Digital databases and access are related. Libraries must better promote their services and programs.

Hirabhai, T. R. (2015) Gujarat medical library automation and internet. IT allows effective, cutting-edge service delivery. Most medical school libraries have begun buying electronic material. 21st-century academics, researchers, and students will have electronic library resources.

Sivankalai, S., Virumandi, A., Chellapandi, P (2014) this page discusses Paavai College of engineering's digital library. It investigates formal and informal sources used by academics. We have discussed e-resource fixation and how librarians help instructors find material.

Virumandi, A, Chellapandi, P., Sivankalai, S (2014) this document discusses online resources and services at Madurai Kamaraj University's TPM library. We may conclude that there is no gender-based difference in using digital university libraries' online resources.

### Objectives

- To identify the range of e-resources provided by medical college libraries in Chengalpattu district, including e-books, e-journals, online databases, and digital repositories.
- To analyze the user demographics (students, faculty, researchers) and their frequency and purpose of accessing e-resources.
- To investigate the preferred e-resources among users and their satisfaction with the accessibility, relevance, and quality of these resources.
- To explore the barriers faced by users, such as technical issues, lack of digital literacy, inadequate training, and limited ICT infrastructure.
- To examine the effectiveness of library support services, including user training programs, information literacy workshops, and technical assistance in facilitating e-resource usage.

### Methodology

This study employs a mixed-methods approach to analyze the use patterns of e-resources among medical college library users in Chengalpattu district. A structured questionnaire is designed to collect quantitative data on user demographics, frequency of e-resource usage, preferences, satisfaction levels, and challenges faced. In addition, qualitative data is gathered through semi-structured interviews with selected students, faculty, and library staff to gain deeper insights into user experiences and perceptions.

The sample consists of users from medical colleges across the district, selected using stratified random sampling to ensure representation from various user groups, including students, faculty, and researchers. Data analysis involves descriptive statistics to identify trends and inferential statistics to explore relationships between variables. Thematic analysis is applied to qualitative data to extract key themes. This comprehensive approach provides actionable insights to improve e-resource services and enhance user engagement in medical college libraries.

### Limitations

This study, with a total of 824 respondents, provides valuable insights into e-resource usage among medical college library users in Chengalpattu district. However, certain limitations must be acknowledged.

Firstly, the study is geographically confined to Chengalpattu district, and the findings may not be generalizable to other regions with varying infrastructural and demographic contexts. Secondly, the reliance

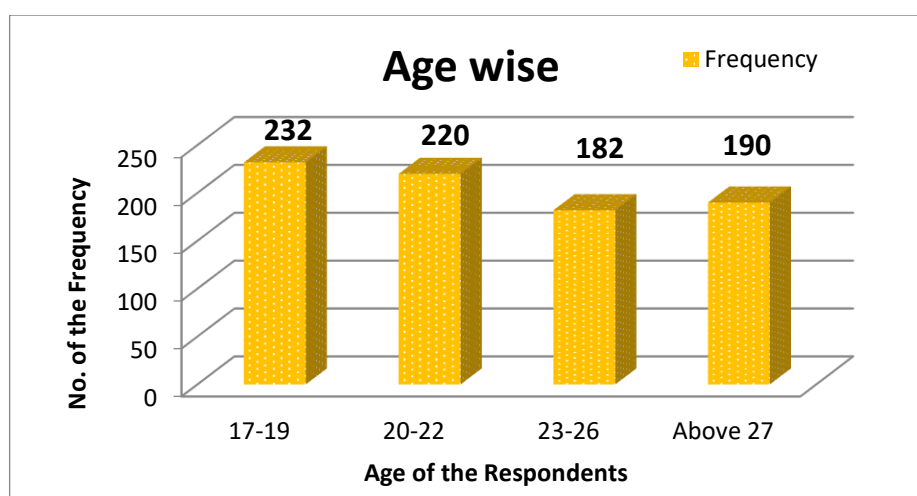
on self-reported data through questionnaires and interviews introduces the possibility of response bias, where users may overstate or understate their e-resource usage and satisfaction levels.

The diversity in ICT infrastructure and digital literacy across institutions poses another challenge, as technological disparities could influence usage patterns. Additionally, the cross-sectional nature of the study captures data at a specific point in time, which may not account for evolving trends in e-resource utilization. Despite these limitations, the study provides a foundational understanding of user behaviors and challenges, serving as a basis for further research and improvement of library services.

## Demographic Profile

**Table.1- Age of the Respondents**

Age wise	Frequency	Percentage (%)
17-19	232	28.2
20-22	220	26.7
23-26	182	22.1
Above 27	190	23.0
<b>Total</b>	<b>824</b>	<b>100.0</b>

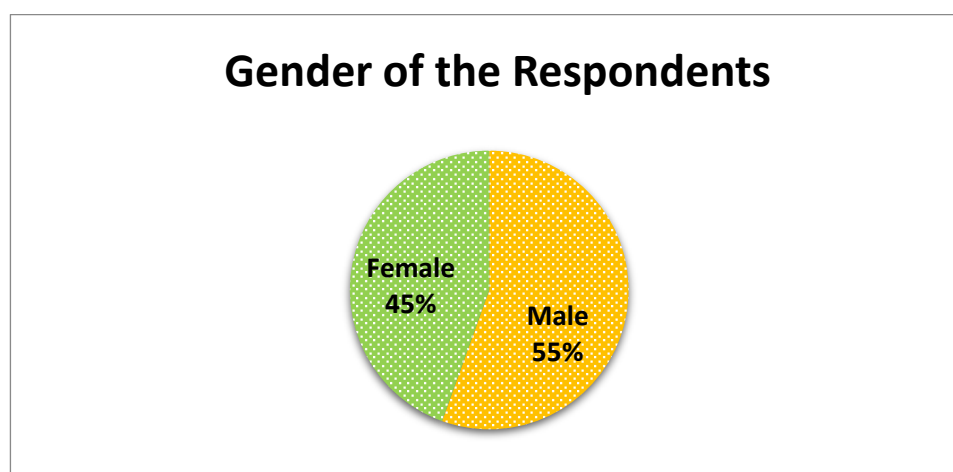


**Figure: 1- Age of the respondents**

The study of aging helps to understand the e- resource and use pattern were we all hope to reach. The age of the respondents divided into four categories from 17 – 19, 20 – 22, 23 – 26 and above 27. Above figure 1 shows that the most of the respondents (28.2%) from the age categories of 17 - 19 years where as respondents 23 – 26 are quite minimal (22.1%).

**Table: 2- Gender of the Respondents**

Gender wise	Frequency	Percentage (%)
Male	457	55.5
Female	367	44.5
<b>Total</b>	<b>824</b>	<b>100.0</b>

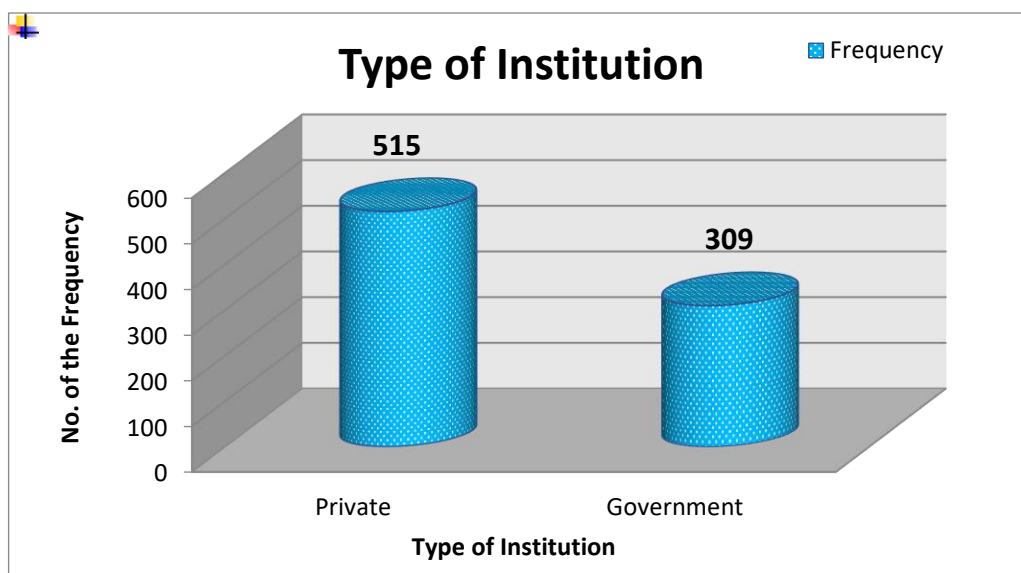


**Figure: 2 - Gender of the respondents**

Above table 2 shows that the respondents are mostly (55.5%) from male whereas 44.5% of the respondents are female.

**Table: 3- Type of Institution**

Type of Institution	Frequency	Percentage (%)
Private	515	62.5
Government	309	37.5
<b>Total</b>	<b>824</b>	<b>100.0</b>

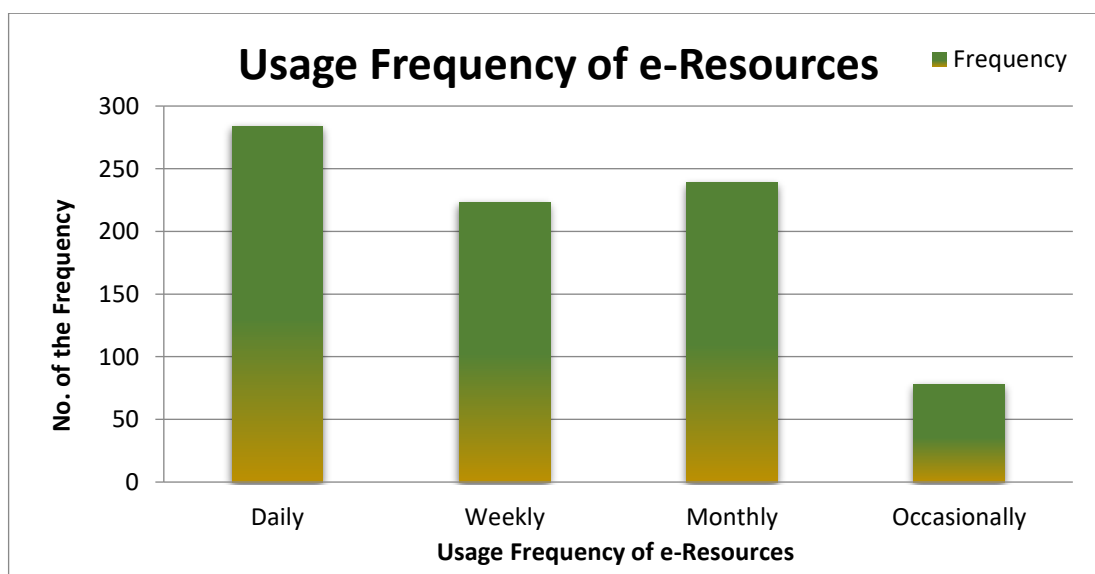


**Figure: 3 - Type of Institutes**

The table 3 shows the type of institution category of the respondents. Most of the respondents (52.5%) are from private and (37.5%) from public.

**Table: 4- Usage Frequency of e-Resources**

Usage Frequency of e-Resources	Frequency	Percentage (%)
Daily	284	34.5
Weekly	223	27.1
Monthly	239	29.0
Occasionally	78	9.5
<b>Total</b>	<b>824</b>	<b>100.0</b>



**Figure: 4 - Usage frequency of e-resources**

The table 4 shows the usage frequency of e-resources category of the respondents. Most of the respondents (34.5%) are from daily usage. (27.1%) of the respondents are weekly usage. (29.0%) of the respondents are monthly usage. (9.5%) of the respondents are occasionally usage pattern.

**Table: 5- Impact of Gender on Study Constructs**

<b>Gender Vs Study Constructs</b>						
	<b>Gender</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>t-value</b>	<b>p-value</b>	<b>Status</b>
Level of Awareness	Male	3.742	0.649	-12.173	0.000	Supported
	Female	4.205	0.369			
Satisfaction of e-Resource	Male	3.158	0.687	-24.437	0.000	Supported
	Female	4.050	0.146			
Utilization of e-Resource	Male	2.551	0.916	0.154	0.514	Not Supported
	Female	2.541	0.904			
Level of Usage	Male	2.388	0.810	0.165	0.306	Not Supported
	Female	2.379	0.772			
Preferred e- Resource	Male	2.285	1.009	0.402	0.597	Not Supported
	Female	2.256	1.024			
Preferred Format	Male	2.478	0.819	0.637	0.566	Not Supported
	Female	2.442	0.798			
Preferable choice of Access	Male	2.247	0.934	0.188	0.674	Not Supported
	Female	2.234	0.925			

**Interpretation:**

Table-5 displays the impact of gender on constructs with respect to zones. The E-resources and use pattern among medical college library users is assessed with seven constructs such as LA, SE, UE, LU, PE, PF and PC. As for the Test groups, Male is having lower scores in gender (Mean = 3.74, SD = 0.64) compared to Female (Mean = 4.20, SD = 0.36). The output of test for equality of variance indicates a significant p-value of 0.000, which is less than 0.05. The results indicate that there is significant difference between the mean level of awareness between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., level of awareness significantly differs on different gender, is accepted.

As for the Test groups, Male is having lower scores in gender (Mean = 3.15, SD = 0.68) compared to Female (Mean = 4.05, SD = 0.14). The output of test for equality of variance indicates a significant p-value of 0.000, which is lesser than 0.05. The results indicate that there is significant difference between the mean Satisfaction of e- resource between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., Satisfaction of e-resources significantly differs on different gender, is accepted.

As for the Test groups, Female is having lower scores in gender (Mean = 2.54, SD = 0.90) compared to Male (Mean = 2.55, SD = 0.91). The output of test for equality of variance indicates a significant p-value of 0.514, which is greater than 0.05. The results indicate that there is significant difference between the mean Utilization of e- resource between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., Utilization of e-resource significantly differs on different gender, is not accepted.

As for the Test groups, Male is having lower scores in gender (Mean = 2.38, SD = 0.81) compared to Female (Mean = 2.37, SD = 0.77). The output of test for equality of variance indicates a significant p-value of 0.306, which is greater than 0.05. The results indicate that there is significant difference between the mean Level of usage between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., Level of usage significantly differs on different gender, is not accepted.

As for the Test groups, Female is having lower scores in gender (Mean = 2.25, SD = 1.02) compared to Male (Mean = 2.28, SD = 1.00). The output of test for equality of variance indicates a significant p-value of 0.597, which is greater than 0.05. The results indicate that there is significant difference between the mean Preferred e- resource between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., preferred e-Resource significantly differs on different gender is not accepted.

As for the Test groups, Female is having lower scores in gender (Mean = 2.44, SD = 0.79) compared to Male (Mean = 2.47, SD = 0.81). The output of test for equality of variance indicates a significant p-value of 0.566, which is greater than 0.05. The results indicate that there is significant difference between the mean, Preferred format between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., Preferred format significantly differs on different gender, is not accepted.

As for the Test groups, Female is having lower scores in gender (Mean = 2.23, SD = 0.92) compared to Male (Mean = 2.24, SD = 0.93). The output of test for equality of variance indicates a significant p-value of 0.674, which is greater than 0.05. The results indicate that there is significant difference between the mean Preferable choice of access between these two test groups. So, the alternative hypothesis ( $H_1$ ) i.e., Preferable choice of access significantly differs on different gender, is not accepted.

### Conclusion

This study, involving 824 respondents, provides a comprehensive understanding of e-resource usage patterns among medical college library users in Chengalpattu district. The findings reveal that e-resources play a critical role in supporting academic, research, and professional activities. Users widely prefer e-journals and databases for their accessibility and up-to-date information. However, challenges such as inadequate ICT infrastructure, lack of digital literacy, and limited training hinder optimal utilization.

The study highlights the importance of user-centric library support services, including training programs and enhanced technical assistance, to bridge the gap between resource availability and effective usage. Addressing these challenges can significantly improve user satisfaction and resource impact.

In conclusion, medical college libraries must adopt proactive strategies to enhance access, promote awareness, and provide tailored support to meet the diverse needs of their users. These efforts will ensure that e-resources are effectively leveraged to foster academic excellence and professional development.

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