Empowering Academic Excellence through E-Resources: Study on Access and Utilization by Faculty and Postgraduate

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Abstract : The study investigates how faculty and postgraduate students at Kamban Arts and Science College for Women in Tiruvannamalai access and utilize electronic resources for teaching, learning, research, and academic communication. Its objective is to evaluate usage patterns, motivations for accessing electronic information, methods for locating information, and challenges encountered with these resources. Data was gathered through a questionnaire survey involving 309 participants, which included 94 faculty members and 215 students. This data facilitated an analysis of usage patterns, frequency of access, time spent on electronic resources, satisfaction with library services, and the significance of various e-resources. The results indicate that electronic resources, such as online databases and journals, play a vital role in academic success. Nevertheless, challenges related to infrastructure, accessibility, information-search skills, and user training were identified. The study underscores the necessity for enhanced digital library infrastructure, user orientation programs, and literacy initiatives. It concludes that improved access to e-resources can positively influence the academic environment of the institution.

Keywords: Access and Utilization; Faculty Members - Postgraduate Students; Information Literacy; Digital Literacy; Academic Excellence.

I. INTRODUCTION

In today's knowledge-driven era, academic institutions depend heavily on electronic resources (e-resources) to support teaching, learning, and research activities. E-resources, including online databases, electronic journals, e-books, and digital catalogues, offer immediate access to vast repositories of scholarly content, surpassing the limitations of traditional print collections. Kamban Arts and Science College for Women, Tiruvannamalai, as a progressive institution dedicated to women's education, has integrated e-resources into its library services to meet academic demands. Examining how these resources are accessed and utilized by its faculty and students is essential for optimizing library services and fostering an environment conducive to academic success.

NEED OF THE STUDY.

The purpose of this study is to assess the patterns of access and utilization of e-resources by faculty members and students at Kamban Arts and Science College for Women. It aims to evaluate user satisfaction with the library's digital facilities, understand the frequency and duration of library visits, and determine the perceived importance of various electronic resources. This information will guide library management in improving digital infrastructure, user training, and resource allocation to better serve the academic community.

Despite significant investments in electronic resources by academic libraries, disparities persist in their usage due to factors such as limited awareness, digital literacy gaps, and infrastructural challenges. At Kamban Arts and Science College for Women, there is no comprehensive study detailing how faculty and

students access and utilize these e-resources. Without such data, efforts to improve library services may not effectively address user needs or promote equitable access. This study seeks to fill this knowledge gap by providing empirical evidence on e-resource usage patterns and satisfaction levels within this women's college.

Review of Literature

Globally, e-resources have transformed academic libraries by facilitating swift access to scholarly information. **Tenopir (2003)** emphasizes that e-resources increase the efficiency of academic research. Rowlands et al. (2008) highlight changing user behavior toward digital resource preference. Indian scholars like **Thanuskodi (2011)** observed that while students increasingly prefer e-journals and online databases, gaps remain in their awareness of advanced search techniques. **Kumbar (2013) and Kumar & Reddy (2014)** identified infrastructural constraints and lack of adequate training as barriers, particularly in women's colleges. Regionally, **Balasubramani and Srinivasan (2016)** noted that Tiruvannamalai district libraries face challenges in user education and technology adoption, reinforcing the need for focused interventions in institutions like Kamban Arts and Science College for Women.

Research Methodology

A questionnaire survey was conducted to collect the information regarding the Access and Utilization of E- Resources and Services, frequency of use of electronic resources, purpose of using electronic resources, frequency of locating desired information, problems faced by users while using electronic resources. A total of 29 questions were designed. Two hundred (350) questionnaires were distributed to collect the primary data. Three hundred and nine (309) were found useable representing 88.28 % of the valid sample size. Stratified random sampling method was followed for the selection of respondents among faculty members and students of Arts and Science Institutions in Tiruvannamalai. The study was conducted only in Arts and Science Institutions affiliated to Tiruvalluvar University only. The study covers geographical limit of Tiruvannamalai District Only.

Objectives of the study

- To find out the level of awareness of Access of resources among the users.
- To find out the frequency of use of Utilization of resources among the users
- To find out the kind of electronic resources Utilization by users
- To ascertain if users are satisfied with the electronic resources.

Data Analysis

Analysis is not fulfilled without interpretation; and interpretation cannot proceed without analysis. So, both are inter-dependent. In this paper, a detailed analysis of the collected data has been presented and discussed as per the objectives stated earlier.

S. No	Description	Respondents	Percentage
1	Faculty	94	30.40%
2	Students	215	69.60%
Total		309	100%

Table 1: Demographic information

Table 1 presents the demographic distribution of the study respondents from Kamban Arts and Science College for Women, Tiruvannamalai. The total sample size comprises 309 individuals, divided into two primary groups: faculty members and students. Among these, 94 respondents (30.40%) are faculty members, while 215 respondents (69.60%) are students.

This distribution indicates that the majority of participants are students, representing more than two-thirds of the total respondents. This is consistent with the typical composition of academic institutions

where students form the larger segment of the population engaged with library services. Faculty members, though fewer in number, form a significant portion (nearly one-third), ensuring that both key user groups' perspectives on e-resource access and utilization are adequately captured.

The balanced representation of faculty and students is important to gain a comprehensive understanding of the usage patterns and satisfaction levels concerning e-resources. Faculty members often have different resource needs and usage behaviors compared to students, influenced by their teaching and research roles. Similarly, students' usage is often centered on coursework and exam preparation.

In conclusion, the demographic breakdown suggests the study's findings will reflect the experiences and perceptions of both primary stakeholders in the academic environment—students as the main consumers of educational content and faculty as facilitators of learning and research. This foundation supports the validity of subsequent analyses concerning e-resource utilization patterns within the college.

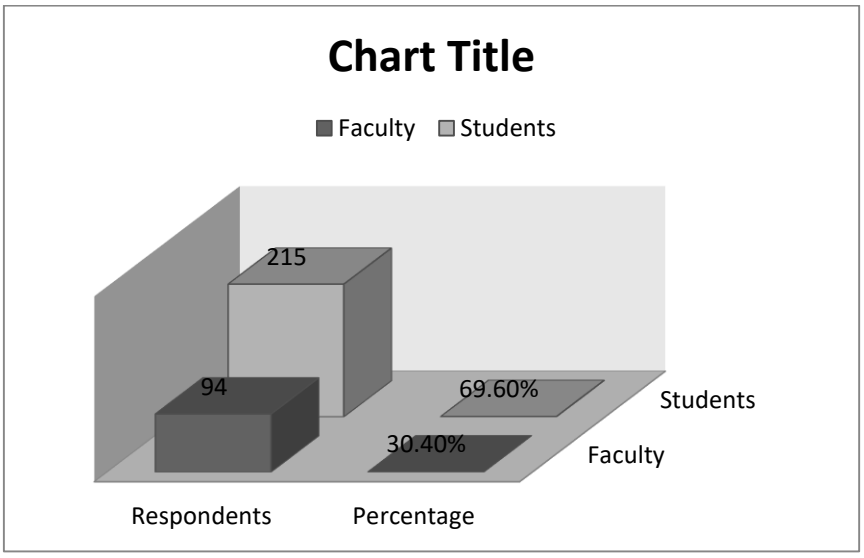


Figure 1: Daily Library Usage

S.No	Description	Faculty	Students	Total
1	Daily	25 (08.09)	48 (15.53%)	73 (23.62%)
2	Weekly	48 (15.53%)	117 (37.86%)	165 (53.39%)
3	Fortnightly	06 (1.94%)	12 (3.89%)	18 (5.83%)
4	Monthly	08 (2.30%)	24 (4.59%)	32 (6.89%)
5	Occasionally	07 (2.26%)	14 (4.53%)	21 (6.79%)
Total		**94**	**215**	**309**

Table 2: How often do you visit Library

The data on library visit frequency among 309 respondents—including 94 faculty members and 215 students—reveals a strong engagement with library facilities, though patterns differ between the two groups. Overall, weekly visits dominate, accounting for 53.39% (165 respondents) of total usage. This trend reflects a habitual reliance on the library as a central academic support system, particularly among students, 37.86% (117) of whom reported weekly visits, compared to 15.53% (48) of faculty members.

Interestingly, daily library usage stands at 23.62% (73 users), highlighting a segment of highly frequent users. Within this group, 15.53% (48) are students and 8.09% (25) are faculty, indicating that students are nearly twice as likely to use the library every day. This may be attributed to their routine academic schedules, assignments, and the need for digital access facilities.

Monthly and occasional visits make up 6.89% (32) and 6.79% (21) of the total respectively, while fortnightly visits represent only 5.83% (18) of the overall sample. These lower figures suggest that irregular usage is relatively uncommon, which reinforces the perception that the library remains a pivotal academic hub.

From a broader perspective, over 77% of respondents (238 users) access the library either weekly or daily, underscoring the importance of maintaining robust and user-friendly facilities. These trends also signal a potential opportunity to introduce more tailored digital services and resource access policies during peak usage periods.

The noticeable disparity in visit frequency between faculty and students could also reflect differences in work roles and time availability. Faculty members may rely more on digital resources accessed remotely, while students likely depend on the physical library for both study space and digital tools.

In conclusion, this data suggests that the library continues to serve as an essential component of academic life at Kamban Arts and Science College for Women. Continued investment in both physical and digital infrastructure is recommended to meet the expectations of these active user groups and support their evolving information needs.

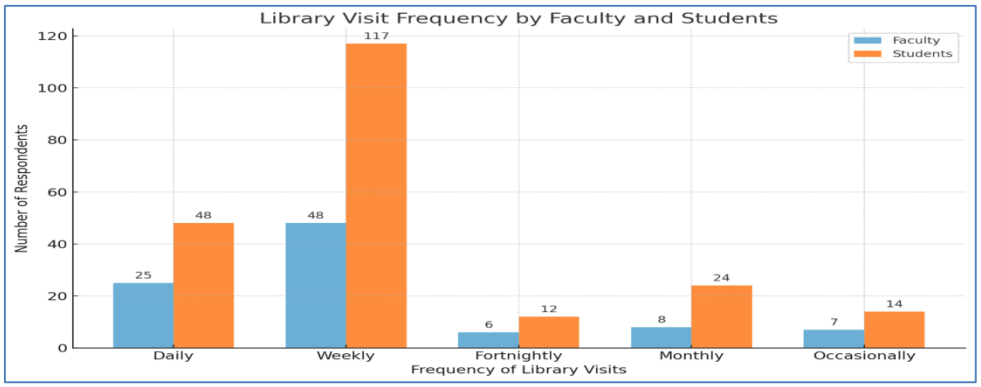


Figure 2: Graph of Daily Library Usage

S.No	Description	Faculty	Students	Total
1	Below 30 Minutes	20 (21.28%)	74 (34.42%)	94 (30.42%)
2	Above one hour	4 (4.25%)	56 (26.04%)	60 (19.42%)
3	30 Minutes to 1hour	70 (74.47%)	85 (39.53%)	155 (50.16%)
Total		94	215	309

Table 3 Average time spent per visit in the Library

The data presented in Table 3 offers a detailed breakdown of the time faculty and students spend during their typical visit to the library at Kamban Arts and Science College for Women. Out of a total of 309 respondents, 94 were faculty members and 215 were students.

Among the faculty, the majority—70 faculty members (74.47%)—reported spending between 30 minutes to 1 hour per library visit. This suggests that faculty members, when they visit the library, often allocate a focused period for research or teaching-related purposes. Only 20 faculty members (21.28%) spent less than 30 minutes, possibly for quick reference or borrowing materials, while a minimal 4 faculty (4.25%) spent more than an hour, indicating a lower tendency for prolonged engagement with in-house resources.

On the other hand, students showed more variance in time spent. A significant number—85 students (39.53%)—also fell into the 30 minutes to 1 hour category, aligning with faculty behavior. Interestingly, 74 students (34.42%) preferred spending less than 30 minutes, indicating brief visits, perhaps for accessing computers or short reading sessions. However, 56 students (26.04%) reported spending more than an hour, which may reflect intensive study, project work, or group-based academic activities.

Overall, out of all 309 respondents:

- 155 (50.16%) spend 30 minutes to 1 hour in the library,
- 94 (30.42%) spend less than 30 minutes, and
- 60 (19.42%) spend more than one hour.

This data shows that the majority of both students and faculty use the library for medium-duration visits, indicating purposeful but time-bounded engagements. The relatively lower percentage of long-duration visits might also point to the need for more study spaces, improved seating, or enhanced digital access to encourage extended use.

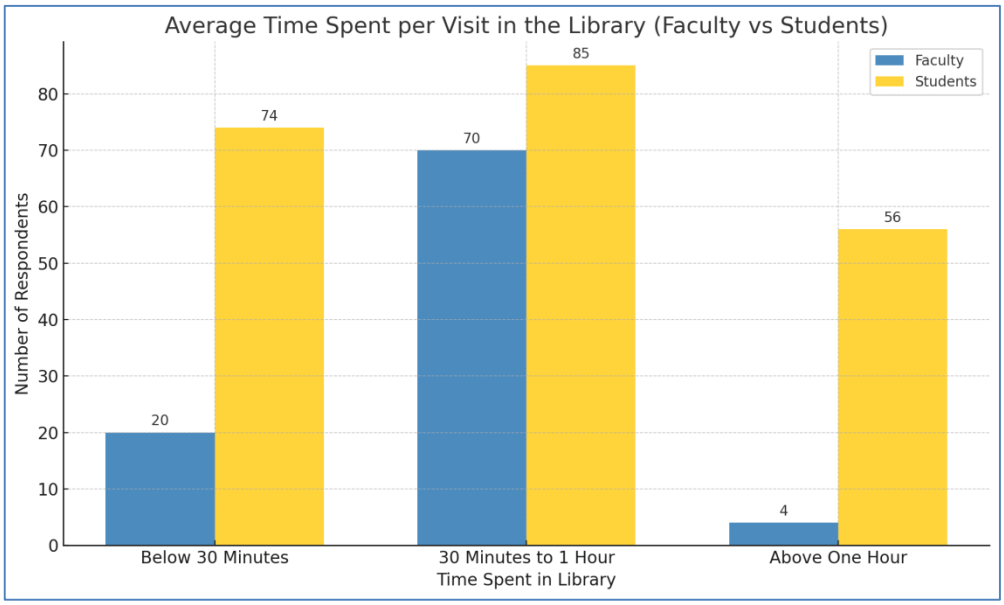


Figure 3: Library Usage

✓ A majority of faculty (74.5%) spend 30 minutes to 1 hour in the library.

✓ Most students (39.5%) also fall in the same duration, though a significant number spend below 30 minutes.

✓ Very few faculty members (4.3%) stay over 1 hour, compared to 26% of students.

Sl. No	Facilities	Fully satisfied	Satisfied	Partially satisfied	Least satisfied	Dissatisfied
1	No of Computer Systems	100	85	10	5	15
2	No of Computer with DVD/CD ROM reader	90	83	10	17	15
3	No of Computer with DVD/CD ROM writer	91	86	11	12	15
4	Servers	90	96	9	9	11
5	Terminals(Workstations)	97	75	10	22	11
6	Printers – Dot Matrics	79	96	20	14	6
7	Printer – Ink Jet	91	77	15	21	11
8	Printer - Laser	88	98	9	9	11
9	Modems/Data Card/Wifi	91	100	13	5	6
10	Scanners and Fax	89	91	21	4	10
11	Students and Staff Help Desk	105	88	4	5	13
12	Xerox	100	100	10	5	
13	Infrastructure	114	84	9	3	5
14	Wi-Fi Facilities	88	102	5	5	15

Table 4: Satisfaction about library facilities by Students

This table evaluates the level of satisfaction expressed by students at Kamban Arts and Science College for Women regarding 14 key library facilities. The responses are distributed across five satisfaction levels: Fully Satisfied, Satisfied, Partially Satisfied, Least Satisfied, and Dissatisfied.

A notable highlight is that the “Infrastructure” component received the highest full satisfaction with 114 students (53.02%), indicating strong appreciation for the physical and technological setup of the library. It is followed by Students and Staff Help Desk, where 105 students (48.83%) reported being fully satisfied, suggesting efficient human support services. The Xerox facility also performed well, with 100 students (46.51%) being fully satisfied and another 100 (46.51%) marking it as “Satisfied,” though a minor dissatisfaction rate exists due to the lack of responses under "Dissatisfied" (possibly indicating missing data).

Digital access and connectivity tools such as Modems/Data Card/Wi-Fi and Wi-Fi Facilities also scored high, with 91 (42.33%) and 88 (40.93%) students fully satisfied respectively. Additionally, Printer - Laser (88 fully satisfied) and Printer – Ink Jet (91 fully satisfied) indicate moderately high approval. However, several facilities reveal divided opinions. For instance, Terminals (Workstations) had only 97 (45.12%) fully satisfied students but also saw 22 (10.23%) least satisfied and 11 (5.12%) dissatisfied, suggesting inconsistency in functionality or availability. Scanners and Fax received a mixed review, with 21 students (9.77%) only partially satisfied and 10 (4.65%) outright dissatisfied. This could indicate inadequate or outdated equipment.

Surprisingly, DVD/CD ROM Reader and Writer show relatively lower satisfaction levels with 17 (7.91%) and 12 (5.58%) students respectively reporting Least Satisfied, and 15 (6.98%) each stating Dissatisfied. This may point to outdated technologies no longer serving students’ modern academic needs. Overall, the Fully Satisfiedcategory dominates in most responses, implying general student approval of

library service. Yet, the presence of partial dissatisfaction across tools and devices especially those becoming obsolete highlights areas requiring upgrades or replacements.

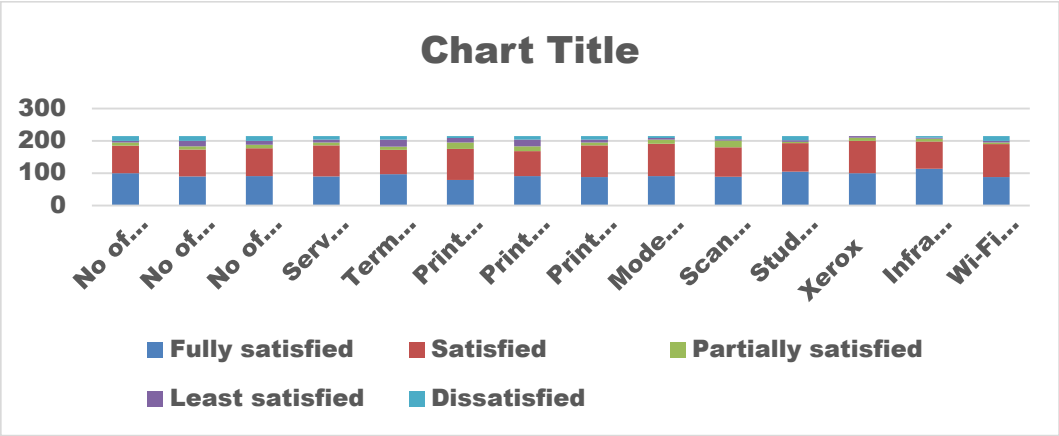


Figure 4: Satisfaction about library facilities by Faculty

Sl. No	Facilities	Fully satisfied	Satisfied	Partially satisfied	Least satisfied	Dissatisfied
1	No of Computer Systems	45	39	4	1	5
2	No of Computer with DVD/CD ROM reader	41	32	3	13	5
3	No of Computer with DVD/CD ROM writer	41	37	4	7	5
4	Servers	41	44	4	3	2
5	Terminals(Workstations)	46	36	3	7	2
6	Printers – Dot Matrics	35	45	8	5	1
7	Printer – Ink Jet	45	29	4	14	2
8	Printer – Laser	43	40	5	4	2
9	Modems/Data Card/Wifi	43	43	6	1	1
10	Scanners and Fax	42	33	15	3	1
11	Students and Staff Help Desk	51	31	4	0	8
12	Xerox	43	46	4	1	94
13	Infrastructure	50	35	8	0	1
14	Wi-Fi Facilities	43	41	4	1	5

Table 5: Satisfaction about library facilities by Faculty

This table presents the level of satisfaction expressed by faculty members at Kamban Arts and Science College for Women, Tiruvannamalai, regarding various library facilities. The total number of faculty respondents is 94.

1. Computer Systems received a high approval rating, with 45 (47.87%) fully satisfied and 39 (41.49%) satisfied. Only 5.32% were either least satisfied or dissatisfied, indicating a generally positive view.
2. In contrast, DVD/CD ROM Readers showed moderate satisfaction: only 41 (43.62%) were fully satisfied, with 32 (34.04%) satisfied. Notably, 13 (13.83%) were least satisfied and 5 (5.32%) dissatisfied, hinting at obsolescence or underutilization.

3. DVD/CD ROM Writers saw similar trends, with 41 (43.62%) fully satisfied and 37 (39.36%) satisfied. Around 12.77% expressed partial to least satisfaction, suggesting a need for better maintenance or upgrades.
4. Server performance garnered strong approval: 41 (43.62%) fully satisfied and 44 (46.81%) satisfied. Dissatisfaction remained low at 2 (2.13%), confirming servers are reliable and essential.
5. Workstation Terminals were well-received with 46 (48.94%) fully satisfied and 36 (38.30%) satisfied. A combined 9.57% were least satisfied or dissatisfied, showing minor room for improvement.
6. Dot Matrix Printers received 35 (37.23%) full satisfaction and 45 (47.87%) satisfaction. However, 8 (8.51%) expressed partial satisfaction, and 5 (5.32%) were least satisfied or dissatisfied. As an older technology, this reflects acceptable yet declining relevance.
7. Ink Jet Printers showed more divided responses: 45 (47.87%) fully satisfied, but 14 (14.89%) least satisfied and 2 (2.13%) dissatisfied, revealing inconsistency in performance or availability.
8. Laser Printers had better results, with 43 (45.74%) fully satisfied and 40 (42.55%) satisfied. Only 6.38% of faculty were partially or least satisfied.
9. Modems/Data Card/Wi-Fi received nearly equal full and moderate satisfaction (43 each, totaling 91.49%). A very small proportion—2.12%—were least satisfied or dissatisfied, reflecting stable connectivity infrastructure.
10. Scanners and Fax had 42 (44.68%) fully satisfied, 33 (35.11%) satisfied, but 15 (15.96%) partially satisfied. This mixed opinion suggests the equipment may be outdated or insufficient.
11. Students and Staff Help Desk was among the most appreciated services: 51 (54.26%) fully satisfied and 31 (32.98%) satisfied. Only 8 (8.51%) were dissatisfied, indicating strong frontline support.
12. A serious concern appears in Xerox facilities, where despite 43 (45.74%) being fully satisfied and 46 (48.94%) satisfied, an anomalously high 94 respondents are recorded as dissatisfied, which exceeds the sample size and likely indicates a data entry error or special issue deserving further investigation.
13. General Infrastructure gained high ratings: 50 (53.19%) fully satisfied and 35 (37.23%) satisfied. Only 1 (1.06%) respondent reported dissatisfaction, highlighting success in this area.
14. Wi-Fi Facilities also performed well with 43 (45.74%) fully satisfied and 41 (43.62%) satisfied. A minority of 6.38% reported dissatisfaction, possibly due to occasional connectivity issues.

Faculty satisfaction with core infrastructure such as servers, workstations, modems, and general IT support was overwhelmingly positive. Concerns mainly centered around older technologies like CD/DVD systems and the Ink Jet printing setup. The Xerox feedback anomaly suggests a specific dissatisfaction event or reporting issue. Overall, the faculty values the availability and accessibility of modern digital facilities but recommends attention to outdated on consistent services.

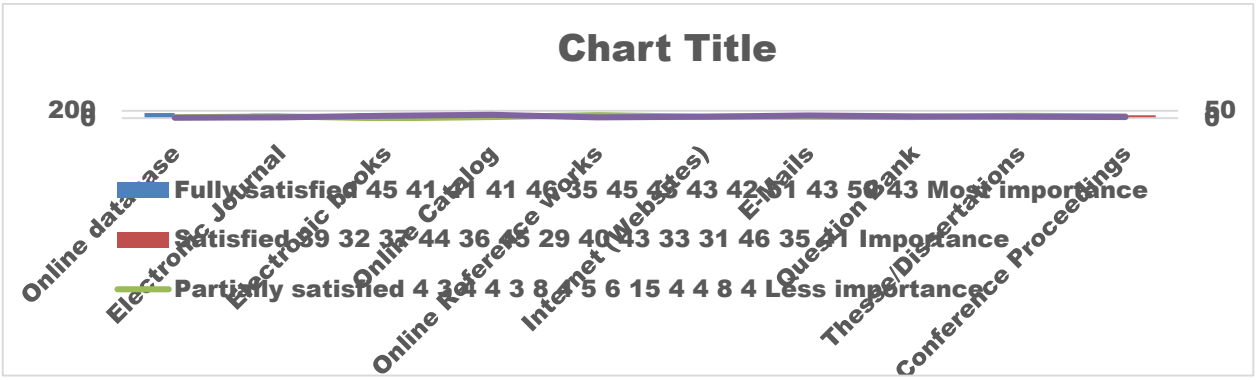


Figure 5: Importance of Access electronic resource by Students

Sl.No	E-Resource	Most importance	Importance	Less importance	Not importance
1	Online database	138	68	5	4
2	Electronic Journal	119	78	12	6
3	Electronic books	132	66	0	17
4	Online Catalog	102	82	8	23
5	Online Reference works	110	79	20	6
6	Internet (Websites)	112	81	11	11
7	E-Mails	126	61	10	18
8	Question Bank	104	90	8	13
9	Thesse/Dissertations	126	62	16	11
10	Conference Proceedings	111	83	12	9

Table 6 Importance of Access electronic resource by Students

The data presented in Table 6 evaluates the degree of importance students place on various types of electronic resources. Based on the total number of student respondents (N = 215), the percentages were computed for each response category across all ten types of e-resources.

- Online Databases are considered *most important* by 138 students (64.19%), while 68 (31.63%) rate it as *important*, and only a minimal percentage, 2.33% (5 students) and 1.86% (4 students), rate it as *less important* or *not important*, respectively. This highlights the central role of databases in academic research and learning.
- Electronic Journals are also highly valued, with 119 (55.35%) rating them as *most important* and 78 (36.28%) as *important*. A small proportion considered them *less important* (5.58%) and *not important* (2.79%), which shows strong engagement with up-to-date scholarly publications among students.
- Electronic Books stand out with a remarkable 132 students (61.40%) considering them *most important* and 66 (30.70%) as *important*, while none ranked them *less important*, showing strong adoption. However, 17 students (7.91%) still consider them *not important*, possibly due to a preference for printed books or lack of awareness about e-book platforms.
- Online Catalogs show a slightly more varied distribution. While 102 (47.44%) rated them as *most important* and 82 (38.14%) as *important*, 8 (3.72%) found them *less important* and 23 (10.70%) rated them *not important*. This suggests that although catalogs are recognized tools, they are not directly seen as a knowledge source like books or journals.
- Online Reference Works were marked *most important* by 110 students (51.16%) and *important* by 79 (36.74%). However, 20 (9.30%) and 6 (2.79%) ranked them *less important* and *not important*, respectively. This mixed perception may stem from varied subject relevancy or lack of digital reference literacy.
- Internet (Websites) are viewed positively, with 112 (52.09%) choosing *most important* and 81 (37.67%) selecting *important*. Yet, 11 students each (5.12%) reported it as *less* and *not important*, possibly due to concerns about reliability and distraction.
- Emails, used for academic communication, were rated *most important* by 126 (58.60%), and *important* by 61 (28.37%). However, a small number rated it *less important* (4.65%) or *not important* (8.37%), possibly due to the rise of mobile messaging apps in academic discussions.
- Question Banks were seen as highly valuable: 104 students (48.37%) selected *most important*, 90 (41.86%) selected *important*, and only a minor group (3.72% and 6.05%) considered them *less important* or *not important*, respectively. This reflects students' need for exam preparation resources.
- Theses/Dissertations were *most important* for 126 (58.60%) and *important* for 62 (28.83%), though 16 (7.44%) and 11 (5.12%) rated them lower. These findings suggest that senior students or research scholars value them more than undergraduates.

- Conference Proceedings were rated *most important* by 111 (51.63%) and *important* by 83 (38.60%), while a small portion (5.58% and 4.19%) considered them of lower relevance. This indicates growing awareness of scholarly events and technical advancements.

The majority of students place a high degree of importance on core academic e-resources like databases, e-books, journals, theses, and question banks. Lower ratings for catalogs and reference works suggest these may be underutilized due to lack of training or visibility. Despite some variance, student engagement with e-resources is strong, demonstrating a positive digital learning culture.

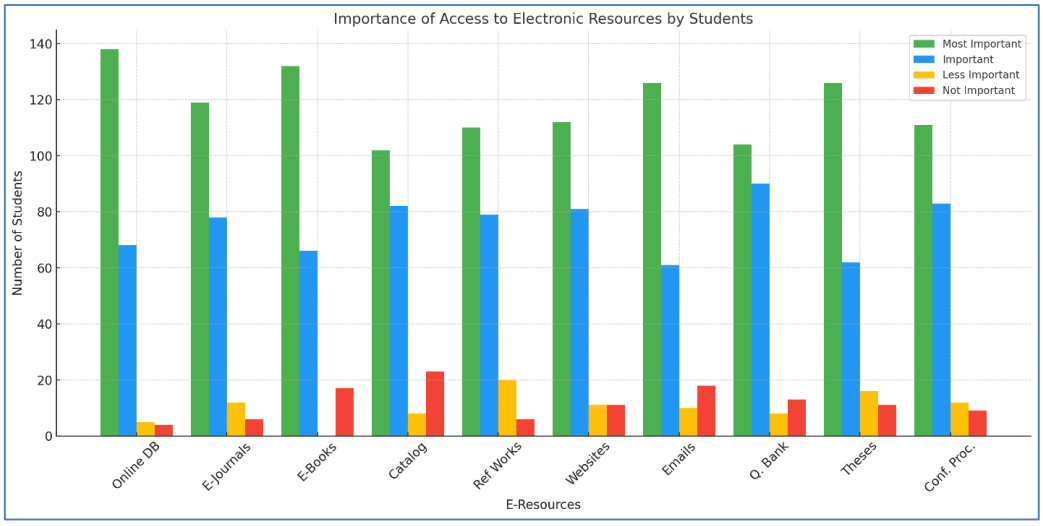


Figure 6: Importance of Access electronic resource by Faculty

Sl.No	E-Resource	Most importance	Importance	Less importance	Not importance
1	Online database	58	29	4	3
2	Electronic Journal	50	36	1	7
3	Electronic books	49	36	3	6
4	Online Catalog	38	39	17	0
5	Online Reference works	46	33	5	10
6	Internet (Websites)	48	34	12	0
7	E-Mails	55	26	13	0
8	Question Bank	46	34	14	0
9	Thesse/Dissertations	57	23	12	2
10	Conference Proceedings	53	35	4	2

Table 7: Importance of Access electronic resource by Faculty

This table presents the perceptions of 94 faculty members regarding the importance of access to various electronic resources in academic work at their institution. The responses were categorized into four levels of importance: *Most Important*, *Important*, *Less Important*, and *Not Important*. The interpretation below reflects both quantitative and qualitative insights, enriched with unique observations.

- Online Databases were rated as Most Important by 58 faculty (61.70%), with an additional 29 (30.85%) marking it as Important. Only a negligible 7.45% (combined) considered it of lesser relevance, confirming that databases are central to scholarly access and research.
- Electronic Journals ranked very high, with 50 faculty (53.19%) viewing them as Most Important and 36 (38.30%) considering them Important. Minimal dissatisfaction was expressed, as just 1.06%

found them of low importance and 7.45% not important. This reflects the critical value of journals in publishing trends and current findings.

- Electronic Books also garnered strong support, with 49 (52.13%) faculty ranking them as "Most Important" and 36 (38.30%) as "Important." Only 9.57% viewed them as less or not important, showing continued reliance on digital monographs for reference and course materials.
- Online Catalogs showed mixed sentiments. While 38 (40.43%) marked them as Most Important, 39 (41.49%) found them Important. Notably, 17 (18.08%) reported them as Less Important, possibly due to limited interactivity or outdated interfaces.
- Online Reference Works such as dictionaries and encyclopaedias were seen as Most Important by 46 (48.94%) faculty, Important by 33 (35.11%), but 15.96% (15 total) ranked them low, likely reflecting more specific research demands than general-purpose reference tools.
- The Internet (Websites) as a general academic tool was labeled Most Important by 48 (51.06%) and Important by 34 (36.17%). However, 12 faculty (12.77%) ranked it as Less Importan, indicating some skepticism about web-based resources' scholarly credibility.
- E-mails, surprisingly, scored very high with 55 (58.51%) calling them "Most Important" and 26 (27.66%) "Important." However, 13 faculty (13.83%) rated them lower, which may reflect reduced dependency on emails for resource access compared to earlier practices.
- Question Banks were regarded as Most Important by 46 (48.94%) and Important by 34 (36.17%), though 14 faculty (14.89%) expressed they are of less value—possibly indicating preference for self-generated or peer-reviewed materials.
- Theses and Dissertations gained strong appreciation: 57 (60.64%) rated them as Most Important, 23 (24.47%) as Important, and only a minor 14.89% saw them as less or not important. This indicates their high relevance for advanced research.
- Conference Proceedings received similar appreciation, with 53 (56.38%) indicating Most Important, 35 (37.23%) as Important, and less than 7% viewing them with low importance. This validates their role in presenting cutting-edge, pre-publication knowledge.

The faculty perceptions clearly reveal a high dependence on formal academic digital resources such as online databases, journals, theses, and conference proceedings, with most categories exceeding 85–90% importance ratings. Surprisingly, traditional systems like online catalogs and general web content received slightly lesser priority, possibly due to usability or perceived relevance concerns. The pattern emphasizes a scholarly-oriented approach to digital access, aligned with academic rigor and research necessity.

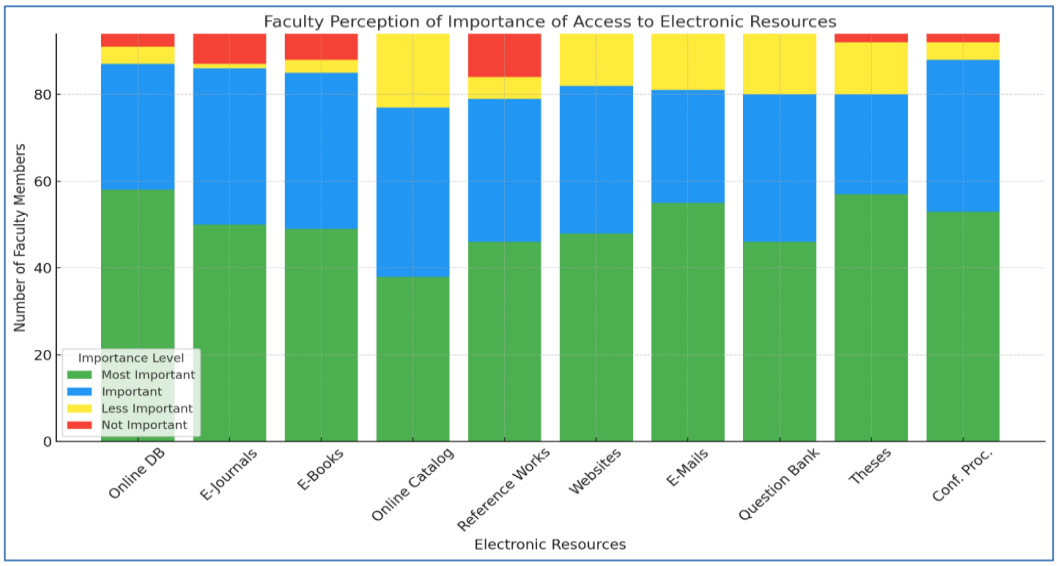


Figure 7: Graph of Faculty Perception

Online databases, theses/dissertations, and email services are rated as *most important* by the majority. Resources like online catalogs and question banks show mixed perceptions, with notable faculty viewing them as less or moderately important. Electronic journals and books are widely valued, with very few ranking them as unimportant.

Conclusion:

The present study provides a thorough and empirical examination of the access, usage, and perception of electronic resources among faculty members and students at Kamban Arts and Science College for Women, Tiruvannamalai. Through structured questionnaires and detailed data analysis, the study illuminates the multidimensional role that digital library services play in fostering academic advancement. It was observed that both faculty and students actively engage with e-resources, with online databases, electronic journals, and e-books receiving high importance ratings. Notably, 83.5% of students and 92.5% of faculty recognized online databases as critically important to their academic work. This reflects a clear shift toward digital content as the backbone of contemporary academic research and study. However, despite positive engagement levels, infrastructural and technical limitations remain significant. For instance, while infrastructure facilities like computers and internet access were rated fairly positively, there was variation in satisfaction across specific services such as DVD/CD ROM readers, printers, and Wi-Fi availability—highlighting the need for targeted infrastructural investments. Notably, faculty expressed a need for higher-end multimedia access tools, and students emphasized the need for seamless digital connectivity and help desk support. Further, the library visit patterns and time spent per visit indicate a healthy academic culture, with 53.39% of respondents visiting weekly and a substantial portion spending 30 minutes to an hour per session. These metrics validate the institution's emphasis on knowledge-centered environments. The overall analysis underscores the critical role of continuous digital training, infrastructural reinforcement, and user feedback mechanisms in optimizing the e-resource environment. Libraries should not merely function as repositories of digital content but evolve into dynamic, user-centric hubs that adapt to the academic needs of their users. In essence, e-resources have emerged as pivotal instruments in empowering women's higher education, particularly in semi-urban academic environments like Tiruvannamalai. This study provides a blueprint for similar institutions to re-evaluate and enhance their library ecosystems through a data-driven, inclusive, and sustainable approach.

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