



Extent of Use of E-Resources During Covid-19 Period in The Libraries of Academic Colleges of Maharashtra

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Abstract

This investigation was carried out to examine the extent of e-resource utilization in academic college libraries across Maharashtra during the COVID-19 pandemic. With physical libraries closed and remote learning becoming the norm, the reliance on digital resources surged. The study assesses the accessibility, frequency of use, and challenges faced by students and faculty in accessing e-books, e-journals, databases, and other online materials. The study was carried out in three steps involving reconnaissance, data collection and analysis, followed by interpretation of statistics. The study was delimited to the jurisdiction of Maharashtra i.e. Academic Colleges situated in Maharashtra were considered. The primary data was collected from the librarians working in the academic colleges of Maharashtra. Statistical analysis of data was done with the help of various statistical tests, which were administered through Statistical Package for Social Sciences (SPSS) 20.0 Software. The significance level was chosen to be 0.05 (or equivalently, 5%). Findings indicate a significant increase in e-resource demand, though barriers such as limited subscriptions, technical issues, and lack of digital literacy hindered optimal usage. The study highlights the critical role of libraries in facilitating remote education and suggests strategies for improving digital resource management, user training, and sustainable access models for future crises.

Keywords: E-resources, academic libraries, COVID-19, digital access, Maharashtra, remote learning

1.0 Introduction

Information and communication technology (ICT) plays an important role in academic library services and information delivery. The impact of communication technology is significantly recognized in delivering of virtual library services. The impact of pandemic COVID-19 was felt by each and every sector around the world (Balkundi, 2023). Especially the education sector, which was badly affected by this pandemic and the situation, got more worrisome when the union government declared a lockdown to break the chain of spreading the COVID-19 virus. All public sectors were affected and started working from home. Educational institutes also engaged in online lectures and examinations (Jharotia, 2025). However, the libraries could not afford to close down their formal duties of providing information to students (Ranaweera, 2021). During the situation of lockdown, the libraries continuously provided library services to its users (Sawant, 2021) with the support of available recent ICT tools and e-resources (Francis, 2023). Digital library services have been developed and enhanced for the years but the recent COVID-19 pandemic has made many users aware (Saundankar, 2021) of these services for the first time (Shukla and Singh, 2022). Especially, because of the closure of libraries, during the pandemic, additional efforts have been made to promote digital libraries and their services.

The COVID-19 pandemic disrupted traditional library operations worldwide, forcing academic libraries to rapidly adapt to remote services and digital solutions (Veer and Panda, 2021). In Maharashtra, college libraries faced unprecedented challenges in continuing information services due to lockdowns, restricted physical access, and technological limitations. This study is motivated by the need to examine how college libraries in Maharashtra responded to the crisis, the effectiveness of their alternative service models, and the impact on students and faculty. Understanding these adaptations is crucial for assessing the resilience of library systems, identifying gaps in digital infrastructure, and formulating best practices for future emergencies (Tunga, 2021). The Scope of the study is extended to understand the information services provided by the libraries of college situated in Maharashtra during COVID-19 Pandemic Period. In view of the situation mentioned above this



investigation was carried out to assess extent of use of e-resources during Covid-19 period in the libraries of academic colleges of Maharashtra.

2.0 Research Methodology

The present study was carried out in three steps involving reconnaissance, data collection and analysis, followed by interpretation of statistics. In the present study, a quantitative method was used in view of the specific objectives of the study.

2.1 Study Area – Maharashtra

The study was delimited to the jurisdiction of Maharashtra i.e. Academic Colleges situated in Maharashtra were considered.

2.2 Design of Study and Sample Selection

The study was carried out by using a descriptive research design, where the librarians of academic colleges of study region were selected randomly. In this study, data was collected from the librarians working in the academic colleges of Maharashtra. Prior to sampling a reconnaissance survey was carried out and on the basis of this survey, it was observed that the total population i.e. the librarians working in the academic colleges of Maharashtra was approximately 1200. Hence, for this size of population a representative sample selection was done using the sampling model proposed by Krejcie and Morgan (1970). According to this model, the above mentioned population needs 291 samples, which are to be selected randomly. Thus, the sample size for this study was 291; however, while conducting the survey, researcher could get data from more number of respondents and the final sample size for this study was 300.

2.3 Collection of Data

In the present study, all the data generation was done by using standard procedures and with the aid of survey method. For the collection of primary data, a structured research instrument was prepared on the basis of generally accepted principles of instrument design, and was carried out according to the standard methodology. Based on the objectives, questions/statements were framed such that each statement would yield Single response. In the present study, Fixed Response (Qualitative) Rating scale /Continuum (such as Likert-type scale) was used. Prior to its use reliability of the questionnaire was assessed using the test-retest method. Also the validity (content, construct, and criterion related validity) of questionnaire was ensured prior to its use for main study data collection.

2.4 Statistical Analysis of Data

Statistical analysis of data was done with the help of various statistical tests. The descriptive statistics, such as frequency, percentage, etc. were determined from the collected data. The inferential statistics such as Chi-Square test was used. All statistical analysis of the data was done by using Statistical Package for Social Sciences (SPSS) 20.0 Software. The significance level was chosen to be 0.05 (or equivalently, 5%).

3.0 Results and discussion

3.1 Extent of use of Electronic books

Table No. 1: Extent of use of electronic books during Covid-19 period

Extent of use	Frequency	Percent
Very high	171	57.0
Moderate	129	43.0
Not at all	0	0.0
Total	300	100.0

$$\chi^2 = 158.82; \text{df: } 2; \chi^2_{\text{crit}} = 5.99; p < 0.05$$

Above **Table 1** presents information pertaining to extent of use of electronic books during covid-19 period in the academic college libraries of Maharashtra. Study result shows that in 57.0% libraries use of electronic books was very high during covid-19 period while, in 43.0% libraries use of electronic books was moderate level.



3.2 Extent of use of Electronic journals

Table No. 2: Extent of use of electronic journals during Covid-19 period

Extent of use	Frequency	Percent
Very high	145	48.3
Moderate	144	48.0
Not at all	11	3.7
Total	300	100.0

$$\chi^2 = 118.82; \text{df: } 2; \chi^2_{\text{crit}} = 5.99; p < 0.05$$

Above **Table 2** presents information pertaining to extent of use of electronic journals in the academic college libraries of Maharashtra during covid-19 period. Study result shows that in 48.3% libraries use of electronic journals was very high during covid-19 period while, in 48.0% libraries use of electronic journals was moderate level. Further, electronic journals were not used in 3.7% libraries during COVID-19.

3.3 Extent of use of Electronic Reserves

Table No. 3: Extent of use of electronic reserves during Covid-19 period

Extent of use	Frequency	Percent
Very high	103	34.3
Moderate	160	53.3
Not at all	37	12.3
Total	300	100.0

$$\chi^2 = 75.78; \text{df: } 2; \chi^2_{\text{crit}} = 5.99; p < 0.05$$

Above **Table 3** presents information pertaining to extent of use of electronic reserves in the Academic college libraries of Maharashtra during covid-19 period. Study result shows that in 34.3% libraries use of electronic reserves was very high during covid-19 period while, in 53.3% libraries use of electronic reserves was moderate level. Further, electronic reserves were not used in 12.3% libraries.

3.4 Extent of use of Full-text Databases

Table No. 4: Extent of use of full text databases during Covid-19 period

Extent of use	Frequency	Percent
Very high	125	41.7
Moderate	138	46.0
Not at all	37	12.3
Total	300	100.0

$$\chi^2 = 60.38; \text{df: } 2; \chi^2_{\text{crit}} = 5.99; p < 0.05$$

Above **Table 4** presents information pertaining to extent of use of full text databases in the academic college libraries of Maharashtra during covid-19 period. Study result shows that in 41.7% libraries use of full text databases was very high during covid-19 period while, in 46.0% libraries use of electronic full text databases was moderate level. Further, full text databases were not used in 12.3% libraries.

3.5 Extent of use of Institutional repository

Table No. 5: Extent of use of institutional repository during Covid-19 period

Extent of use	Frequency	Percent
Very high	82	27.3
Moderate	181	60.3
Not at all	37	12.3
Total	300	100.0

$$\chi^2 = 108.54; \text{df: } 2; \chi^2_{\text{crit}} = 5.99; p < 0.05$$

Above **Table 5** presents information pertaining to extent of use of institutional repository in the academic college libraries of Maharashtra during covid-19 period. Study result shows that



in 41.7% libraries use of full text databases was very high during covid-19 period while, in 46.0% libraries use of electronic full text databases was moderate level. Further, institutional repository was not used in 12.3% libraries.

3.6 Extent of use of Digital archives

Table No. 6: Extent of use of digital archives during Covid-19 period

Extent of use	Frequency	Percent
Very high	93	31.0
Moderate	141	47.0
Not at all	66	22.0
Total	300	100.0

$\chi^2 = 28.86$; $df: 2$; $\chi^2_{crit} = 5.99$; $p < 0.05$

Above **Table 6** presents information pertaining to use of digital archives during covid-19 period in the Academic college libraries of Maharashtra. Study result shows that in 31.0% libraries use of digital archives was very high during covid-19 period while, in 47.0% libraries use of digital archives was moderate level. Further, in 22.0% libraries was not use of this.

4.0 Conclusions

4.1 Extent of use of electronic books

- On the basis of the study results it is evident that in the in most of the academic college libraries of study area use of electronic books was very high during covid-19.

4.2 Extent of use of electronic journals

- In the backdrop of the study results it is clear that in most of the academic college libraries of study area use of electronic journals was very high during covid-19.

4.3 Extent of use of electronic Reserves

- From the study results it is evident that in most of the academic college libraries of study area use of electronic reserves was moderate during covid-19.

4.4 Extent of use of full-text databases

- On the basis of the study results it is evident that in most of the academic college libraries of study area use of full text databases was moderate level during covid-19.

4.5 Extent of use of institutional repository

- In view of the study results it is evident that use of institutional repository was of moderate level in most of the Academic college libraries of study area during covid-19 period.

4.6 Extent of use of digital archives

- On the basis of the study results it is evident that use of digital archives was moderate level in most of the academic college libraries of study area during covid-19.

5.0 References

- Balkundi S. (2023). Impact of E resources on readers during pandemic: A reader's survey, *Delta National Journal of Multidisciplinary Research*, 10(1), pp.50-56.
- Francis F. (2023). Usage of E-Resources in Academic Libraries, *Journal of Online Engineering Education*, 14(2), pp.13-26.
- Jharotia A. K. (2025). E-Resources and E-Learning in Higher Education During COVID-19 in India: A Comprehensive Analysis of Benefits and Challenges, *TULSSAA Journal*, 12(1), pp.1-14.
- Ranaweera H. M. B. P. (2021). Students' satisfaction towards the use of e-resources available in selected Sri Lankan universities during covid-19 pandemic, *Journal of Business*, 8(2), p.51.
- Saundankar S. S. (2021). Open Educational Resources: An Awareness Program for Faculty Members during Covid 19 Pandemic, *International e-Journal of Library Science*, 9(1), pp.28-42.
- Sawant S. S. (2021). Services offered by Indian libraries during COVID-19, *Annals of Library and Information Studies (ALIS)*, 68(3), pp.230-237.



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- Shukla M. B. V. and Singh M. P. (2022). Faculty Perspective on Utilization of Electronic Resources amid the COVID-19 Pandemic of Private Universities in the Delhi NCR, *Knowledge Management in Higher Education Institutions*, 276, pp.1-21.
- Tunga S. K. (2021). COVID-19 Pandemic and Online Library Services: A Web Analysis of National Institute Library Webpages, *International Journal of Information Studies & Libraries*, 6(1), pp.51-60.
- Veer R. and Panda S. (2021). Usage statistics of e-resources during pandemic period: A case study of Chandigarh University library, *Library Philosophy and Practice (e-journal)*, 6339, pp.1-15.

