

DO ONLINE E- RESOURCES SUPPORT COLLEGE STUDENTS DURING COVID-19 PANDEMIC PERIOD? : AN EMPIRICAL ANALYSIS

Sheeba Johnson¹ and Dr. K. Ramasamy²

¹Research Scholar, Mother Teresa Women's University, Kodaikanal, Tamil Nadu & Librarian St. Xavier's College, Thumba, Thiruvananthapuram, Kerala

Email: sheebajohnson81@gmail.com

²College Librarian, M.V. Muthiah Govt. Arts College for Women, Dindigul, Tamil Nadu

Abstract

The unexpected Covid-19 pandemic has changed the life of man in every part of the world. Colleges were locked down with the introduction of the work at home option. Libraries quickly moved to providing library services virtually. Within a short span of time several means of information distribution have been put to application. Though restrictions were eased these applications have become part of the academic scenario and will remain embodied to it for a long time to come. An online survey using Google Forms was conducted among students of St Xaviers College, Thumba Trivandrum. 10 questions related to information dissemination during the lockdown period such as the several means used, the innovative methods, their growth, their effectiveness, the means preferred by the academics, and the adaptation of the academics to the several means in this scenario is circulated. Responses collected from 308 students revealed that during the pandemic the bulk of the academics looked to Google search regularly for their information seeking and that the online resources found, mainly ebooks and that too the ones freely downloadable satisfied in fulfilling their syllabus needs. Online e-journals also served their syllabus based research. The study ironically revealed that even with all the latest online innovations available, the students still preferred visiting the college library and availing its physical resources mainly printed books and print journals rather than using the online e-resources that took the centre stage during the pandemic.

Keywords: *Pandemic, e-resources, college library, print resources*

Introduction

The sudden and unexpected Covid-19 pandemic has changed the life of every man no matter what country, race or economical standing. The rich or poor, black or white, young or old, have had their lives drastically affected by the pandemic. Governments worldwide were forced to place their countries in full or partial lockdown to contain the spread of the virus. Universities quickly responded and modified operations, services and procedures, which included University and Scientific Libraries quickly closing and moving to providing library services virtually. Several measures have been experimented in the educational scenario to counter this standstill brought about by the pandemic. India, reported its first positive case of the Covid 19 virus on 30 January 2020, with a student, who was studying in Wuhan University and had travelled to India. As part of precautionary measures to contain the spread of the virus, Government of India declared closure of all educational institutions across the country from 16 March 2020. During the lockdown period of the Covid-19 Pandemic colleges were locked down and the work at home era evolved. Educational institutions ranging from crèches to Research centers have been put through a lot of confusion till the utilization of the internet and World wide web and related Social media was approached to bring about an effective solution to counter the standstill. The sudden developments of lockdown for almost six months forced dislocation of many students leaving them with lack of course materials to prepare for the examinations. This situation challenged the ways academic libraries used to function. The suspension of direct services and loss of access to physical collections at the institutions libraries left the students, faculty and library professionals to consider adopting the online resources and services mode that was gaining popularity. Thus emerged the era of the Work from home and dependence on the internet and social media. Educational institutions that were large classrooms are capsuled into simple mobile phones. Educational life to students became online centered or rather mobile phone centered, with students attending classes through a mere mobile phone and institutions looking to sources such as Meet apps, Whatsapp, livestreams and even television broadcasts for their classes to reach the students. Students are more dependent on what is available to them online. College libraries also simultaneously put up their own efforts and distribute information through Whatsapp groups, Meet apps and other e-resources. Social media platforms amongst the most widely used sources of information in the World, the easy and

inexpensive access to the internet and a large number of registered users in these platforms made them one of the easiest and most effective ways to disseminate information. Library users sought the help of library resources that were in electronic aka digital form. Online resources that were earlier seldom looked to become part and parcel of very library users routine. Google searches, e-books, e-journals, external links proved fruitful to the users. Even syllabus based data was sought through Google searches and other online resources. E-books could even be downloaded for further reference. How far this transition has been accepted by the users and to what extent e-resources has satisfied the needs of library users is yet to be studied. Students who looked to books in the library shelves sought e-books available online. They looked to online journals in place of print journals. Though it caused a lot of confusion initially, the online transition have now become part of everyday student life. As time went by and restrictions were eased, several academic libraries opened to students with strict adherence to Covid 19 protocols of social distancing and preventive measures enforced in these libraries. The situation created by COVID-19 has forced institutions to make short-term changes with an emphasis on overcoming what has been considered to be a temporal situation, which will be reverted once normalcy is returned to the traditional college system. For academic librarians involved in the delivery of information skills/literacy training, a renewed mission is emerging, addressing access and connectivity to resources, designing for online education and fostering the development of digital literacy of students.

The Covid 19 pandemic

Covid 19 also known as Coronavirus all of the world in every part. It has hit the world in all sectors. The first case was reported in China in November and since then it is affecting almost all the countries in the world. It is supposedly to have originated from Wuhan in china. The first case of the COVID-19 pandemic in India was reported on 30 January 2020. The spread of the virus in and alarming rate and increasing mortality rate caused great alarm among nations leading to lockdowns declared eventually nation by nation. And the first lockdown was declared in India from 25 March to 14 April 2020, and it was extended further two times from 15 April to 03 May and from 04 May to 17 May 2020. It is a pandemic in our generation that caused even the educational scenario to come to a

sudden halt and a slow gradual transition to online means of information dissemination. There is an uncertainty, and no one knows how long the COVID-19 crisis will last.

Sudden transition and confusion

The sudden and unexpected transition from physical classrooms and libraries to digital virtual portals caused much confusion among students who were yet to learn the usage of the digital means and meeting rooms.

Circulation of Books a cause of concern; could become circulator of the virus.

Researchers looking for answers searched high and low with new views of the virus being revealed day by day and it was seen that books changing hands could help spread the virus. Books come in contact of many persons at a time, therefore, the chances of virus transmission can occur by direct contact with infected user and indirect contact with surfaces in the library or with objects used by the infected user/staff. Libraries were closed down and books back to the shelves.

Work from home librarians

To librarians, the only option to overcome the lockdown was to adopt the Work from home option. They sought ways and means to reach out to users from the four corners of their homes. The only other option was to remain locked down and locked out. Several libraries at the international, national and academic level have remained closed with zero activity and enforcing staff cuts, while those opting the virtual way rise back to survival. In the event of even print journal publishers suspending publications, those opting for virtual publications continued undisturbed by the pandemic.

Resources readily charted by librarians

The technological advancements and innovations have transformed the traditional libraries to the present smart Libraries. Today's Libraries offer wide range of innovative services to the users for their information need in the pandemic situation. Libraries are the store houses of knowledge recorded in physical/digital medium. The application of Information

and Communication Technologies (ICT), the Internet and particularly the World Wide Web have revolutionized library activities, hence there has been changes in the normal functioning of Libraries in the digital world. The present trend of library resources includes e-books, e-resources, digital library, e- services etc. Librarians charted out action plans and online resources were sourced for users. Google searches, e-books links, e-journals were scrutinized and links distributed through chat rooms and other social media applications.

Setbacks due to poor internet or poor gadgets

Though the masses began to cope with the new system, many were still faced with the problems due to poor internet bandwidth or poor quality gadgets such as Tablet pc's, mobile phones etc. This discouraged most users who faced this challenge. Even before COVID-19, there was no guarantee that students or even staff, who studied or worked on-campus, would have a stable or reliable access to the Internet or the necessary digital technologies at home that would allow them to switch to a complete remote way of working or learning.

Surge in dependence on Digital resources

Digital services that was just a part of physical libraries before the pandemic, have now become the primary source of information dissemination. Digital repositories, Social networking components, Online journals, e-books, etc have now become an unavoidable part of academic libraries.

Importance of library websites

The pandemic brought to light the importance of library websites in the field of information services. It became a primary source of library information services with two way transaction between the library and the users. Library websites that were just namesake websites have now become treasure chests of information attracting library users who rarely looked to websites for their information.

Mobile phone usage once a hazard now a blessing

Use of mobile phones that was earlier becoming a hazard has now become a necessity due to the changes brought about by the pandemic. Anyone who was not accustomed to using a mobile was almost out of the classroom or library. Meet applications that were just used for video conference meetings became part of everyday life a every academic.

Physical disorders due to excessive online dependency

Students of all ages encounter various physical and mental disorders due to the transition to virtual classrooms and libraries. Academic calendars have been re-written now and again with syllabuses cut short to ease the problems faced by students.

Gradual return to normalcy

With the easing of restrictions and return to physical libraries, the masses and returning to the luxury of physical books and resources that still remain their primary and best sought source of information.

This study focused on researching the effectiveness of online information dissemination among college students during the Covid era.

Operational Definitons

Pandemic : A pandemic is defined as “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people. The classical definition includes nothing about population immunity, virology or disease severity. By this definition, pandemics can be said to occur annually in each of the temperate southern and northern hemispheres, given that seasonal epidemics cross international boundaries and affect a large number of people. However, seasonal epidemics are not considered pandemics (Bulletin of the World Health Organization, 2011)

E-resources : An electronic resource is defined as a resource which require computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim to being marketed. These may be delivered on CD ROM, on tape, via internet and so on. Over the past few years, a numbers of techniques and related

standards have been developed which allow documents to be created and distributed in electronic form. Hence to cope with the present situation, librarians are shifting towards new media, namely electronic resources for their collection developments that the documents of users are better fulfilled. The e-resources on magnetic and optical media have a vast impact on the collections of University libraries. These are more useful due to inherent capabilities for manipulation and searching, providing information access is cheaper to acquiring information resources, savings in storage and maintenance etc. and sometimes the electronic form is the only alternative.

E-resources (electronic resource) is that, "Information (usually a file) which can be stored in the form Electrical signal usually, but not necessary on a computer.

Types of e-resources: The e-resources are basically divided in two major types are:

1. Online e-resources, which may include:

- E-journal (Full text & bibliographic)
- E-books
- Online databases
- Web sites

2. Other electronic resources may include:

- CD ROM
- Diskettes
- Other portable computer databases.

Review of Literature

Muhammad et al. (2021)

Globally, the COVID-19 pandemic negatively affected all sectors including the education system, forcing all the academic institutions and libraries to be closed for safety. Scholarly communities voiced that aftereffects of this pandemic situation are far wider than before. However, this emergency brought many opportunities and calls for a digital shift.

It has been observed that some institutions had the infrastructure to shift to digital classrooms, however, others couldn't manage and declared summer vacations. Online provision of reference services is not a new concept, however, before the pandemic this

was a less used service as people can visit physically. COVID-19 closure created more awareness about library online collection and services.

University web portals were not used widely by the users in this pandemic. Similar feedback was about social media channels such as Facebook, Twitter, etc. The reason may be low internet penetration and slow internet connectivity in rural areas. Nevertheless, telephone, email, and WhatsApp emerged as the most effective channels to communicate, contact, and engage with the user. Google Meet and Zoom were also used for conducting staff meetings. Such revelation illuminates the need of redesigning the library and information services with the help of such tools that may have an extended reach and impact. Moreover, it also emphasizes the need for high-speed internet connectivity not only in major cities and towns but also in rural areas.

Pooja and Dubey (2020)

Role of libraries in proliferation of knowledge got more consolidated by activities and webinars conducted by libraries in this crisis time. It was found that various topics of deliberations in these webinars were very relevant and apt going in line with 'making a difference' in providing something to everyone in an easy and convenient manner.

The Internet and web technologies have created a new and unparallel environment and enabling the libraries to enhance and strengthen the research, teaching and learning even in this difficult and uncertain time. The concept and practice of providing remote access of e resources by libraries is not new, but the user friendly way adopted by many libraries and the number of resources made available by them during the pandemic is exemplary.

Daniel and Leonardo (2020)

Social media platforms are amongst the most widely used sources of information in the World, the easy and inexpensive access to the internet and a large number of registered users in these platforms make them one of the easiest and most effective ways to disseminate information.

Konstantina (2020)

However, it has also been a catalyst for change and resifting of priorities. For academic librarians involved in the delivery of information skills/literacy training, a renewed mission is emerging, addressing access and connectivity to resources, designing for online education and fostering the development of digital literacy of students.

The COVID-19 pandemic stressed even more the important role of academic librarians in helping students to develop information, digital and media literacy skills so that they can be in a position to independently select, access and use accurate, reliable, trustworthy and credible sources of information, not only for their studies but also for their own wellbeing. During COVID-19 the surge of circulating false claims and information online via social media and fake news made it equally difficult for students to decipher misinformation/disinformation from accurate and reliable information.

Melendez (2020)

Though, due to social-distancing measures currently in place due to the coronavirus pandemic, thousands of libraries across the country are closed but even when shuttered, many libraries are finding creative ways to provide vital services, information, and entertainment to their patrons, from repurposing 3D printers to providing Wi-Fi and social events online. They are making sure that e-books, online magazines, and other digital materials should be available for the users.

More importantly, from the learner's point of view, the sudden shift to this online learning reality could be described as a "forced migration" to online learning design and pedagogy. What this means is that, whereas before, on-campus provision of learning and teaching experiences would be, in most cases, just enhanced or supplemented by off-site online provision, with the effects of COVID-19, there has been a complete and involuntary shift, reversing priorities and the positioning of online provision in universities.

Baloch and Musyani (2020)

The university libraries, most developed segments of academic libraries in the country, face a number of social, financial, and technical challenges. Lacking in wide-scale

technological applications, off-campus access to subscribed resources, large scale digital initiatives, institutional repositories, and collaborative projects make them special cases to study in this pandemic. Moreover, low internet penetration and mobile broadband access in small towns greatly affects the ability of students to efficiently access online classes and information resources

Adil (2020)

Librarians should support library users by compiling list of online resources on library websites, delivering online information literacy instruction through social media, and developing online institutional repositories/library guides.

Objectives of the study

1. To highlight the means available to college students during the lockdown period.
2. To find out innovative ways to reach out library users
3. To highlight the growth of online resources from the beginning of the pandemic.
4. To find the effectiveness of these means in comparison to what was available to them before the pandemic.
5. To know the preferences of academics on the means available in libraries.
6. To learn the knowledge seeking behavior of students.
7. To learn the adaptability of students to the new sudden transition.

Methodology

An online survey using Google Forms was circulated among students of St Xaviers College, Thumba Trivandrum with 10 questions related to information dissemination during the lockdown period. Responses were collected from 308 students and question based analysis was done to observe the outcome. The outcome is recorded in pie charts.

Findings

1.Dependence on Google search for information seeking during pandemic

Of the 308 respondents surveyed, 52.9% looked to Google search regularly for their information seeking during the pandemic, and 43.5% depended on it occasionally, while a meager 3.6% looked to it only on a monthly basis for information.[Fig 1].

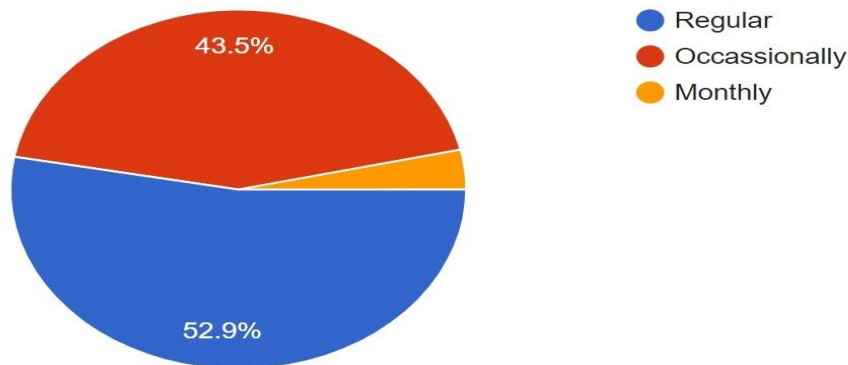


Fig. 1 Dependence on Google search for information seeking during pandemic.

2.Syllabus related information needs satisfied

59.3% said they got enough information related to their syllabus from online sources during the pandemic and 30% said they may have got it, while only 10.7% said they did not get information related to their syllabus from online sources. [Fig. 2]

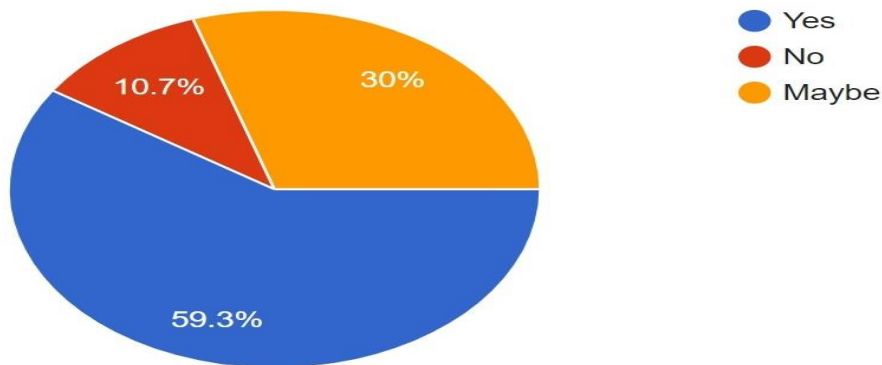


Fig. 2 Syllabus related information needs satisfied

3.Access to syllabus based ebooks

The majority of students; 45.3% said they got access to syllabus based ebooks online and 39.1% felt that they may have got it, while 15.6% said they did not get access to any syllabus based ebooks. [Fig. 3]

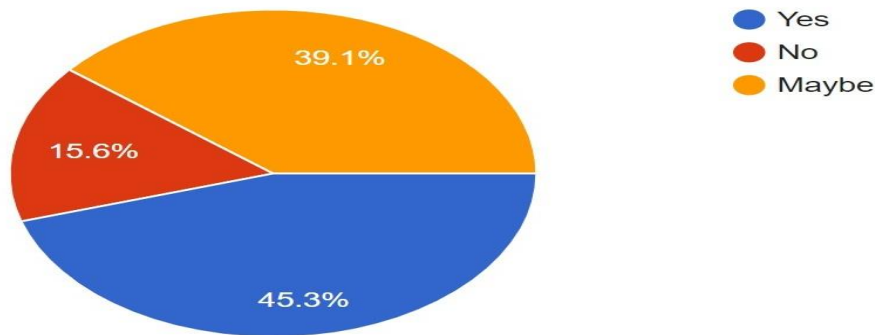


Fig. 3. Access to syllabus based ebooks

4. Dependence on Syllabus based ebooks freely downloadable

Only 26.4% agreed that syllabus based ebooks were freely downloadable while a 15.8% disagreed and a majority of 57.8% stayed neutral on the fact. [Fig. 4]

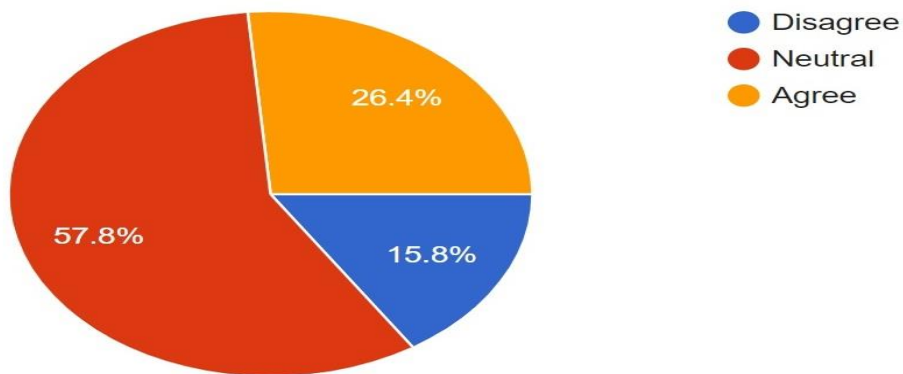


Fig. 4. Dependence on Syllabus based ebooks freely downloadable

5. Preference of printed books over e-books

But even after the world being introduced to the latest in digital technology, ironically the majority of students surveyed still preferred to walk into a library and look to printed books at the library that seek information in e-books and resources. The chunkier part of almost 85% library users still preferred Printed books over e-books. [Fig 5]

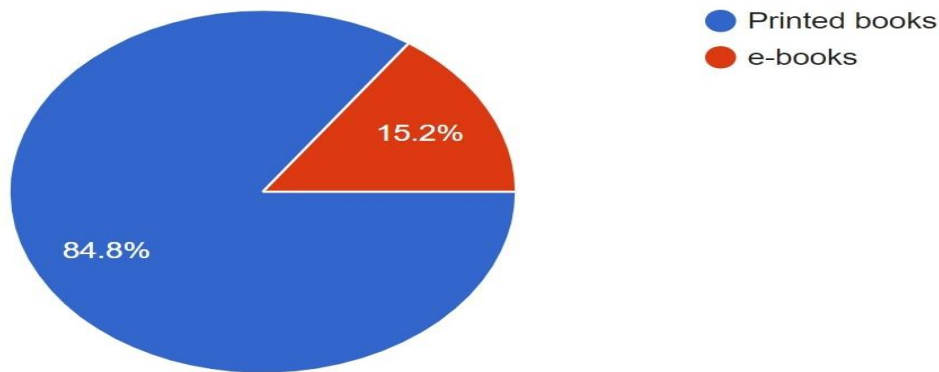


Fig 5. Preference of printed books over ebooks.

6. Dependence on freely available e-journals

Of the 308 students the 30.9% said they made use of the freely available e-journals. 42.3% were not sure while 26.7% said they did not make use of these journals. [Fig. 6]

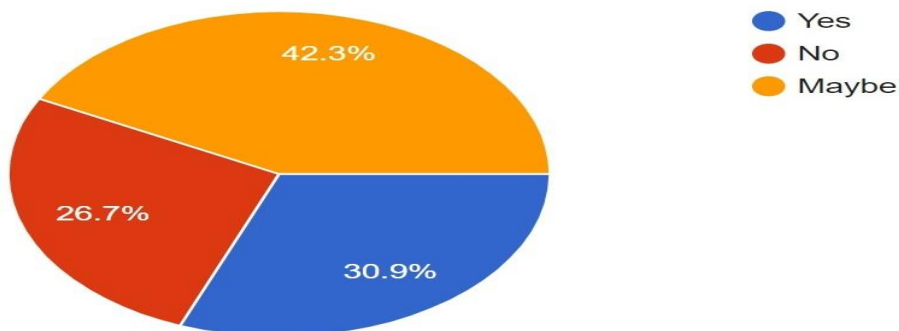


Fig. 6 Dependence on freely available e-journals

7. Preference of Print journals over e-journals

And in a similar trend the majority of students preferred Print journals over e-journals. 77.2% said they preferred print journals while only 22.8% were happy with e-journals. [Fig7]

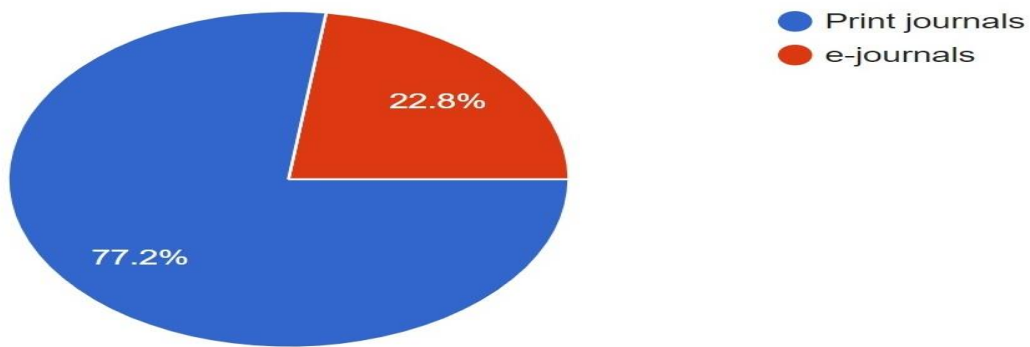


Fig 7. Preference of Print journals over e-journals.

8. Dependence on Google search for syllabus related information

As to the use of Google search service, the majority of 45% admitted that their syllabus based information search Google search did meet their syllabus based information requirements. 39.1% said it maybe so, while only 16% said that Google search did not meet their syllabus related information requirements. [Fig8]

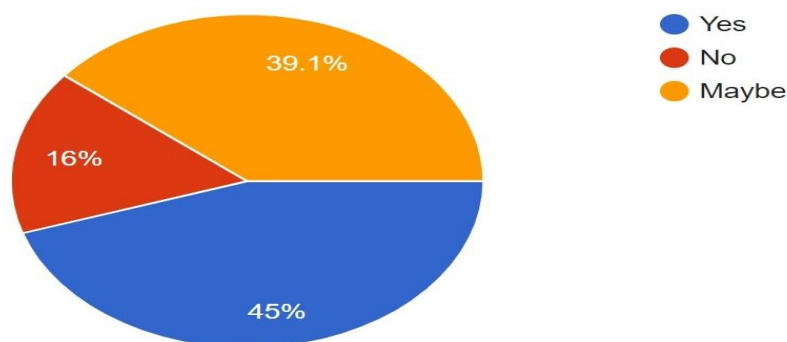


Fig. 8. Dependence on Google search for syllabus related information.

9. Physical library satisfied all information needs before the pandemic

With every student now aware of the innovative technologies in online teaching learning process, the students still saw the physical library as the backbone of their information search. 80.1% of the students still looked to the facilities at the library. A meager 2.6% said the physical library did not satisfy their information requirements.[Fig 9]

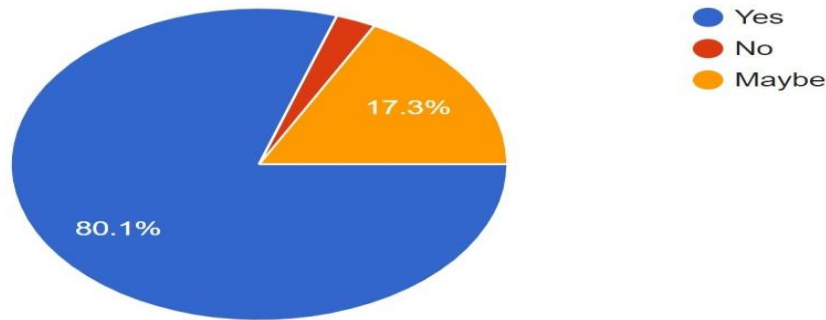


Fig 9. The physical library satisfied all information needs before the pandemic.

10. Preference for the college library over e-resources

All the latest online innovations available, the students surveyed still said they still preferred the college library over online e-resources. 68.2 % percent say they prefer the College library and 31.8% said they preferred e-resources.

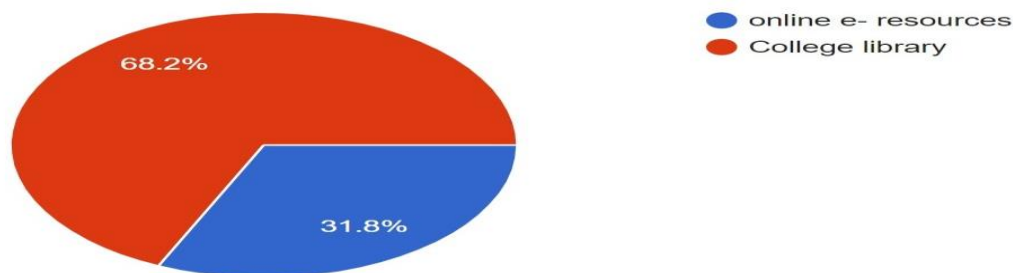


Fig 10. Preference for the college library over e-resources.

Recommendations

Based on the results of this study, the following recommendations are provided:

- (1) Alongside online information dissemination, libraries should consider opening up libraries with monitored restrictions such as social distancing and other safety measures such as limiting users per day, sanitizing material and rooms, etc to permit students to access the library on a controlled manner rather than a complete shutdown of libraries. This will certainly be well entertained by those who find it difficult in depending on online resources alone.
- (2) Students need to be given awareness of the use of the various online means of information dissemination and the various authentic digital resources.

- (3) Library websites need to be periodically updated to keep the users informed about the resources and technology at hand.
- (4) It also seems important to re-prioritize library budgets to increase the e-resources and e-services. Libraries need to invest in getting new technologies, infrastructure, systems, and staff development to be able to serve their users in emerging online environments.
- (5) Libraries need to prepare their resources, services, systems, and staff to effectively help the online students.

Conclusion

The emergence of COVID-19 has affected global educational activities. The pandemic is now changing the way we live, the way people interact, associate and conduct research and studies. Online networks became the primary tutor in 2020, with most college libraries opting for remote services via Social networking platforms and Meet platforms like Zoom, Google Meet, Microsoft Teams platform classes, that evolved from video conferencing from the late-1990s. Never before in human history has it been possible to communicate so quickly during a pandemic, social media platforms have been a key piece for the dissemination of information. The pandemic and successive developments in the teaching learning process makes it imperative for college leaders and the policymakers to make digital transformation and technology a priority in the educational scenario. It has emphasized the need and importance and ease of use of digital technology in the field of education. Though, online services are a better option for the libraries because no personal contact is made in such services but it is not feasible to provide such online services to the remote users and those are not very much familiar with the online environment. And this may be one good reason as to why users with limited resources prefer traditional libraries over online ones. Academic libraries have a renewed mission to help learners in the online space to empower them to overcome digital divides and inequalities. Academic libraries are also well positioned to increase awareness in academic staff of current information and digital literacy related issues faced by students and, in the post-COVID-19 new information realities, become changing agents in the ways in which students learn, engage, interact and create with online information.

REFERENCES

- Adil, S. A. (2020). Libraries beyond the COVID-19: New service models implications. In *Paper presented at the 2nd international conference on emerging issues of information landscape (ICEIL2020), April 20–21, 2020.*
- Baloch, S. M., & Musyani, Z. (2020, July 8). Pakistan's great digital divide. Retrieved from The Diplomat. <https://thediplomat.com/2020/07/pakistans-great-digital-divide/>.
- Daniel, A. González-Padilla., & Leonardo, Tortolero-Blanco. (2020). Social media influence in the COVID-19. Pandemic. *International braz j urol.* (e-journal). 46. <http://dx.doi.org/10.1590/s1677-5538.ibju.2020.s121>
- Definition and types of E-resources. (2020). Library & Information Science Network. <https://www.lisbdnetwork.com/electronic-resources-evaluation-criteria-library/>
- Konstantina Martzoukou (2020) Academic libraries in COVID-19: a renewed mission for digital literacy. Retrieved from <https://www.emerald.com/insight/0143-5124.htm>
- Melendez, S (2020). Closed Libraries are Offering Parking with Lot WiFi, E-Books, and Zoom Story Time. Retrieved from <https://www.fastcompany.com/90490585/closed-libraries-are-offering-parking-lot-wi-fi-e-books-and-zoom-story-time>.
- Muhammad, Rafiq., Syeda, Hina Batool., Amna, Farzand Ali., & Midrar Ullah. (2021). University libraries response to COVID-19 pandemic: A developing country perspective. *The Journal of Academic Librarianship*, 47(1), 1-10.
- Pooja, P. Dadhe., & Dubey, Manju N. (2020). Library Services Provided During COVID-19 Pandemic: Content Analysis of Websites of Premier Technological Institutions of India. *Library Philosophy and Practice* (e-journal). 4445. <https://digitalcommons.unl.edu/libphilprac/4445>
- The classical definition of a pandemic is not elusive. (n.d.). WHO - World Health Organization. <https://www.who.int/bulletin/volumes/89/7/11-088815/en/>

