

# Challenges faced by university libraries in the context of the covid-19 pandemic

Flor de Maria Silvestre 1 , Murilo Bastos da Cunha 2





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#### **ABSTRACT**

Like other institutions, libraries were not prepared to respond to everything that the Covid-19 pandemic brought: social isolation, remote work, suspension of academic activities, uncertainties about the return to the new normal, etc. This paper analyzes information from six academic libraries in the Federal District (Brazil), describing what were the first measures and steps that libraries implemented to keep up with the current life of their users. Semi-structured interviews and document research with content analysis were applied, identifying the following results: (1) Adoption of protocols and guides for users on security measures, libraries published documents with security measures, based on information from international and national institutions; (2) Use of social networks to promote services and communicate with users, with Instagram being the main ally for the dissemination of services and for being in contact with users.

#### **KEYWORDS**

Academic libraries. Covid-19. Library services. Federal District.

# Desafios enfrentados pelas bibliotecas universitárias no contexto da pandemia da COVID-19

#### **RESUMO**

Introdução: Assim como outras instituições, as bibliotecas também não estavam preparadas para dar respostas a tudo o que a pandemia da COVID-19 trouxe: isolamento social, trabalho remoto, suspensão de atividades acadêmicas, incertezas sobre a volta ao novo normal, etc. Objetivo: Este trabalho analisa informações de seis bibliotecas universitárias do Distrito Federal (Brasil), descrevendo quais foram as primeiras medidas e passos que essas bibliotecas implementaram para seguir vigente na vida dos seus usuários. Método: Para a coleta de dados foram aplicadas entrevistas semiestruturadas e pesquisa documental com análise de conteúdo. Resultado/Conclusão: Foram identificados os seguintes resultados: (1) Adoção de protocolos e guias para os usuários sobre medidas de segurança, sendo que as bibliotecas publicaram documentos com as medidas de segurança, baseados em informação de instituições internacionais e nacionais; (2) Uso de redes sociais para promoção dos serviços e comunicação com os usuários, sendo que o Instagram apresentou-se como o principal aliado para a difusão dos serviços e para entrar em contato com os usuários.

#### PALAVRAS-CHAVE

Bibliotecas universitárias. COVID-19. Bibliotecas. Serviços em bibliotecas. Distrito Federal.

#### Author's correspondence

<sup>1</sup>University of Brasília, Brasília, DF, Brazil / e-mail:

silvestreestela@unb.br

<sup>2</sup>University of Brasília, Brasília, DF, Brazil / e-mail: murilobc@unb.br

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## 1 INTRODUCTION

As of March 2020, Brazil faced a global emergency due to the COVID-19 virus, having been recognized as a pandemic by the World Health Organization (WHO). As a result, the economic and social structure of the world changed. Due to its high rate of transmission, the lack of vaccines and effective treatments, governments adopted social isolation measures in order to prevent the collapse of the hospital system. Thus, remote working activities began in all sectors, including the libraries that are part of universities.

In addition, in the same period, there was the cancellation of face-to-face classes at all levels of education. Little by little, educational institutions adapted to virtual teaching, with libraries closed, adapting physical services to the virtual environment and creating new services that reached their users who could not physically go to the library. It is important to point out that it took a few months for the libraries to adapt to their realities, some suspended all their physical services, others adapted some of them to the virtual environment, as well as those that created new services and others that only stayed with the ones which they had implemented before the pandemic.

In order to know the performance of university libraries in the context of the pandemic, this research was developed with the general objective of identifying what were the first measures that libraries implemented to remain active in the lives of their users.

## 2 OUTLINES AND SECURITY PROTOCOLS FOR SERVICE IN LIBRARIES

In the first months of the pandemic and the pronouncement of remote activities, the library found itself in a situation of adaptation and reformulation of what to do, how to do it, and what would be the right thing or the advisable thing to do, etc. Therefore, a bibliographic survey was carried out to find out what had been published regarding the directives, that is, the standard and/or guidelines that regulates the functioning of libraries and information centers, in the context of the pandemic.

In order to identify the publications that guided the resumption of activities of university libraries in Brazil, we reviewed the documents made available by the **CONVIDE-i9 Virtual Library**, a collaborative proposal of the Association of Librarians and Information Science Professionals of the Federal District (DF, in the Brazilian acronym) (ABDF), the Brazilian Federation of Associations of Librarians, Information Scientists and Institutions (FEBAB) and volunteer librarians (ASSOCIATION OF LIBRARIES AND PROFESSIONALS OF INFORMATION SCIENCE OF THE DF, 2020). The virtual library has eight categories, our research focused on the category "Protocols and recommendations" <sup>1</sup>, the searches were carried out from July 9 to 20, 2021.

A bibliographic search was carried out considering only publications from March, April, May, June and July 2020, the first ones from the beginning of the pandemic, as well as publications from institutions and associations of librarians. Thus, 14 publications were identified with the indicated characteristics, as shown in Chart 1.

**Chart 1.** Publications on COVID-19 safety standards, actions, and protocols from international institutions

INSTITUTION	PUBLICATION TITLE	MONTH - YEAR
American Library Association (ALA)	Pandemic Preparedness: Resources for Libraries (AMERICAN LIBRARY ASSOCIATION, 2020a)	March- 2020

<sup>&</sup>lt;sup>1</sup>Protocols and recommendations in the CONVIDE-ig Virtual Library. Available in: <a href="https://abdf.org.br/biblioteca-virtual-convide-ig/protocolos">https://abdf.org.br/biblioteca-virtual-convide-ig/protocolos</a>. Access: 21 jun. 2021.

American Libraries, official ALA jornal	How to Sanitize Collections in a Pandemic: conservators weigh in on the mysteries of materials handling during COVID-19 (EWEN, 2020)	
March — 2020		
International Federation Of Library Associations And Institutions (IFLA)	COVID-19 and the Global Library Field (INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS AND INSTITUTIONS, 2020)	
April- 2020		
European Bureau of Library, Information and Documentation Associations (EBLIDA)	Guidelines on access policies, personnel security, social distancing and sanitation of collections (EUROPEAN BUREAU OF LIBRARY, INFORMATION AND DOCUMENTATION ASSOCIATIONS, 2020)	
April-2020		
International Council Of Museums	Conservation, management and security of collections: protection of professionals and performance of museological institutions, archivists and libraries in times of Covid 19 (INTERNATIONAL COUNCIL OF MUSEUMS BRASIL, 2020)	
April- 2020		
Portuguese Association of Librarians, Archivists and Documentalists	Taking a stand: archives and libraries during the Covid-19 pandemic (PORTUGUESE ASSOCIATION OF LIBRARIES, ARCHIVISTS AND DOCUMENTALISTS, 2020)	
May- 2020		
Canadian Federation of Library Associations (CFLA-FCAB)	Fair Dealing Guidance for Canadian Libraries During the Time of COVID-19 (CANADIAN FEDERATION OF LIBRARY ASSOCIATIONS, 2020)	May- 2020
Super library marketing		
Angela Hursh	Your Library is Reopening: How to Communicate New Rules to Your Staff and the Public During a Pandemic (HURSH, 2020)	May- 2020

Source: Elaborated by the authors based on the virtual library CONVIDE-ig.

With the pandemic, intuitions and professional associations came together and organized research initiatives: on COVID, fighting disinformation, sharing experiences, preparing for the COVID-19 pandemic. As in the case of ALA, which made available the "Pandemic Preparedness Resources for Libraries" tab (AMERICAN LIBRARY ASSOCIATION, 2020a).

In addition to the international initiatives in the field of Information Sciences, we also have the international and national organizations in the health area that served as a basis for the elaboration of guidelines and safety standards, we highlight the World Health Organization (WHO), the Pan-American Health Organization (PAHO) and the National Health Surveillance Agency (2019).

Below, we present a summary of the recommendations indicated by national and international institutions. Altogether, they all coincide in the care for user service, conservation

of the collection, reopening of libraries and dissemination of services through virtual platforms. These were the documents published at the beginning of the pandemic, which served for many other libraries to be inspired and use as a reference, in order to prepare internal documentation.

## 2.1 Designs and security protocols in library management

- Reorganize activities with teleworking conditions;
- Redistribute furniture and workstations, so that there is the recommended physical distance;
- Adopt the spacing indicated by the health authorities, by means of signs on the floor, marking the spacing;
- Suspend receiving donations until the pandemic is controlled;
- Avoid leaving materials for special treatments, such as rebinding at this time;
- Evaluate the possibility of eliminating or reducing the rates of fines or other penalties in this pandemic period;
- Prioritize the acquisition of electronic content;
- Make intensive use of social networks, apps, emails to keep the user community informed about opening dates and service offerings.

#### 2.2 Collection design and security protocols

- The delivery of the material requested for loan can be made by scheduling with a preestablished date and time;
- Returns exclusively in boxes or places adapted for this purpose, so as not to receive them directly at the library counter;
- Separate a shelf for receiving bibliographic materials and identify it as a "quarantine shelf";
- Recommended period for quarantine is at least 5 days without using any product that jeopardizes the integrity of the books;
- The virus can stay on surfaces for several days, for paper it is estimated 4 to 5 days.

Regarding the permanence of the virus in circulating library materials before they are placed on the shelves, we have a test carried out by the Reopening Archives, Libraries And Museums Project (REALM Project). The test was carried out by applying the SARS-CoV-2 virus (the virus that causes COVID-19) to five materials kept under normal conditions of room temperature and humidity:

- (1) Hardcover book cover;
- (2) Book cover;
- (3) Simple paper pages inside a closed book;
- (4) Plastic book cover (biaxially oriented polyester film);
- (5) DVD case.

The results show that the SARS-CoV-2 virus was not detectable on the materials after three days of quarantine at standard office temperature. In addition, the relative humidity conditions that can generally be achieved in any climate-controlled office space provide an environment that allows for natural attenuation of SARS-CoV-2, according to the REALM Project study (REOPENING ARCHIVES, LIBRARIES AND MUSEUMS PROJECT, 2020).

Another similar test was published in the Journal of Hospital Infection by Kampf *et al.* (2020), which indicates that the virus can persist on some inanimate surfaces (such as metal, glass and plastic) for up to nine days and on paper for up to four or five days. With these scientifically proven tests, librarians had more confidence when setting the quarantine period for borrowed books from 4 to 5 days.

Regarding how to sanitize collections, there is not much literature on the fact that the COVID-19 virus is very recent. We have, for example, the Northeast Document Conservation Center (NEDCC) (2020), in the document entitled "Disinfecting Books and Other Collections"

that presents technical recommendations to keep in mind when cleaning our collection. One of them being the non-use of cleaning and disinfection products, ultraviolet radiation (UV), nebulization and heat treatment:

Liquid disinfectants and cleaning powders can damage cultural heritage collections if they come into contact with them and are therefore **not recommended** for disinfecting collections. Liquid disinfectants can cause moisture damage, discoloration and staining. The chemicals in these products can react over time with the components of media materials and objects (e. g. plastics, metals, inks and dyes) and can cause paperbased materials to become weak and/or brittle as they get older. Powder cleaners are generally too abrasive to be used directly in cultural heritage collections. (NORTHEAST DOCUMENT CONSERVATION CENTER, 2020, p. 2, our translation, highlighted by the author)

Nebulization is ineffective because chemical fog has no impact on contaminants between stacked or filed materials, inside a file box or folder, or between pages of books and magazines, the same goes for UV light, plus UV light is known to cause fading, discoloration, embrittlement and accelerated aging of materials. Although heat has been shown to be effective in destroying SARS-CoV-2, this requires exposure to high temperatures for 20 minutes or more, this time and intensity of heat is potentially harmful to the collection materials (NORTHEAST DOCUMENT CONSERVATION CENTER, 2020). Therefore, the best thing to do is to indicate to users, librarians and library staff personal hygiene to come into contact with the materials of the collection. The other measure to be taken is the quarantine and exposure of the material to room temperature in a period of 4 to 5 days.

## 2.3 Outlines and security protocols in services

- Subject to conditions, the library may offer alternative services for borrowing physical materials (home delivery, drive-through, delivery of books by motoboy, delivery of books by mail, etc.), digitizing the library's own material;
- Offer information about the pandemic based on official sources, contributing to the reduction of misinformation and fake news;
- Enhance existing online services and digital content.

#### 2.4 User and librarian security outlines and protocols

- Use of personal protective equipment, PPE, recommended by health organizations;
- Social distancing: the recommended minimum distance between people is 2 (two) meters;

As in other areas, libraries have adapted to protocols and security measures to protect the librarian, its users, the team that composes it and the physical collections. It took a few months for libraries to adapt according to their realities, some suspended all their physical services, others adapted some of them to the virtual environment, as well as those that created new services and others that only stayed with the virtual ones, implemented before the pandemic. However, all libraries in the sample disseminated a document (protocol, indications, library policies). These indications have been updated frequently, with a first and/or second version being available, according to the advances of the virus.

With the adaptation of some services and forms of work, such as face-to-face and remote work, a hybrid functioning of the library can be observed. It was necessary to study a way to continue offering information services and products, but it was a challenge to convey the services and products to users and non-users of the library.

# 3 SOCIAL NETWORKS AND LIBRARIES IN THE PANDEMIC

From March 2020 to December 2021, the COVID-19 pandemic caused significant changes in the digital habits of people around the world. As a result, increased use of messaging, social media, entertainment, video and shopping applications was added.

In the specific case of university libraries, they were already immersed in the world of technologies, having technical processes and areas of services and marketing. However, the challenge was to inform its users that they were active and that services were available in the virtual environment. For this, it was opportune to know the profile of the users: young people between 18 and 30 years old, generation Z, who understand the operation of technological tools better than anyone else

The internet has been there since they were born and is part of the common landscape complemented by portable digital devices, web services such as Google, social networks, video servers online, high data transfer speeds and great opportunities for interaction and innovation in a daily way. Much of life happens on screen and activities such as watching television, reading to periodicals are unusual compared to other generations. (HERNÁNDEZ AND HERNÁNDEZ; RAMÍREZ-MARTINELL; CASSANY, 2014, p. 119, our translation).

According to data from the report "Digital 2020: Brazil", from the companies We Are Social and Hootsuite, the use of social networks in Brazil has increased every year, the report shows that 66% of the Brazilian population is active on social networks. In addition, it spends, on average, 4h41min on the internet with its mobile devices. In general, people tend to get informed, like and share content, as the main actions (WE ARE SOCIAL; HOOTSUITE, 2020). Taking this data into account, university libraries find an ally on social networks, whether through Youtube, for sharing videos of tutorials and workshops, or Instagram, to interact with users on a daily basis

Through videos, the library can socialize tutorials teaching users to search the collection, use databases of books and periodicals, publicize events and exhibitions that are taking place in the library environment, promote raffles and even establish a dialogue with their users, among other services. (ARAÚJO; FREIRE, 2019/2020, p. 47).

This is effectively what happened in the pandemic, Instagram has become a platform that allows access to the library 24 hours a day. Therefore, there was the possibility of real-time interaction between the library staff and users, whether to ask questions, teach something or make polls, like and share posts. In addition, it has very dynamic tools that have been well used by libraries, as described in Chart 2.

Chart 2. Instagram tools used by libraries

INSTAGRAM RESOURCES	LIBRARY SERVICES AND ACTIVITIES
Bio	Contact number, hours, link to library website
Lives	Workshops, live training
Highlights	Fix information about services, trainings
Stories	Invitations to the cine club, to library activities  Polls to choose the next book for the book club
Feed	Art about commemorative dates Posters, activity post

Source: Elaborated by the authors.

Keeping active, updated and in contact with users is not a single person's task, nor is it a simple activity, it is part of an area of digital marketing, and needs to be planned

The importance of having guidelines for the use of social media within a library is given by the consistency in the performance focused on a strong and segmented digital presence based on its target audience. Therefore, they need to integrate the production, dissemination, interaction and monitoring of content according to a plan. (PRADO; CORREA, 2016, p. 175).

In view of this, Prado and Correa (2016) indicate seven guidelines for the use of social media that are the basis for developing a digital marketing plan for university libraries:

- 1. **Planning**: defining objectives, identifying human and financial resources.
- 2. Social and behavioral aspects: studies to know the user's profile.
- 3. **Ethical and legal aspects**: avoid cybercrimes (inappropriate use of image and text, plagiarism, copyright, invasion of privacy and others).
- 4. Languages and Content Types: Speak the same language as your followers.
- 5. **Monitoring and metrics:** track the perception of your followers and monitor compliance with the plan
- 6. Crisis management: honest posture and clarity in writing to avoid dubious interpretation.
- 7. **Evaluation schedule**: observe whether the objectives defined in the planning were achieved.

Access to social networks is free and does not generate investment, however we have to consider the guidelines indicated by the authors and have those responsible in the library team to coordinate and review the posts, define the themes, the frequency of posts, follow the statistics, monitor user interaction and answer all questions.

In addition to what is indicated in guideline two, due to the characteristics of digital native users and the service provided by libraries having become virtual, the libraries participating in the present research chose social networks as a tool for active communication with their users and non-users, because if someone likes a post, they can share, save or repost it, reaching people who didn't even know it was a library post. Therefore, investing in dynamic publications that speak the same language as young people is very important.

#### 4 METHODOLOGY

The present research is an action research, as we count on the participation of librarians from the validation of the instrument to the stage of suggestions for the development of skills in the use of Information and Communication Technologies (ICT). Data collection was divided into two parts: in the first, document analysis was carried out on the libraries' websites and social networks; the second consisted in the application of a semi-structured interview, allowing this instrument a more open dialogue with the interviewees, being able to formulate questions and re-questions. The interview was applied during the pandemic period, from June to August 2021, with the librarians in charge of six university libraries. The sample consisted of six universities in the 2019<sup>2</sup> General Index of Evaluated Courses of the Institution (IGC) ranking, composed of a Federal University, four private ones and a Federal Institute, namely: University of Brasília (UnB), Catholic University of Brasília – UCB, University Center of the Higher Education Institute of Brasília (IESB), Euro-American University Center (UNIEURO), Federal Institute of Education, Science and Technology of Brasília (IFB), Planalto University Center of the Federal District (UNIPLAN).

<sup>&</sup>lt;sup>2</sup> The National Institute of Educational Studies and Research Anísio Teixeira (INEP) released on the morning of 23/4/2021, the data from the General Index of Evaluated Courses of the Institution (IGC) 2019. Available at: https://www.gov.br/inep/pt-br/acesso-a-informacao/dados-abertos/indicadores-educacionais/indicadores-dequalidade-da-educacao-superior. Access on: 1 jun. 2021.

Finally, content analysis of security protocol documents and interviews were performed. Content analyzes constitute "a set of communication analysis techniques that use systematic and objective procedures for describing the content of messages" (BARDIN, 2016, p. 36) [...] this approach aims to effect logical and justified deductions regarding the origin of the messages. Taking into account (the sender and its context, or, eventually, the effects of these messages)" (BARDIN, op. cit., p. 42), which were applied both in the documents published by the libraries and in the interviews. Thus, identifying the guidelines and units of analysis.

## 5 DATA ANALYSIS

In the analysis of data for the theme of safety policies for the library's performance in the pandemic, three categories were identified (document of resumption of activities, safety protocols, services and collection).

In Table 3, the units of analysis are indicated, which represent the activities and processes developed in the libraries, ranging from planning, care of the team and collections to the information that will reach users.

Chart 3. Library and analysis units against COVID-19

LIBRARY-PANDEMIC	ANALYSIS UNITS
Activity resumption document	Protocols – guides – standards (planning)  Operating steps
, '	Communication channels
	Personal protective equipment (PPE)
	Social distancing
Safety protocols	Mask use
	Hand hygiene with alcohol gel
	Types of services
	Reservations
Services in times of a pandemic	Loans
	Returns (quarantine)

**Source:** Authors' adaptation from interviews and library documents.

Of the six libraries interviewed, three published documents referring to the activity resumption plan, library operation guide and technical recommendations. The other three libraries did not publish documents directly but were included in a more general document of the institution, for which they asked for the recommendations of the librarians responsible.

## 6 DOCUMENTS - PUBLISHED STANDARD PROTOCOLS

Regarding the published documents, all respondents indicate the planning in which the steps of gradual availability of library services are described, the hygiene care to be taken and the communication channels for users and non-users to contact. In the article Reopening: Not "When?" But "How?", Balzer (2020), the importance of marking a way forward is presented, the author quotes Lori Smith Thornton, head of the Public Services Department at the New

Mexico State Library (NMSL) in Santa Fe, who developed one of the first plans to reopen libraries in April 2020. The plan begins with an indication of maintaining interlibrary loans and book-by-mail services and requires the reorganization of furniture and computers to allow for social distancing, as parts of the building were reopened to the public. These are basic measures that the libraries participating in the research have implemented and communicated to their users.

In the case of UnB, the library points out five steps for resuming activities and indications of the availability of products and services in this period and the requirements for accessing them

[...] the essentially face-to-face user service activities will be partially resumed, distributed in five stages: stage 0, stage 1, stage 2, stage 3 and stage 4. They will be released and disclosed in the ECB's communication channels in accordance with the steps foreseen in the General Plan for the Resumption of Activities at the University of Brasília and will occur gradually, according to the adaptation of the service to this reality, following the guidelines of UnB and health authorities. (UNIVERSIDADE DE BRASÍLIA, 2021, p. 11, highlighted by the author)

The documents provide precise indications for users about the services available, hours and service channels, as well as didactic information on safety protocols, such as the use of PPE, necessary according to the guidelines of the responsible bodies.

#### 7 SAFETY PROTOCOLS

All libraries participating in the research were complying with the security protocols indicated by the competent authorities, which was proven in the visits carried out between June and July 2021, at which time all libraries were operating by appointment.

The protocols, norms and security standards adapted by the libraries are those indicated by WHO, PAHO and ANVISA. These indications may be renewed, at any time, in the light of new findings from the International Scientific Community, WHO and/or the determinations of Brazilian health authorities.

Among the measures indicated by the MS are non-pharmacological ones, such as social distancing, respiratory and hand hygiene etiquette, use of masks, cleaning and disinfection of environments and home isolation of suspected and confirmed cases, which must be used in an integrated manner, in order to prevent illness and control the transmission of COVID-19, also allowing the gradual resumption of activities carried out by the various sectors and the safe return of social life. (BRASIL, 2020, p. 64)

It is observed that the six libraries participating in the research adapted to the security protocols indicated by the competent institutions, as was proven in the visits, this is because the libraries did not close their doors to face-to-face work, even if only for technical processing, this fact allowed to carry out.

In these six visits, the following were observed:

- Thermometers for measuring the temperature at the entrance (of the University);
- Alcohol gel totems at the entrances to the library;
- Acrylic protection in service areas and workstations;
- Distance signage, limitation of spaces between study tables;
- Space limits for attendance;
- Distance of 1.5 meters between people;
- Sanitizing mats;

• Notices posted in visible places which indicate, for example: "Only access by people using masks will be allowed, as established by decree n. 40,648, of April 2020"; notices with didactic images of security protocols.

Due to the fact that the theme is new and constantly being updated, there are few publications on the adaptation of protocols in the area of librarianship; we have a document by Vam De Berg (2020) focused on professionals working in archives, libraries, museums and documentation centers. In it, the author indicates that they should be active agents in the containment of the spread of the coronavirus (COVID-19) and in the search for the preservation of the documents of their institution.

For the containment of the virus to be effective, archivists, librarians and museologists must:

- Avoid the proliferation of microorganisms that cause damage to both documents and the health of professionals;
- Ensuring greater durability of documents;
- Ensuring the citizen's right to have access to information. (VAM DE BERG, 2020, p. 5)

All libraries participating in the survey complied with personal care and collection protocols. With the protocols adopted and the distribution of team functions, the next step was to define which services would be adapted to the virtual environment and which would be created considering the profile and needs of university library users.

## **8 SERVICES IN TIMES OF A PANDEMIC**

The responding libraries did not close their doors to users, they continued to offer face-to-face services by appointment; remote/online services. Some services were adapted from face-to-face to virtual, some of these services from the libraries participating in the research were adapted to the virtual environment during the pandemic:

- Face-to-face book loan now book loan by appointment;
- On-site laptop loan now laptop loan by appointment;
- Chat on the website or Messenger, in the pandemic virtual shifts, WhatsApp or direct from Instagram;
- In-person training, lives through the various platforms, web conference;
- Face-to-face reading club in the pandemic, in the virtual environment, on Instagram or Youtube;
- Face-to-face film club during the pandemic, in the virtual environment, via Instagram or Youtube;
- Nothing appears and payment of fines in person now virtual;
- Self-service scanner, in the pandemic digitization of the collection and sending the material via email, respecting copyright.

Many libraries reinvented themselves and created new services in these contexts. In three of the six participating libraries, at the request of users, they created the service "Virtual Study Table Scheduling". The use of library study tables, before the pandemic, was free, the student entered the library and occupied a table, in the pandemic, this service started to be done through scheduling, and its use implied the implementation of all protocols of security.

Book Drive Thru: Library lends on demand. What was traditionally the Drive Thru for fast food, getting the food without leaving the car, was also implemented to get the vaccine, just as it happened in the library, it was a differentiated service implemented, in a pioneering way, by the IESB library. Very practical service, just arrive, park and pick up the book, without getting out of the car, and go home. "The student requests the book by email or phone, and the employee separates the selected material, then puts it in a plastic bag, along with the loan receipt". "The student just has to go get it", explains the supervisor of the Library, Vanessa

Rufino, who put this service into practice. Excerpts from the interview on a national TV channel (IESB OFFICIAL, 2020). This service became news in Brazil, as it favored service to users, as mentioned by the librarian in charge. The student stays with the book for 30 days and, when he returns to the library, the book is quarantined, away from the material, and then returns to the general collection.

Regarding scheduled loan services, the five libraries that provided the loan service complied with the quarantine indicated by the health authorities for the hygiene of materials, they also allocated a room for returned materials or, in other cases, separate shelves for the borrowed materials. In addition, two libraries provided self-service to return books.

Returned books were quarantined. Some libraries indicate 14 days, and others, five to four days, and only after that time would they be available for a new loan. Therefore, these measures are in agreement with Kampf et al. (2020) and REopening Archives, Libraries And Museums Project (2020).

The UnB Central Library (BCE-UnB) recommended that returns be made exclusively at the self-service machines, located on the ground floor of the library, to avoid any type of contact with library employees. All libraries indicated that they informed users about the status of materials.

Returned materials will be under the **situation quarantine in Pergamum**; this situation will be visible to the user at the time of the search and the request of the item will be allowed after the quarantine has been fulfilled. (UNIVERSIDADE DE BRASÍLIA, 2021, p. 14, highlighted by the author).

Thus, the user is aware of the situation of the material, which reinforces the care of the person who works in the library: with users and in the handling of borrowed documents.

As in other areas, libraries have adapted protocols and security measures to protect the librarian, their users and library staff. Therefore, we can say that the collaboration of experiences and safety standards in librarianship, both nationally and internationally, was present through the sharing of information, research and collaborative work, which allowed, in a short time, to publish documents of interest to the sector, in this context of the pandemic.

## 9 COMMUNICATION CHANNELS BETWEEN LIBRARIES AND USERS

Knowing how the library works was one of the priorities indicated by the interviewees. In this context, virtual platforms, websites, apps and social networks were the main means to open the doors of libraries to users and non-users. ALA Executive Director Tracie D. Hall, in her March 2020 COVID-19 statement, mentions that we make sure library users and non-users are aware of the valuable resources they have to offer from new services created as well as being the main resource and support for teachers and students in online classes (AMERICAN LIBRARIES ASSOCIATION, 2020b).

- a) From the interviews, we identified two units of Means to learn about the functioning of the library, services and products made available during the pandemic;
- b) Means to keep in touch with users and develop activities in the virtual environment.

In unit of analysis "A", the six libraries indicated using institutional e-mail; two libraries use Moodle and Teams; two indicated using the institution's website; two TikTok; four, Instagram and, finally, four indicated the library's website as a means of getting to know its users through service protocols and the library's new products and services. It is important to point out that institutional e-mail is the main means of forwarding information to users and non-users of the library, however, it does not guarantee that members of the academic community

will review your e-mail. Still, the library's website is the first place everyone will look for information about this institution.

Figure 1. Social networks and communication channels of libraries.

Source: Elaborated by the author.

As can be seen in Figure 1, the most used channel to send information to users was email. From the moment of registration, members of the academic community have to indicate their email address to obtain the student card, access that is registered in the university's system. Through email, libraries send newsletters of the latest acquisitions, among other information. The interviewees mention that before the pandemic they were monthly and that, in 2021, the period in which they contributed to this research, it was more frequent.

We can say that the library's website serves as an information medium and a fixed platform, which has existed since before the pandemic, in addition to finding traditional information, now we can find services and schedules available during the pandemic; security protocols against COVID-19, online service channel and library social media links.

In the unit of analysis "B", the interviewees pointed to social networks as the main ally to be in contact with their users. These networks emerged as a tool to support library management during the pandemic period, as the biggest users of university libraries are students belonging to an age group of potential users of social networks. One of the reasons why the libraries interviewed used these platforms to be in contact with their users.

The social networks to which the libraries are subscribed are WhatsApp, Facebook, Twitter, TikTok and Instagram. To exchange information and channels to post videos and hold virtual meetings, workshops and training, we have: Youtube, Google Meet, Microsoft Teams, Moodle and Zoom, in which training takes place online and webinars, are the preferred means of access by the generation Z, as indicated by Araújo and Freire (2019/2020). According to the report "Digital 2020: Brazil." (WE ARE SOCIAL; HOOTSUITE, 2020), the use of social networks in Brazil has increased every year, as pointed out in the report.

Instagram was the platform chosen to keep in touch with users and implement the library's services and products through the multiple tools it makes available. Of the six libraries participating in the research, four indicated Instagram as the main channel of dissemination, the other two libraries, as they are dependent on national sponsors, would have to carry out many bureaucratic procedures to obtain authorization to create a library account, since they used the institutional email to continue in communication with their users.

The interviewees indicate as a challenge the incursion into the world of social networks, the use of photo and video editing programs, and the creation of arts and content to have users engaged with their publications. Two of the libraries have a communication professional who contributed to the posts. We check the data on Instagram from the libraries participating in the

research and, indeed, they are very dynamic, as their contents are very striking and with topics of interest to young university students.

The Instagram of the IESB library was indicated by FEBAB, as described by Sena (2021), as one of the most important in sharing content relevant to the area and society in general. On the IESB library's Instagram, we identified posts that respond to viral marketing, with the creation of fun announcements, dynamic arts, with current themes, all in the world of librarianship, with the aim of reaching more people.

Viral marketing is the creation of fun or informative messages designed to be disseminated exponentially in the virtual world, reaching the largest number of people, in the shortest possible time. It's the famous buzz. The objective is to make the advertising go viral, but the viral effect only occurs through the choice of consumers (BRAZILIAN SUPPORT SERVICE FOR MICRO AND SMALL BUSINESSES, [2019?], p. 8).

As an example, there is a post that went viral through its sharing in WhatsApp groups and social networks. It was published when the Olympics were taking place. They made a post titled: "What kind of student are you?" (IESB LIBRARY, 2021). The art was related to a discipline of the Olympics and the library user. In this regard, in the interview, the librarian in charge makes the following statement: "We are creating content that has the face of the student, has the face of youth, that is no longer an Instagram of libraries or reading that says that the library closes today, opens tomorrow... no!" (IESB library responder). This is what is also observed in the posts.

It can be seen how Instagram has become an important ally for libraries due to its dynamism and the options it presents, such as the publication of short videos, Reels videos – which can be up to a minute long, photos, polls, hashtags, music, dynamic stories with photos and videos, thus making publications more attractive to young people who enjoy this type of app.

To keep Instagram active and dynamic, it is essential to have a digital marketing plan for social networks, to have a schedule per month, to define the number of posts per week, posting times, to identify commemorative dates or day-to-day events, arts, photos and texts ready for publication in areas of interest to users, as indicated by Prado and Correa (2016).

Angela Hursh (2021), library marketing specialist, blogs about marketing on social media. Regarding Instagram, she indicates trends for 2022, such as: focusing on carousel posts, which are a mix of photos and videos, giving better engagement results. In addition, the expert states that:

[...] the platform is shifting its focus to video. This shift comes due to the growing popularity of online videos, as well as the threat of competitors including TikTok and YouTube. Instagram will give more visibility and engagement to videos in 2022. (HURSH, 2021, translated by us).

This is because, according to the research, the libraries participating in Feed only post photos, it would be a challenge for 2022 to include videos.

This implies a team that is committed and constantly updated on the subject of social networks, following a marketing plan, as indicated by Prado and Correa (2016). For better decision making, we can make use of Instagram tools, such as metrics, in which we can see what kind of posts the most likes had; range; comments; hours of the day and day of the week when the best time is to post according to the library's followers, since its users are following your posts and cannot stay long without producing content.

For all these aspects mentioned above, we believe that marketing through social networks was the timeliest option for libraries. It allowed to be in contact with users equitably, showing, in a relaxed way, the resources it offers.

# **10 FINAL CONSIDERATIONS**

The pandemic allowed librarians to reinvent themselves and face the challenges of working remotely in a totally virtual environment. The first challenge indicated by the interviewees was the organization of the team, followed by finding out about security measures and deciding which services would be offered in the virtual environment. As indicated by one of the interviewees, librarians had to learn on their own how to edit videos, edit images, create arts for Instagram, in addition to being constantly improving in digital marketing.

It is important to emphasize that social networks are the main allies for the dissemination of library services and products. With this, the challenge of building designs, criteria and security protocols arises to carry out the technical processes in the library, maintenance of the collection, book loans, mobile device loans.

The library's main objective is to satisfy the needs of its users. In this context of the pandemic, many services and products were adapted and created in order to keep users and attract new ones. Thus, complying with the five laws of librarianship, namely: (1) books exist to be used; (2) to each reader their book; (3) to each book its reader; (4) save the reader's time; (5) the library is a growing organism (RANGANATHAN, 2009, p. xi).

The user was always remembered when security measures were implemented, we believe that the role of innovations and adaptations of libraries occurred on behalf of the user, including on social networks - more specifically on Instagram, which has a poll option, which served to interact with users; in the YouTube lives, users were able to write their questions in the chat; in the communication channels available on the website, users had their questions answered within hours at most. The user was not a mere observer, the platforms allowed for dialogue and active participation. Therefore, the library encouraged the use of virtual databases, which many users did not know about. It was always active. Ultimately, the library adapted and stood out. Certainly, many services will be maintained in the virtual environment, because, as pointed out by the testimony of one of the librarians interviewed, it was noted that "the students liked it a lot". Therefore, we believe that institutions will keep some products and services more online than in person.

The objectives planned for this research were achieved, identifying three main challenges faced by libraries, which were indicated by the interviewees, namely: (1) situational diagnosis, keeping informed about the advances of the virus, about security measures and adapting these standards to the realities of libraries; (2) Services and products; adapt, create services and products, protecting library staff and users; (3) Promotion of products and services, identify channels, social networks to be present in users' lives. The management in the quick response with which the six libraries returned to service is remarkable, they were closed for a maximum of 15 days. All libraries participating in the survey returned to activities within 10 days. Therefore, the library did not stop, even though the university was closed, which allowed its role as an information-dispensing institution, standing out positively in the academic community.

In the university's social networks as an institution, a timely strategy was identified to disseminate library services, as these networks are followed by students in general, including library users and non-users. In this regard, Silvestre Estela (2019) points out that university libraries spread their services and products through their social networks, but non-users of libraries indicated that they do not follow the library's social networks, but rather the university's. Therefore, by disseminating the libraries through the university's social networks, it will be possible to provide access to all of the universities.

# **REFERENCES**

AGÊNCIA NACIONAL DE VIGILÂNCIA SANITÁRIA (Brasil). **Procedimento n. 01**: limpeza e desinfecção de ambientes, equipamentos, utensílios potencialmente contaminados, gerenciamento de resíduos sólidos e efluentes sanitários. Brasília: ANVISA, 25 jul. 2019. 3 p. Available at: <a href="https://www.gov.br/anvisa/pt-br/assuntos/paf/coronavirus/arquivos/arquivos-protocolos/7125json-file-1">https://www.gov.br/anvisa/pt-br/assuntos/paf/coronavirus/arquivos/arquivos-protocolos/7125json-file-1</a>. Access on: 18 dez. 2021.

AMERICAN LIBRARY ASSOCIATION. **Pandemic preparedness**: resources for libraries. Chicago: ALA, 2020a. Última atualização: 30 Jun. 2020. Available at: <a href="https://www.ala.org/tools/atoz/pandemic-preparedness">https://www.ala.org/tools/atoz/pandemic-preparedness</a>. Access on: 15 nov. 2021.

AMERICAN LIBRARY ASSOCIATION. **ALA Statement on COVID-19**. Chicago: ALA, 13 Mar. 2020b. Available at: <a href="https://americanlibrariesmagazine.org/blogs/the-scoop/ala-statement-covid-19/">https://americanlibrariesmagazine.org/blogs/the-scoop/ala-statement-covid-19/</a>. Access on: 16 nov. 2021

ARAÚJO, Walqueline da Silva; FREIRE, Gustavo Henrique de Araújo. Marketing em mídias sociais: contribuições para bibliotecas. **InCID**: Revista de Ciência da Informação e Documentação, Ribeirão Preto, v. 10, n. 2, p. 39-54, set./fev. 2019/2020. DOI: <a href="https://doi.org/10.11606/issn.2178-2075.v10i2p39-54">https://doi.org/10.11606/issn.2178-2075.v10i2p39-54</a>. Available at: <a href="https://www.revistas.usp.br/incid/article/view/149599">https://www.revistas.usp.br/incid/article/view/149599</a>. Access on: 30 nov. 2021.

ASSOCIAÇÃO DOS BIBLIOTECÁRIOS E PROFISSIONAIS DA CIÊNCIA DA INFORMAÇÃO DO DF. **Biblioteca virtual CONVIDE-i9**. ABDF: Brasília, 2020. Available at: <a href="https://abdf.org.br/biblioteca-virtual/biblioteca-virtual-convide-i9">https://abdf.org.br/biblioteca-virtual/biblioteca-virtual-convide-i9</a>. Access on: 21 jun. 2021.

ASSOCIAÇÃO PORTUGUESA DE BIBLIOTECÁRIOS, ARQUIVISTAS E DOCUMENTALISTAS. Notícias BAD. **Tomada de posição**: arquivos e bibliotecas durante a pandemia de Covid-19. Lisboa, 2 maio 2020. Available at: <a href="https://noticia.bad.pt/2020/05/02/tomada-de-posicao-arquivos-e-bibliotecas-durante-a-pandemia-de-covid-19/">https://noticia.bad.pt/2020/05/02/tomada-de-posicao-arquivos-e-bibliotecas-durante-a-pandemia-de-covid-19/</a>. Access on: 1 set. 2021.

BALZER, Cass. Reopening: not "when?" but "how?": libraries consider the realities of a post-pandemic world. **American Libraries**: a publication of the American Library Association, 17 Apr. 2020. Available at: <a href="https://americanlibrariesmagazine.org/blogs/the-scoop/covid-19-reopening-libraries-not-when-but-how/">https://americanlibrariesmagazine.org/blogs/the-scoop/covid-19-reopening-libraries-not-when-but-how/</a>. Access on: 1 out. 2021.

BARDIN, Laurence. Análise de conteúdo. São Paulo: Edições 70, 2011.

BIBLIOTECA IESB. **Biblioteca nas Olimpíadas**: que tipo de aluno é você?. Brasília, DF, 30 jul. 2021. Instagram: bibliotecaiesb. Available at: <a href="https://www.instagram.com/p/CR9KpP3L8X">https://www.instagram.com/p/CR9KpP3L8X</a> /?utm medium=copy link. Access on: 1 out. 2021.

BRASIL. Ministério da Saúde. Gabinete do Ministro. Portaria n. 1.565, de 18 de junho de 2020. Estabelece orientações gerais visando à prevenção, ao controle e a mitigação da transmissão da COVID-19, e à promoção da saúde física e mental da população brasileira, de forma a contribuir com ações para a retomada segura das atividades e o convívio social seguro. **Diário Oficial da União**, seção 1, Brasília, DF, n. 116, p. 64-65, 19 jun. 2020. *Anexo*.

#### Available at:

https://pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?data=19/06/2020&jornal=515&pagina=64. Access on: 16 out. 2021.

CANADIAN FEDERATION OF LIBRARY ASSOCIATIONS. Fair dealing guidance for canadian libraries during the time o COVID-19. CFLA/FCAB: Toronto, 4 May 2020. Available at: <a href="https://cfla-fcab.ca/en/uncategorized/fair-dealing-guidance-for-canadian-libraries-during-the-time-of-covid-19/">https://cfla-fcab.ca/en/uncategorized/fair-dealing-guidance-for-canadian-libraries-during-the-time-of-covid-19/</a>. Access on: 21 jun. 2021.

CHMARA, Theresa. Guidelines for reopening libraries during the COVID-19 pandemic. **American Library Association**. Chicago, 8 Jun. 2020. Available at: <a href="https://www.ala.org/advocacy/intfreedom/reopeningguidelines">https://www.ala.org/advocacy/intfreedom/reopeningguidelines</a>. Access on: 21 jun. 2021.

COMISSÃO BRASILEIRA DE BIBLIOTECAS UNIVERSITÁRIAS. Recomendações da Comissão Brasileira de Bibliotecas CBBU para elaboração de planejamento de reabertura das bibliotecas universitárias. Documento eletrônico. [6] p. Available at: <a href="http://www.febab.org.br/cbbu/wp-content/uploads/2020/05/Recomenda%C3%A7%C3%B5es-14-de-maio-1.pdf">http://www.febab.org.br/cbbu/wp-content/uploads/2020/05/Recomenda%C3%A7%C3%B5es-14-de-maio-1.pdf</a>. Access on: 1 jun. 2021.

CONFEDERATION OF OPEN ACCESS REPOSITORIES. **COAR recommendations for COVID-19 resources in repositories**. COAR: [Germany], 25 May 2020. Available at: <a href="https://www.coar-repositories.org/news-updates/covid19-recommendations/">https://www.coar-repositories.org/news-updates/covid19-recommendations/</a>. Access on: 21 jun. 2021.

DIXON, Jennifer A. Reopening libraries: campus concerns. **Library Journal**. New York, 25 Jun. 2020. Available at: <a href="https://www.libraryjournal.com/story/reopening-libraries-campus-concerns-covid-19">https://www.libraryjournal.com/story/reopening-libraries-campus-concerns-covid-19</a>. Access on: 21 jun. 2021.

EUROPEAN BUREAU OF LIBRARY, INFORMATION AND DOCUMENTATION ASSOCIATIONS. Netherlands, n. 6, Apr., 2020. Special issue "Guidelines on access policies, personnel security, social distancing and sanitation of collections", n. 3. Available at: <a href="http://www.eblida.org/news/april-newsletter-special-issue3.html">http://www.eblida.org/news/april-newsletter-special-issue3.html</a>. Access on: 6 out. 2021.

EWEN, Lara. How to sanitize collections in pandemic: conservators weigh in the mysteries of materials handling during COVID-19. **American Libraries**, Chicago, 27 Mar. 2020. Available at: <a href="https://americanlibrariesmagazine.org/blogs/the-scoop/how-to-sanitize-collections-covid-19/">https://americanlibrariesmagazine.org/blogs/the-scoop/how-to-sanitize-collections-covid-19/</a>. Access on: 12 nov. 2021.

HERNÁNDEZ Y HERNÁNDEZ, Denise; RAMÍREZ-MARTINELL, Alberto; CASSANY, Daniel. Categorizando a los usuarios de sistemas digitales. **Píxel-Bit. Revista de Medios y Educación**, Sevilla (España), n. 44, p. 113-126, ene. 2014. Available at: https://recyt.fecyt.es/index.php/pixel/article/view/61655. Access on: 18 dez. 2021

HURSH, Angela. The 2022 guide to social media for libraries: everything you needs to know about Instagram. **Super library marketing**: practical tips and ideas for library promotion. [S. l.], 2021. Available at:

https://superlibrarymarketing.com/2021/11/22/instagramforlibraries2022/. Access on: 10 nov. 2021.

HURSH, Angela. Your library is reopening: how to communicate new rules to your staff and the public during a pandemic. **Super library marketing**: practical tips and ideas for library

promotion. [S. l.], 2020. Available at: <a href="https://superlibrarymarketing.com/2020/05/18/reopeningcovid/">https://superlibrarymarketing.com/2020/05/18/reopeningcovid/</a>. Access on: 21 jun. 2021.

IESB OFICIAL. **IESB na Mídia:** Biblioteca Drive Thru: empréstimos de livros sem sair do carro. [Brasília]: DF 1, 2020. Available at: https://www.youtube.com/watch?v=gdVVV2KCU I. Access on: 13 out. 2021.

INTERNATIONAL COUNCIL OF MUSEUMS BRASIL. Recomendações do ICOM Brasil em relação à covid 19: sobre conservação, gestão e segurança de acervos; proteção de profissionais e atuação de instituições museológicas, arquivísticas e bibliotecas em tempos de Covid 19. Brasília: ICOM Brasil, abr. 2020. Available at: <a href="http://www.icom.org.br/wp-content/uploads/2020/04/RECOMENDACOES\_CONSERVACAO\_15\_ABRIL\_FINAL-1.pdf">http://www.icom.org.br/wp-content/uploads/2020/04/RECOMENDACOES\_CONSERVACAO\_15\_ABRIL\_FINAL-1.pdf</a>. Access on: 1 jun. 2021.

INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS AND INSTITUTIONS. **COVID-19 and the global library field**. Netherlands: IFLA, 2020. *Endereço eletrônico*. Última atualização: 13 out. 2020. Available at: <a href="https://www.ifla.org/covid-19-and-the-global-library-field/#">https://www.ifla.org/covid-19-and-the-global-library-field/#</a>. Access on: 21 jul. 2021.

KAMPF, G. *et al.*. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. **Journal of Hospital Infection**, [United Kingdom], v. 104, n. 3, p. 246-251, 1 Mar. 2020. DOI:

https://doi.org/10.1016/j.jhin.2020.01.022. Available at: https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext. Access

on: 1 out. 2021.

NATIONAL AUTHORITIES ON PUBLIC LIBRARIES IN EUROPE. Public libraries in Europe and COVID-19: findings from NAPLE Members, April-July 2020. **NAPLE Forum**. [Europe], 17 Jul. 2020. Available at: <a href="https://naple.eu/libraries-and-covid-19/">https://naple.eu/libraries-and-covid-19/</a>. Access on: 21 jun. 2021.

NORTHEAST DOCUMENT CONSERVATION CENTER. Preservation leaflets. Emergency management. **Disinfecting books and other collections**. Andover Landing: NEDCC, 30 Sept. 2021. Available at: <a href="https://www.nedcc.org/free-resources/preservation-leaflets/3.-">https://www.nedcc.org/free-resources/preservation-leaflets/3.-</a> emergency-management/3.5-disinfecting-books. Access on: 1 out. 2021.

ONLINE COMPUTER LIBRARY CENTER. REALM Project: REopening Archives, Libraries, and Museums. **Test 1**: natural attenuation as a decontamination approach for SARS-CoV-2 on five library materials. Dublin: OCLC, 2021. Available at: <a href="https://www.webjunction.org/content/dam/WebJunction/Documents/webJunction/realm/test1-report.pdf">https://www.webjunction.org/content/dam/WebJunction/Documents/webJunction/realm/test1-report.pdf</a>. Access on: 1 out. 2021.

PRADO, Jorge Moisés Kroll do; CORREA, Elisa Cristina Delfini. Bibliotecas universitárias e a presença digital: estabelecimento de diretrizes para o uso de mídias sociais. **Perspectivas em Ciência da Informação**, Belo Horizonte, v. 21, n. 3, p. 165-181, jul./set. 2016. DOI: <a href="http://dx.doi.org/10.1590/1981-5344/2733">http://dx.doi.org/10.1590/1981-5344/2733</a>. Available at: <a href="http://portaldeperiodicos.eci.ufmg.br/index.php/pci/article/view/2733">http://portaldeperiodicos.eci.ufmg.br/index.php/pci/article/view/2733</a>. Access on: 1 out. 2021.

RANGANATHAN, S. R. **As cinco leis da biblioteconomia**. tradução de Tarcisio Zandonade. Brasília, DF: Briquet de Lemos/Livros, 2009.

REOPENING ARCHIVES, LIBRARIES AND MUSEUMS PROJECT. Natural attenuation as a decontamination approach for SARS-CoV-2 on five library materials. [S. l.]: REALM Project, 2020. Available at:

https://www.webjunction.org/content/dam/WebJunction/Documents/webJunction/realm/test1-report.pdf. Access on: 1 out. 2021.

RODGERS, Emily Puckett. Reopening libraries: designing for health. **Library Journal**. NewYork, 25 Jun. 2020. Available at: <a href="https://www.libraryjournal.com/story/reopening-libraries-designing-for-health-covid-19">https://www.libraryjournal.com/story/reopening-libraries-designing-for-health-covid-19</a>. Access on: 21 jun. 2021.

SENA, Priscila. Biblioteconomia e Ciência da Informação no Instagram. **Federação Brasileira de Associações de Bibliotecários, Cientistas da Informação e Instituições**, 27 de abril, 2021. Available at: <a href="https://febab.org/2021/04/27/perfis-biblioteconomia-ciencia-da-informac-mais-recomendados-no-instagram/">https://febab.org/2021/04/27/perfis-biblioteconomia-ciencia-da-informac-mais-recomendados-no-instagram/</a>. Access on: 10 jun. 2021.

SERVIÇO BRASILEIRO DE APOIO ÀS MICRO E PEQUENAS EMPRESAS. **Marketing digital como estratégia de vendas**. Brasília: Sebrae, [2019?]. 21 p. *E-book*.

SILVESTRE ESTELA, Flor de María. **Não-usuário de bibliotecas universitárias**: um estudo de caso na Universidade de Brasília - UnB. 2019. 172 f. Tese (Doutorado em Ciência da Informação) – Faculdade de Ciência da Informação, Universidade de Brasília, Brasília, 2019. Available at: <a href="https://repositorio.unb.br/handle/10482/35317">https://repositorio.unb.br/handle/10482/35317</a>. Access on:13 ago. 2021.

UNIVERSIDADE DE BRASÍLIA. Biblioteca Central. **Plano de retomada das atividades da Biblioteca Central**: cartilha para usuários e usuárias. Brasília: UnB, 2021. Available at: <a href="http://repositoriocovid19.unb.br/wp-content/uploads/2021/07/BCE-Plano-de-Retomada-Cartilha-para-Usuarios.pdf">http://repositoriocovid19.unb.br/wp-content/uploads/2021/07/BCE-Plano-de-Retomada-Cartilha-para-Usuarios.pdf</a>. Access on: 25 nov. 2021.

VAM DE BERG, Thayane Vicente. Recomendações para a proteção da saúde dos profissionais que atuam em arquivos, bibliotecas, museus e centros de documentação, e a preservação dos documentos em suporte papel em tempos de covid-19. Rio de Janeiro: Universidade Federal do Estado do Rio de Janeiro, Arquivo Central, Supervisão de Processamento e Preservação do Acervo; Laboratório Multidimensional de Estudos em Preservação de Documentos Arquivísticos, 2020. Versão 2. Publicada em 23 de maio de 2020. Available at:

http://www.unirio.br/cch/pda/copy\_of\_VAMDEBERGThayaneVicenteRecomendaesparaapro\_teodasadedosprofissionaiseapreservaodosdocumentosdiantedoCOVID192averso23052020.pdf . Access on: 06 dez. 2021.

WE ARE SOCIAL; HOOTSUITE. **Digital 2020**: Brazil. [S. l.]: We Are Social; Hootsuite, 2020. Slide. Available at: <a href="https://datareportal.com/reports/digital-2020-brazil">https://datareportal.com/reports/digital-2020-brazil</a>. Access on: 10 nov. 2021.