COVID-19 and Philippine Academic Libraries

Ana Maria B. Fresnido and Sharon Maria S. Esposo-Betan

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Objectives. The study aimed to: (1) determine the readiness of academic libraries to provide online services and resources in the pre-COVID-19 period or at the onset of the community quarantine in the Philippines in March 2020; (2) look into the different initiatives and innovations introduced by academic libraries during the quarantine period so as to continuously provide services and access to resources, in the absence of face-to-face interaction; (3) explore the different issues and challenges encountered by academic libraries in the delivery of library services during the pandemic; and finally, (4) find out how academic librarians envision the post-COVID-19 era of academic libraries in the country.

Methods. The study made use of descriptive quantitative method. Data were gathered through survey using an instrument developed by the authors. Sampling was purposive with head librarians in academic libraries from all over the country as the respondents. Spreadsheet was used to process data which were presented in simple tables, graphs and charts. Responses to the open ended question were analyzed and manually coded using inductive coding.

Results. Majority of academic libraries in the country were caught unprepared when the pandemic hit. Despite this, they managed to provide services that were delivered online, while simultaneously embarking on a number of different initiatives. COVID-19 showed to have made considerable impact in terms of staffing, utilization, collection development, and funding. Finally, the respondents envision academic libraries in the post-pandemic era to still be hybrid, with digital resources gaining prominence over printed resources.

Contributions. The shared experiences of academic libraries in the Philippines amidst the pandemic and how they were able to rise above the challenges they were confronted with as they shift their services to online mode may serve as a guide and help inspire other libraries in developing countries faced with similar situations.

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ABSTRACT

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Keywords: COVID-19 Pandemic, Philippine Academic Libraries, Pre-during-post Pandemic Scenario, Innovation, Online Services, Resilience

INTRODUCTION

The novel corona virus 2019 (interim name of COVID-19) was believed to have initially occurred in Wuhan, China in December 2019 and since then has spread rapidly into other cities of the country, and eventually internationally, causing a global outbreak. In the Philippines, the first suspected case, a Chinese national, was investigated in January 2020 (Edrada et al., 2020).

With the growing concern on COVID-19, the Commission on Higher Education (CHED) released an advisory in mid-February 2020 encouraging all higher educational institutions (HEIs) to conduct screening protocols (e.g., checking of temperature) and to avoid attending and holding activities that would require huge number of participants. All travels to China were also banned. Students and personnel who traveled abroad were required to undergo quarantine (Philippines. Commission on Higher Education, 2020b).

After only about a couple of months when the first COVID-19 case was reported, the number of cases ballooned (Edrada et al., 2020), which prompted the Philippine government to take action and imposed community quarantine on March 16, 2020. Classes were suspended and mass gatherings were prohibited. Travels to and from Luzon were likewise suspended. All establishments, with the exception of those providing essential services were given orders to close. Only one representative per household was allowed to go out to buy basic necessities (Ravelo, 2020).

Following the president's announcement on the community quarantine, CHED released a series of advisories in March 2020 reiterating the suspension of classes, and consequently, on-the-job trainings (OJTs), internships, and practicum, specifically in the National Capital Region (NCR). HEIs were also urged to ensure that all plans and decisions made at the time of the pandemic take into consideration the safety and health of students and school personnel (Philippines. Commission on Higher Education, 2020a).

When the community quarantine was extended, CHED released advisory no. 6, which provided clearer directives on how HEIs were supposed to proceed during the extended enhanced community quarantine (ECQ) (i.e., after April 30, 2020). Particularly, HEIs were given the freedom to determine *"how to best meet the contact hour requirements for the completion of a subject or degree program."* Furthermore, CHED acknowledged the limitations in learning delivery mode of HEIs, hence were advised to make do with whatever available resources they have and to allow students who have no internet access to complete the requirements after the ECQ (Philippines. Commission on Higher Education, 2020c).

As the situation worsened even after the implementation of the ECQ, CHED released another advisory dated May 24, 2020, highlighting (1) the suspension of face-to-face classes; (2) the offering of summer classes exclusively to graduating students, students who have subjects scheduled in the summer, and graduate students; (3) the suspension of OJT and internship programs; and, (4) the changes in the schedule of class opening for AY2020/21 (Philippines. Commission on Higher Education, 2020d).

With the suspension of face-face-classes, all other services provided by colleges and universities must likewise be offered online. Libraries, for one, have rapidly adapted their services and policies during the lockdown. New activities were likewise adopted such as reallocation of print collection budgets to digital materials and reaching out to patrons who were digitally disconnected through the use of phones (*How Public Libraries Are Responding to the Pandemic*, 2020), among others.

LITERATURE REVIEW

The impact of COVID-19 to libraries has been the center of attention of library and information science (LIS) professionals as they try to adjust and find new ways to provide access to library resources and offer essential services amidst the physical restrictions. This is made evident by the continuously rising number of studies on the topic despite its novelty.

Libraries' Response to the Pandemic

The different measures carried out by academic libraries in China and the challenges associated with it were explored by Guo et al., (2020). The release of information relating to COVID-19 through the libraries' websites proved to be common among the libraries and so was shifting to online services. Similarly, an academic library in the US shared it experiences in responding to the pandemic, detailing how it shifted some of its services to online mode and the different initiatives it undertook in support of online teaching and learning (Mehta & Wang, 2020). The strategic actions adapted by academic libraries in Mexico was analyzed by Ortega-Martínez et al. (2021). Library efforts showed to focus on ensuring the safety and security of patrons upon resumption of library services, collection management, and the use and provision of digital services. In Zimbabwe, an investigation on the innovations initiated by academic libraries in support of e-learning was carried out by Tsekea & Chigwada (2021). The provision of electronic information sources confirmed to be crucial to research and the teaching-learning process. Rafiq et al., (2021) looked at how university libraries in Pakistan were responding to the pandemic and carried out a qualitative exploration. While the libraries were physically closed, the provision of services continued. Website redesign, reallocation of resources, and provision of online services were common practices among the libraries. The lack of policies to address issues emanating from work-from-home, digital divide, lack of digital competencies and slow internet connection, were identified as major challenges. The impact of COVID-19 to libraries in Italy was also investigated by Tammaro (2020) using a mixed method approach. The study concluded that the pandemic has forced libraries to transition and envision anew the provision of services taking into consideration the community they serve. The use of social media in Greek libraries amidst the pandemic was the focus of study conducted by Koulouris et al., (2020). Facebook turned out to be the platform that was widely used for announcements and promotion of events. To avoid service disruption, librarians have embraced the work-from-home set-up. The struggles of librarians in Kazakhstan to provide uninterrupted service to its patrons while working from home was explored by Yap & Manabat (2020). Unstable internet connection, unavailability of laptops or its incapability to accommodate needed applications, distractions, and managing household chores were identified as issues that the librarians had to wrestle with. Similarly, the concept and practice of working remotely specifically in the technical services of the library was examined by Craft (2020). An overview of how such was carried out in the pre-pandemic era provided the connections between

the previous practice and that of the current practice. Directions for future research were likewise offered. Through the conduct of literature review Nawaz et al. (2020) examined how libraries may take advantage of artificial intelligence (AI) at the time of the pandemic. Identification of users with AI support, AI based monitoring, AI chatbots, robot assistance, drone surveillance and services, AI alarms, and AI based online tutorials were some of the applications identified to be useful for libraries.

The Role of Libraries During the Pandemic

The libraries' role in helping prevent the spread of COVID-19 in Nigeria was investigated by Adigun et al. (2020). Findings showed that libraries played the crucial role of promoting awareness on COVID-19 through the provision of online contents, the holding of programs related to COVID-19 and serving as a gateway in making available data on COVID-19 cases from reputable sources. Likewise, Ameen (2021) shared his viewpoints on the role of libraries in Pakistan and concluded that collaboration is key in addressing issues brought about by the pandemic and that the efforts of librarians to find ways to redesign their services to remain relevant is crucial. As online learning has become the trend due to the COVID-19 outbreak, a reexamination of the role of libraries was carried out by Ifijeh & Yusuf (2020). Among the different practices, the maintenance of a responsive website, the practice of blended librarianship and the use of social media, were identified as best practices.

Libraries in the Post-Pandemic Era

A description of a model digital library (within the context of copyright laws) envisioned to replace the traditional library services, given the physical restrictions caused by the pandemic, was explored by Pokorná et al. (2020). Data gathered from Google analytics and access logs showed users' preference towards copyright protected monographs. Mestri (2020), on the other hand, forwarded recommendations on how libraries should prepare to reopen in the future, making sure that the patrons, library staff, and all library resources remain safe and secure.

This study is a modest contribution to existing literature on the impact of COVID-19 to libraries, particularly academic libraries in the Philippines. Specifically, it aimed to: (1) determine the readiness of academic libraries to provide online services and resources in the pre-COVID-19 period or at the onset of the community quarantine in the Philippines in March 2020; (2) look into the different initiatives and innovations introduced by academic libraries during the quarantine period so as to continuously provide services and access to resources, in the absence of face-to-face interaction; (3) explore the different issues and challenges encountered by academic libraries in the delivery of library services during the pandemic; and finally, (4) find out how academic librarians envision the post-COVID-19 era of academic libraries in the country.

METHODOLOGY

The study employed descriptive quantitative method. Data were gathered through survey using an instrument developed by the authors. The survey questionnaire was divided into three parts—the pre-pandemic, pandemic, and post-pandemic era of Philippine libraries. Specifically, it was designed to help determine the pre-pandemic and the present state of academic libraries in the

country, and how librarians envision academic libraries to be in the post-pandemic era. The items focused on the provision of library resources and services and how academic libraries were compelled to adapt to the changing circumstances brought about by the pandemic. To establish face validity, the questionnaire was reviewed with the help of three experts. Pilot testing was also conducted, with the staff from a small academic library serving as the respondents. The instrument was then revised based on the inputs of the experts and the results of the pilot testing conducted. Google form was used to create the online survey. The link to the form was then sent to the email addresses of the respondents. To help ensure the widest participation possible, invitation to take part in the survey was also posted in Facebook. The survey was administered in June 2021.

Purposive sampling was used to identify the respondents who consisted of academic library administrators from all over the country. They were specifically targeted since they are expected to be able to provide a more holistic view of their respective libraries. All the regions were represented, although majority were from NCR and Region IV-A, most likely because it is in these regions where most HEIs are situated (Office of Planning, 2020). Zamboanga Peninsula and Bangsamoro had the least number of respondents. Table 1 shows the breakdown of respondents by region.

Table 1. Breakdown of Respondents by Region

Region	Number of Respondents	%
National Capital Region (NCR)	48	29.81
Cordillera Administrative Region (CAR)	4	2.48
Central Luzon (Region III)	12	7.45
Ilocos Region (Region I)	5	3.11
CALABARZON (Region IV-A)	20	12.42
MIMAROPA (Southwestern Tagalog Region)	4	2.48
Bicol Region (Region V)	5	3.11
Western Visayas (Region VI)	14	8.70
Central Visayas (Region VII)	6	3.73
Eastern Visayas (Region VIII)	8	4.97
Zamboanga Peninsula (Region IX)	2	1.24
Northern Mindanao (Region. X)	7	4.35
Davao Region (Region XI)	11	6.83
SOCCSKSARGEN (Region XII)	8	4.97
Cagayan Valley (Region II)	5	3.11
Bangsamoro (BARMM)	2	1.24
Grand Total	161	100.00

Excel spreadsheet was used to process data which were presented in simple tables, graphs and charts. Responses to the open-ended question were analyzed and manually coded using inductive coding.

FINDINGS

Status of Academic Libraries Before the Pandemic

Availability of Online Resources

Results of the survey showed that 12.42% of the respondents were highly prepared and 27.95% were prepared to provide online resources to their clients even before the pandemic. Majority of these libraries were from the NCR and Region IV-A. Quite a big portion of the respondents (35.40%) rated themselves somewhat prepared and 22.98% not prepared at all. Two (1.24%) of the respondents were undecided as to how ready their respective libraries were, in providing access to online resources (refer to Figure 1).

The responses made it evident that less than half of the surveyed libraries were already hybrid as they make available resources in different formats. As such, they are considered to be halfway towards becoming a digital library (Oppenheim & Smithson, 1999).
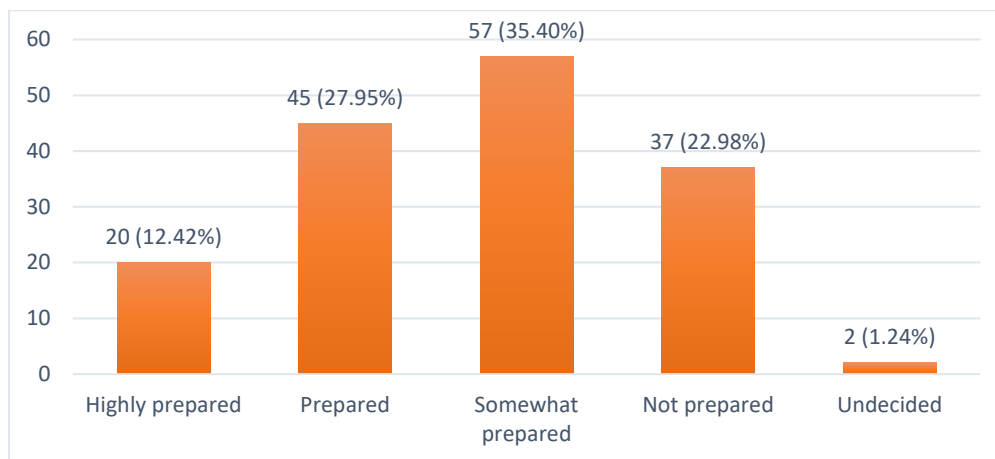

Figure 1. Extent of the Libraries' Preparedness to Provide Online Resources before the Pandemic

Availability of e-Reference Services

There were 18 (11.18%) academic libraries that rated themselves highly prepared to provide e-reference service and another 51 (31.68%) which stated that they were prepared, for a combined total of 42.86%. Libraries that were somewhat prepared (those with limited e-reference services) make up 37.27% of the respondents while those not prepared at all consisted of 19.25%. One of

the respondents stated that their library is undecided on the availability of e-reference services which somehow conveys unfamiliarity with what e-reference service is.

Virtual reference service provides a way for the patron to connect with the librarian online regardless of time and space differences. Transactions may be conducted asynchronously (e.g., email, web forms, online pathfinders, and frequently asked questions (FAQ)) and synchronously (e.g., chat, video conferencing, and digital reference robots) (Maharana & Panda, 2005). Substantial investment on a strong Internet service, subscription to e-resources, and trained librarians make this possible (Smith, 2000).
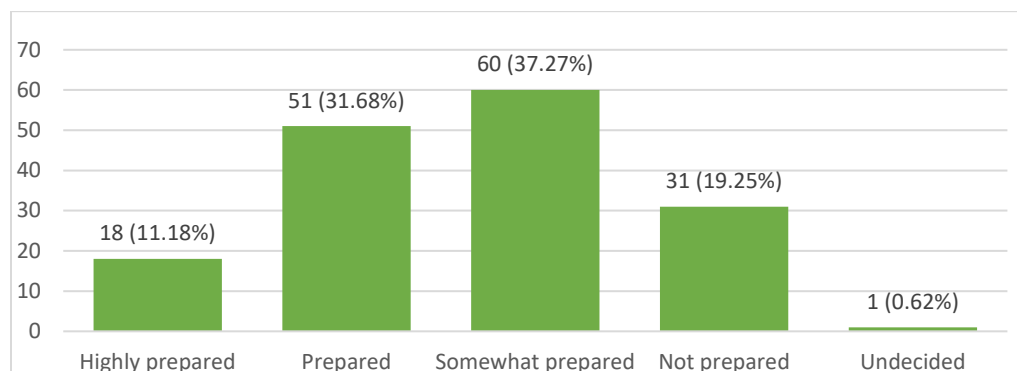

Figure 2. Extent of the Libraries' Preparedness to Provide e-Reference Services before the Pandemic

Based on the results of the survey, it is obvious that majority of academic libraries in the country were caught unprepared when the pandemic hit, as they either have none or very limited access to e-resources and e-reference services.

Status of Academic Libraries During the Pandemic

Physically Closed Academic Libraries

As of June 2021, 44.72% of academic libraries in the country were physically closed while the rest (55.28%) have already decided to open their respective libraries. Majority of libraries that were still closed at the time of the survey were from NCR, Central Visayas Region (Region VII), and Northern Mindanao (Region X). This is most likely because Regions 7 and 10 were under modified enhanced community quarantine (MECQ) from June 16 to 30. While the NCR was under general community quarantine (GCQ) at that time (U.S. Embassy in the Philippines, 2021), the number of confirmed cases in the said region continued to rise, hence most libraries remained closed. Just like other libraries in 150 countries worldwide (Mestri, 2020), Philippine academic libraries were also compelled to close to prevent the spread of COVID-19.
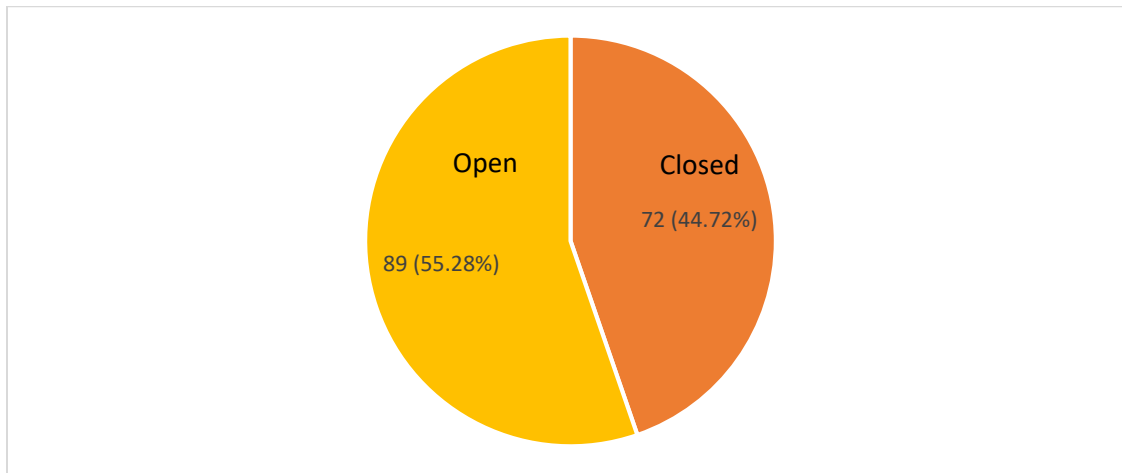
Figure 3. Physically Closed Academic Libraries (as of June 2021)

Physically Closed Academic Libraries That Continue to Render Service (as of June 2021)

A significant number of libraries (95.03%) that were physically closed, continued to render service to their clients. On the contrary, 4.97% of libraries that were open did not provide any service at all, as their main reason for opening was to allow their staff to report for work. Providing service despite the physical restrictions imposed by the lockdown is a practice adopted by libraries in most countries worldwide (Mestri, 2020) compelling academic libraries to change the way they do things (Mehta & Wang, 2020).
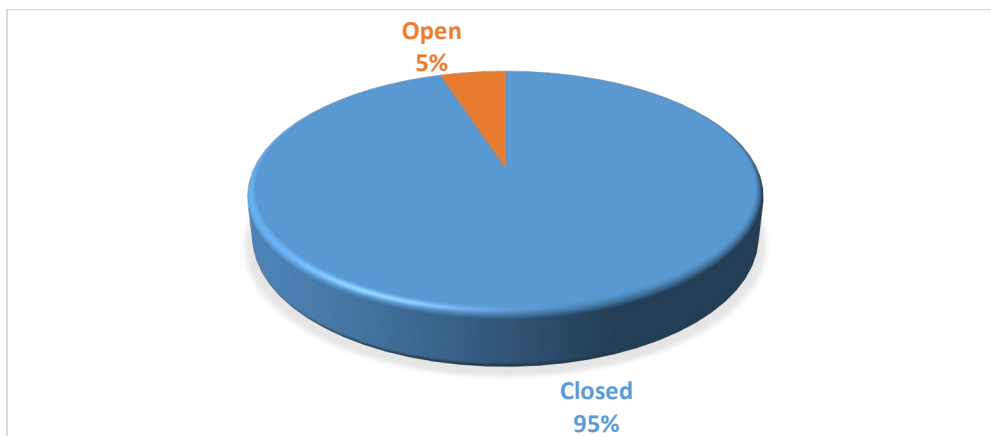

Figure 4. Physically Closed Academic Libraries That Continue to Render Service (as of June 2021)

Services Being Rendered During the Pandemic

As expected, services delivered online proved to be quite extensive. With the enormous amount of information available online and the proliferation of misinformation (Auberry, 2018; Williams, 2010), libraries took an active role in the development of the students' information literacy (IL) skills (Bussell, 2021), hence conducting virtual library orientation/information literacy sessions showed to be a common service (see Table 2) and a new initiative implemented by academic libraries (see Table 3). Online tutorials (refer to Tables 2 and 3) were also made available in support of learners who need to develop their IL skills (Chakraborty & Jana, 2021).

E-reference service turned out to be the second most common service being provided (refer to Table 2) and was also an initiative that most libraries embarked on during the pandemic (see Table 3). While only 42.86% of the libraries considered themselves highly prepared and prepared to render e-reference service before the pandemic (refer to Figure 2), an increase of 38.51% was observed in the number of libraries that were able to deliver the service after more than a year, since COVID-19 hit the Philippines. Table 3 suggests that the creation of social media accounts has been instrumental in making this possible since it serves a number of different purposes, one of which is chat reference service (Collins & Quan-Haase, 2012), usually provided through Facebook (FB) Messenger.

With the physical restrictions imposed by the community quarantine, 69.57% of the respondents made sure that access to digital resources was made available (see Table 2) to support online teaching/learning and research. For majority of the libraries (82.61%), providing access to digital resources appeared to be a newly introduced service.

The holding of online exhibits and events seemed to have also become the trend and so is the promotion of online content as resources and services shifted online (Tammaro, 2020).

The efforts of the librarians to provide access to resources not necessarily owned by the library was made evident through the provision of document delivery service (DDS) and inter-library loan (ILL), revealing the good side of the pandemic, that is, the reinforcement of library linkages. With DDS and ILL in place, access to resources among partner libraries is optimized in the most cost-efficient way possible (Saavedra-Alamillas et al., 2020).

Work-from-home arrangement was introduced and this necessitated the building of digital competencies of staff as they had to work independently.

Despite the closure of libraries, loaning out of library materials continued, suggesting that books remain to be a vital source of information. Some of the libraries (39.75%) even went out of their way to deliver books that students and faculty wanted to borrow. As libraries remained to be closed to library patrons, adjustments to loan policies (e.g., extended loan period and no imposition of fines) had to be enforced.

As online presence is crucial to library accessibility, academic libraries in the county made sure that they are visible in various social networking sites and that the contents of their websites remain up to date.

The establishment of institutional repositories (IR) was a project that a few libraries (21.12%) embarked on, showing their strong support for open access initiative. While the building of IRs seemed not very popular yet, the number of libraries embarking on digitization projects signals a growing interest on IRs.

Table 2. Most Common Services Offered by Academic Libraries During the Pandemic

Services Being Rendered	Number of Reponses	%
Virtual library orientation/Information literacy session	140	86.96
e-Reference service	131	81.37
Online exhibits	129	80.12
Inter-library loan	117	72.67
Access to digital resources	112	69.57
Document delivery service	108	67.08
Library loan	68	42.24
Online tutorials	67	41.61
Promotion of online content	36	22.36
Online events	32	19.88
Others	24	14.91

Table 3. New Initiatives Implemented During the Pandemic

New Initiatives	Number of Responses	%
Provision of e-reference service	142	88.20
Provision of access to digital resources	133	82.61
Virtual library orientation/Information literacy session	131	81.37
Work from home arrangements	128	79.50
Creation of social media accounts	126	78.26
Loan policy adjustments	117	72.67
Promotion of online content	112	69.57
Document delivery service	100	62.11
Website update	97	60.25
Staff training on digital competencies	93	57.76
Digitization	90	55.90
Library networking	78	48.45
Online events	74	45.96
Delivery of book loans to clients	64	39.75
Online tutorials	64	39.75

Establishment of institutional repositories	34	21.12
Inter-library loan	32	19.88
Online exhibits	31	19.25
Others	13	8.07

Major Problems Encountered in Continuously Providing Library Services

Limited online resources (experienced by 75.16% of the respondents) or its unavailability (which 33.54% of the respondents had to deal with) were problems assumed to have been caused by inadequate funding (faced by 56.52% of the respondents) and further aggravated by budget cuts, (which 63.35% of the respondents had to endure) and the lack of support from administration (experienced by 15.53% of the respondents).

Issues concerning library personnel proved to be prevalent. Health and safety turned out to be the leading concern because just like patrons, library personnel were also at risk of being infected. Reassigning of roles and responsibilities became inevitable especially for those whose jobs had to be performed onsite (e.g., shelving, book processing, checking out of library materials, filing, and scanning/digitization), thus they were given other work assignments that could be performed online. Although they most likely were not familiar with or were incapable of performing the new assigned task, they were forced to do as told because they had no choice. This probably explains the reason why lack of cooperation among library staff was also noted. Since services were mostly provided online, the lack of digital literacy skills also surfaced as one of the concerns that libraries had to deal with. With the drop in the number of enrollees (Flores, 2021; Magsambol, 2020), library personnel also suffered from job insecurity because private colleges and universities rely solely on tuition and other fees to finance their operations. Working on extended hours also proved to be a concern, specifically for those who work from home.

Limited or the lack of onsite service was also regarded as a major concern by many. In reality though, this may be considered to have caused majority of the problems that academic libraires in the country face. On the contrary, it also served as the catalyst in the provision of innovative library services.

Internet connectivity issues occupied the third spot among the problems being experienced by academic librarians. With the work from home set-up, everyone was expected to work online. Sadly, internet connection in the country has always been slow and unreliable or at times, even unavailable ("So, Yeah, the Philippines Has Expensive Turtle Internet, According to a New Study: A Global Digital Well-Being Study Reveals the Poor State of Internet in the Philippines," 2020).

Since the only means to provide access to resources that were not born digital is to convert them into digital format, issues on copyright also emerged.

Libraries were also obliged to adjust their loan policies, usually imposing no definite due dates and waiving overdue fines, resulting to frequent record adjustments and decreased library income, respectively.

The lack of digital literacy showed to be an issue not confined to library staff alone as this also proved to be true for students and faculty alike.

Table 4. Major Problems Encountered in Continuously Providing Library Services

Concerns	Number of Responses	%
Limited online resources	121	75.16
Health and safety issues of staff	118	73.29
Internet connectivity issues	116	72.05
Budget cuts	102	63.35
Reassignment of roles and responsibilities among library staff	92	57.14
Inadequate funding	91	56.52
Copyright issues	90	55.90
Limited onsite service	84	52.17
Lack of digital literacy skills among the staff	72	44.72
Loan policy adjustments	69	42.86
Lack of digital literacy skills among the clients	67	41.61
Unavailability of online resources	54	33.54
Job insecurity	42	26.09
Lack of visibility in social media sites	36	22.36
No onsite service	30	18.63
Lack of support from administration	25	15.53
Extended work hours	22	13.66
Lack of cooperation among library staff	20	12.42
Others	8	4.97

Impact of COVID-19 to Academic Libraries in the Philippines

COVID-19 has had a substantial impact on academic libraries in the country specifically in terms of staffing, utilization, collection development, and funding.

Respondents identified library personnel to have been greatly affected by the pandemic. Particularly, the need to retool and improve ICT competencies has become apparent given the shift in online services and resources. As work-form-home becomes inevitable, being able to work efficiently independently is something that library staff had to be accustomed to while they try to find ways to maintain work-life balance. Since some work assignments cannot be performed online, some library staff were given other assignments because working onsite was not feasible. Some were even transferred to other offices/departments just so they can be retained given the budget reduction caused by the significant decrease in the number of enrollees (Flores, 2021; Magsambol, 2020). Others were not as fortunate as they had to be retrenched because they were

considered as none essential workers. Those who were able to keep their jobs had to battle with the thoughts of possibly losing them eventually, hence suffer from mental health issues. Staff who had to report onsite, suffer from the same, since they were required to undergo home quarantine lasting between 7 to 24 days. The thought that they may have been infected with the virus in their workplace haunted them.

The negative impact of the pandemic to library utilization in general, is undeniable considering the physical restrictions imposed by the community quarantine. Severely affected was the usage of printed materials which in the past had been the chief source of reliable information especially for those who have no or limited access to electronic resources. Utilization of online resources was also affected since students who do not have access to the Internet used to come to the library to access these resources. The use of library facilities was restricted, hence no patrons were accommodated and only the staff were allowed inside. Some of the facilities (e.g., discussion rooms) were also repurposed to accommodate faculty members who, for various reasons, prefer holding online classes inside the campus.

Collection development was also significantly affected primarily because of the need to prioritize acquisition and subscription to digital resources. Librarians likewise expressed difficulties adjusting to doing selection, evaluation and acquisition of materials online.

The shift in the collection development directions and decisions has greatly influenced the way financial resources were allocated. The sad part though is that funding posed to be a major concern as libraries suffered from budget cuts caused by the decrease in the number of enrollees.

Despite all the negative impact, academic libraries and librarians in the country proved to be resilient as they were able to manage and adapt to the challenges brought about by the pandemic.

Academic Libraries in the Post-Pandemic Era

Envisioning Academic Libraries in the Post-Pandemic Era

The respondents envision academic libraries in the post-pandemic era to still be hybrid, although digital resources will most likely gain prominence over printed resources, mainly because more budget will be allotted for these. Libraries are also envisioned to embark on open access publishing through institutional repositories. With the robust digital collection, access to library resources is expected to be made available 24/7, remotely.

The practice of blended librarianship will be embraced by librarians, which means that they will be part of the teaching-learning process, interacting directly with the students and the instructor (either face-to-face or online), carrying on the role of providing resources for teaching and learning, thereby contributing to the realization of the objectives of education (Ifijeh & Yusuf, 2020).

Most services will continue to be offered online, hence the work-from-home set-up is expected to stay. Consequently, a reduction in the investment on facilities improvement is

presumed and so is staff downsizing. While onsite services may resume, minimum health protocols will continue to be imposed.

Interestingly, the respondents' vision of what academic libraries will be in the post-pandemic era, is identical to how they perceive their respective libraries to be, after the pandemic is over (refer to Tables 4 and 5).

Table 5. Academic Library Attributes in the Post-Pandemic Era

Attributes	Number of Responses	%
Hybrid collections	148	91.93
More budget allocation for online resources	147	91.30
Adoption of blended librarianship model	135	83.85
Minimum health protocols will continue to be imposed	132	81.99
24/7 access to library resources	123	76.40
Libraries to embark on open access publishing through institutional repositories	117	72.67
Highly online library collections	111	68.94
Mostly online library services	108	67.08
Work from home arrangements will continue	107	66.46
Reduced investment on facilities improvement	66	40.99
Reduced staffing	54	33.54
Others	4	2.48

Table 6. Respondents' Vision of their Own Libraries in the Post-Pandemic Era

Attributes	Number of Responses	%
Hybrid collections	136	84.47
More budget allocation for online resources	135	83.85
Adoption of blended librarianship model	127	78.88
Minimum health protocols will continue to be imposed	125	77.64
24/7 access to library resources	109	67.70
Libraries to embark on open access publishing through institutional repositories	107	66.46
Mostly online library services	103	63.98
Highly online library collections	99	61.49
Work from home arrangements will continue	98	60.87
Reduced investment on facilities improvement	58	36.02

| Reduced staffing | 37 | 22.98 |
| Others | 7 | 4.35 |

CONCLUSION AND RECOMMENDATIONS

Despite the challenges presented by COVID-19 to Philippine academic libraries, it undoubtedly has pushed libraries and librarians to innovate their services and develop their digital resources, thus helped speed the transformation process.

However, as most of the innovations and changes adopted were meant to respond to the pandemic, implementation was most likely done in haste and as such may have lacked careful planning. Given this, it is recommended that new programs and services introduced during the pandemic be assessed to see how well they are responding to the needs of library patrons and likewise ascertain their sustainability.

As the pandemic has definitely changed the way academic libraries do business, it would do well to review both the short and long term plans, keeping in mind the lessons of the pandemic while at the same time envisioning the future. At the very least, today's academic libraries should be able to: make available virtual alternatives to resources and services; make accessible asynchronous tutorials or virtual information literacy sessions through the library's website; support open access initiatives and start building their institutional repositories; ensure that the library website is responsive and kept up to date; invest on a library services platform; enrich the leadership, management, digital and communication skills of library personnel, provide them with sufficient technical support, and prioritize their well-being; strengthen library cooperation; review and revise existing policies, ensuring that they remain relevant and responsive; and lastly, look into the short term as well as lasting impact of COVID-19 on learning spaces.

References

Adigun, G. O., Okuonghae, O., & Mamudu, P. A. (2020). Interrogating the role of libraries in the fight against COVID-19 pandemic : The Nigerian perspective. *International Journal of Knowledge Content Development & Technology*, *10*(4), 47–64.

Ameen, K. (2021). COVID-19 pandemic and role of libraries. *Library Management*, *42*(4–5), 302–304. https://doi.org/10.1108/LM-01-2021-0008

Auberry, K. (2018). Increasing students' ability to identify fake news through information literacy education and content management systems. *Reference Librarian*, *59*(4), 179–187. https://doi.org/10.1080/02763877.2018.1489935

Bussell, H. (2021). Evidence based library and information practice. *Evidence Based Library and Information Practice*, *16*(1), 101–103. https://doi.org/10.18438/eblip29886

Chakraborty, S., & Jana, S. (2021). Challenges and opportunities of academic libraries in India because of COVID-19. *Annals of Library and Information Studies (ALIS)*, *68*(2), 110–118.

http://op.niscair.res.in/index.php/ALIS/article/view/39571

Collins, G., & Quan-Haase, A. (2012). Social media and academic libraries: Current trends and future challenges. *ASIST 2012*.

Craft, A. R. (2020). Remote work in library technical services: Connecting historical perspectives to realities of the developing Covid-19 pandemic. *Serials Review*, *46*(3), 227–231. https://doi.org/10.1080/00987913.2020.1806658

Edrada, E. M., Lopez, E. B., Villarama, J. B., Salva Villarama, E. P., Dagoc, B. F., Smith, C., Sayo, A. R., Verona, J. A., Trifalgar-Arches, J., Lazaro, J., Balinas, E. G. M., Telan, E. F. O., Roy, L., Galon, M., Florida, C. H. N., Ukawa, T., Villaneuva, A. M. G., Saito, N., Nepomuceno, J. R., … Solante, R. M. (2020). First COVID-19 infections in the Philippines: A case report. *Tropical Medicine and Health*, *48*(21). https://doi.org/10.1186/s41182-020-00203-0

Flores, H. (2021, February 25). Survey: 4.4 million school-age Pinoys not enrolled. *PhilStar Global*. https://www.philstar.com/headlines/2021/02/25/2080189/survey-44-million-school-age-pinoys-not-enrolled

Guo, Y., Yang, Z., Yang, Z., Liu, Y. Q., Bielefield, A., & Tharp, G. (2020). The provision of patron services in Chinese academic libraries responding to the COVID-19 pandemic. *Library Hi Tech*. https://doi.org/10.1108/LHT-04-2020-0098

Ifijeh, G., & Yusuf, F. (2020). Covid – 19 pandemic and the future of Nigeria's university system: The quest for libraries' relevance. *Journal of Academic Librarianship*, *46*(6), 102226. https://doi.org/10.1016/j.acalib.2020.102226

Koulouris, A., Vraimaki, E., & Koloniari, M. (2020). COVID-19 and library social media use. *Reference Services Review*, *49*(1), 19–38. https://doi.org/10.1108/RSR-06-2020-0044

Magsambol, B. (2020). *44,000 college students won't enroll during pandemic, says group*. https://www.rappler.com/nation/college-students-wont-enroll-pandemic-pasuc

Maharana, B., & Panda, K. (2005). *Virtual reference service in academic libraries: A case study of the libraries of IIMs and IITs in India* (pp. 1–14). http://eprints.rclis.org/handle/10760/9314

Mehta, D., & Wang, X. (2020). COVID-19 and digital library services – A case study of a university library. *Digital Library Perspectives*, *36*(4), 351–363. https://doi.org/10.1108/DLP-05-2020-0030

Mestri, D. D. (2020). Reopening libraries in COVID 19 pandemic: Challenges and recommendations. *Journal of Advances in Library and Information Science*, *9*(2), 36–45. https://online210.psych.wisc.edu/wp-content/uploads/PSY-210_Unit_Materials/PSY-210_Unit01_Materials/Frost_Blog_2020.pdf%0Ahttps://www.economist.com/special-report/2020/02/06/china-is-making-substantial-investment-in-ports-and-pipelines-worldwide%0Ahttp://

Nawaz, N., Gomes, A. M., & Saldeen, M. A. (2020). Artificial intelligence (AI) applications for library services and resources in COVID-19 pandemic. *Journal of Critical Reviews*, *7*(18), 1951–1955. https://doi.org/10.31838/jcr.07.18.244

Office of Planning, R. and K. M.-K. M. ment D. (Philippines). (2020). *Distribution of higher education institutions by region and sector*. https://ched.gov.ph/wp-

content/uploads/Distribution-of-Higher-Education-Institutions-by-Region-and-Sector-AY-2019-20.pdf

Oppenheim, C., & Smithson, D. (1999). What is the hybrid library? *Journal of Information Science*, *25*(2), 97–112. https://doi.org/10.1177/016555159902500202

Ortega-Martínez, E. de los Á., Pacheco-Mendoza, J., García Meléndez, H. E., Ortiz-Díaz, E. M., & Saavedra-Alamillas, C. (2021). Digital services adapted by libraries in Mexico to COVID-19 pandemic: A critical review. *Digital Library Perspectives*, *37*(1), 3–17. https://doi.org/10.1108/DLP-07-2020-0063

Philippines. Commission on Higher Education. (2020a). *Guidelines for the prevention, control and mitigation of the spread of coronavirus disease 2019 (COVID-19) in higher education institutions (HEIs): CHED advisory no. 5*. https://ched.gov.ph/stufaps/.

Philippines. Commission on Higher Education. (2020b). *Guidelines for the prevention, control and mitigation of the spread of coronavirus disease 2019 (COVID-19) in higher education institutions (HEIs): CHED advisory no. 2*. https://www.doh.gov.ph/sites/default/files/health-update/DC2020-0042-

Philippines. Commission on Higher Education. (2020c). *Guidelines for the prevention, control and mitigation of the spread of coronavirus disease 2019 (COVID-19) in higher education institutions (HEIs): CHED Covid advisory no. 6.*

Philippines. Commission on Higher Education. (2020d). *Guidelines for the prevention, control and mitigation of the spread of coronavirus disease 2019 (COVID-19) in higher education institutions (HEIs): CHED Covid advisory no. 7.*

Pokorná, L., Indrák, M., Grman, M., Stepanovsky, F., & Smetánková, M. (2020). Silver lining of the COVID-19 crisis for digital libraries in terms of remote access. *Digital Library Perspectives*, *36*(4), 389–401. https://doi.org/10.1108/DLP-05-2020-0026

Rafiq, M., Batool, S. H., Ali, A. F., & Ullah, M. (2021). University libraries response to COVID-19 pandemic: A developing country perspective. *Journal of Academic Librarianship*, *47*(1), 102280. https://doi.org/10.1016/j.acalib.2020.102280

Ravelo, J. L. (2020). *To contain the spread of coronavirus, Manila grapples with lockdown*. https://www.devex.com/news/to-contain-the-spread-of-coronavirus-manila-grapples-with-lockdown-96823

Saavedra-Alamillas, C., Pacheco-Mendoza, J., García-Meléndez, H. E., Vilchis López, A., Martínez-Camacho, H., Ortiz-Díaz, E. M., & Ortega-Martínez, E. (2020). Document delivering services: A strategy to support research in Mexican universities in the pandemic by COVID-19. *Digital Library Perspectives*, *36*(4), 337–349. https://doi.org/10.1108/DLP-05-2020-0031

Smith, R. A. (2000). Internet reference service: General sources and trends. *Journal of Library Administration*, *30*(3–4), 335–350. https://doi.org/10.1300/J111v30n03_04

So, yeah, the Philippines has Expensive turtle Internet, according to a new study: A global digital well-being study reveals the poor state of Internet in the Philippines. (2020). *Esquire Philippines*. https://www.esquiremag.ph/culture/tech/philippines-internet-a00203-20200820

Tammaro, A. M. (2020). COVID 19 and libraries in Italy. *International Information and Library Review*, *52*(3), 1–5. https://doi.org/10.1080/10572317.2020.1785172

Tsekea, S., & Chigwada, J. P. (2021). COVID-19: Strategies for positioning the university library in support of e-learning. *Digital Library Perspectives*, *37*(1), 54–64. https://doi.org/10.1108/DLP-06-2020-0058

U.S. Embassy in the Philippines. (2021). *Health alert: Quarantine and regulations update, June 16-31, 2021*. https://ph.usembassy.gov/health-alert-quarantine-and-regulations-update-june-16-30-2021/

Williams, S. (2010). New tools for online information literacy instruction. *Reference Librarian*, *51*(2), 148–162. https://doi.org/10.1080/02763870903579802

Yap, J., & Manabat, A. (2020). Managing a sustainable work-from-home Scheme : Library resiliency in times of Pandemic. *International Journal of Librarianship*, *5*(2), 61–77.

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