

## Towards a New Service of University Libraries within COVID-19 Pandemic Time in Indonesia

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This research aims to understand new virtual services developed by Islamic university libraries viewed from the perceptions of library and information science students. The concepts of services and functions of libraries, social media, and virtual technology, are used to understand this objective. This research employs a qualitative method with data collection techniques covering online observation and interviews. Before determining the object of research, observations were made daily on local and national online newspapers, to get an overview of the phenomena of library services during the COVID-19 time. Online interviews employed Google forms reinforced by direct communication via WhatsApp and Phone Calls with several informants, to obtain and validate data through triangulation techniques. The data analysis employed Miles and Huberman analysis techniques, including data reduction, data display, and verification or conclusions. The results of this study show three main issues: firstly, general phenomena around educational issues of students, indicating various social practices from internal to the external environment. Secondly, library usage becomes based on access development to information resources, service innovation, library response, and intensity of library use. Finally, newly identified service developments cover innovations in social media, librarians before virtual cameras, virtual recreation functions, and library collaboration.

**Keywords:** Indonesia; Islamic university library; Social media; COVID-19; Library student perceptions

## INTRODUCTION

Since the classification of the coronavirus disease 2019 (COVID-19) as a global pandemic by WHO on March 11, 2020 (Putri, 2020), panic has swept the world (Suni, 2020), although all countries, especially Indonesia, have taken various preventive actions. Prevention appears in various versions, ranging from social distancing to lockdown (Djalante, Lassa, Setiamarga, Sudjatma, & Indrawan, 2020). The prevention has limited physical spaces for people on one side, but their distance is virtually closer on the other. Virtualization of social institutions becomes a trend, which at the same time mainstreams virtual communication in almost every community interaction (Wijayanti & Pendit, 2019). This social interaction increasingly shows the face of a millennial era as the embodiment of a generation marked by the high utilization of technological media in social development (McLuhan, 1964). Libraries, as a social institution, a place of education, literacy, and knowledge and information referrals, are not stopped by the global pandemic to fulfill their professional duties through virtual communication (Devasahayam, 2020). The production, distribution, and preservation of information which are the main domains of libraries in delivering their services, have shifted to the power of virtual technology (Hartono, 2019).

New library service in the current pandemic time has demonstrated its significance in the millennial era. The culture of the community is almost all mediated using information and communication technology (Novianti & Garzia, 2020). A library is required to move in harmony with the lives of its people. It has a strategic approach to meet its user's needs (Blake, Gallimore, & Radford, 2018). It aimed to strengthen its existence as an essential element for social life. Communities that have faced social distancing until now have not shown signs of ending because the case of the spread of the epidemic is still unstable, as confirmed by an official report from the Indonesian government by August 18, 2021, and are still likely to rise. The statistics given by their health ministry of these cases noted that positive rate is 34,867 (0.8%), 142,026 (3.4%) passed away, and 4,039,835 (95.8%) were cured (Ministry of Health, 2021). Meanwhile, the World Health Organization confirmed 233,503,524 positive cases globally, and 4,777,503 fatalities (WHO, 2021).

That rising trend has encouraged educational and information institutions to utilize the internet in all their activities. The government issued an announcement letter through its Ministry of Education and Culture (Debora, 2020) and National Library (National Library, 2020) about online learning and work from home (WFH)



as an effort to prevent the spread of COVID-19. The situation also affected university libraries in carrying out their functions. Libraries, physically, were entirely closed to users, even though such physical services were still very dominantly practiced in the libraries, especially those under Islamic college institutions, in Indonesia. The change in services (Xie & Stevenson, 2019) has a significant impact on library information management (Zulaikha, 2019). Library service innovation in such conditions is interesting to analyze about its ability to meet the needs of students. However, this research will be limited to Islamic university libraries due to time constraints and a less conducive pandemic. The research will frame the problem into three issues: general phenomena surrounding students, patterns of library use, and new forms of library services.

### LITERATURE REVIEW

A library service is one of the central and crucial aspects of the existence of a library (Evans, Intner, & Weihs, 2002). Its presence will not be known to the public without service commensurate with the needs of communities (Hamad, Farajat, & Hamarsha, 2018; Nurdin & Saufa, 2020). The communities' needs vary depending on the diversity of their life backgrounds (Turner, 1978; Ahmed & Naveed, 2020). If a person comes from environments that rely on education, their information needs are educational issues covering a variety of themes, such as teaching and learning. Also, if their lives depend on agriculture, law, and the like, then information must also involve these fields. Thus, library services need to be understood and linked closely to survival needs (Minkel & Feldman, 1999).

Library services are known in two main types, namely technical and public. Technical services are library activities that do not directly relate to users, while public services are library activities that are directly provided to users (Evans & Carter, 2009). These two types are often associated with activities carried out through two stages, preparation and implementation. The preparation relates to the activities of librarians before the services reach their users. All these activities are carried out to ensure the relevance and accuracy of services to their needs (Kimura, 2018, p. 54). The implementation relates to services that are directly related to the user. Libraries undertake various activities and approaches oriented to the needs of served communities (Xie & Stevenson, 2019).

Therefore, the development of library functions is related to users' interests in obtaining relevant, effective, and accurate information to use as a source of knowledge (Rahman, 2021; Chisita & Chizoma, 2021). General library functions



include means of storing works, information, recreation, education, and culture (Mathiasson & Jochumsen, 2020). Oktavia describes the function of libraries as storing and loans, storing information resources, centers of community research resources, recreation and re-creation, and cultural development whose purpose is to shape a reality of knowledge (Oktavia, 2019; Zakrajsek & Vodeb, 2020). This reality is a form of information dissemination to facilitate libraries' distribution and discovery of information (Hussain, Taimoor-Ul-Hassan, & Shabir, 2021). Buckland presents the characteristics of quality information, which include information as a process, information as knowledge, and information as things (Buckland, 1991).. This point frames the library as an institution that can create various new services to realize strategic services to users (Perez-Stable, Arnold, Guth, & Meer, 2020). In millennial contexts, libraries deliver more dominant services through cyberspace, including repository space and social media (Hamad, Farajat, & Hamarsha, 2018, p. 155).

The emergence of the COVID-19 pandemic has shifted many library services, particularly physical services. This situation happened because the services collided with the current pandemic conditions. This global pandemic can lead to acute illness if protocols are not carried out, including social or physical distancing, as first happened during the epidemic in Wuhan, China (Yang, Ramiah, Pereira, Temouri, & Behl, 2021). The coronavirus has caused many diseases with severe symptoms, such as the Middle East respiratory syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV) (Aziza, Aqmarina, & Ihsan, 2020). The COVID-19 pandemic can be transmitted easily through sneezing and coughing, which splashes of saliva attached to inanimate objects (King, Ardani, & Vitalio, 2020). Amidst a COVID-19 outbreak like this, various government and non-government institutions are affected, especially educational institutions, and forced to limit their physical interaction.

UNESCO has reported the impact of the virus on the closure of educational institutions, which has led to reducing teaching time and decreased student performance globally (UNESCO, 2020). Also, other losses, such as family inconveniences and economic productivity decline, become mental and social pressures among communities (Hsu, 2015). Education in Indonesia, in particular, has felt its effects. In addition to the closure of institutions, various innovative programs to improve education, such as comparative studies in overseas education and other pieces of training, have been canceled (Rulandari, 2020). No less is the impact on libraries, such as the closure of physical services, borrowing collections,



and reading rooms. Such a situation occurs in all libraries, especially college libraries (Most, 2011). Therefore, libraries in the COVID-19 period have maximized the use of e-resources and social media to maintain their services (Maturure & Rakemane, 2021). UNESCO, in this case, encourages online learning and recommends the correct application for educational institutions to maximize output (UNESCO, 2020).

The university library is currently trying to develop online media to increase information transactions for its users as an initial compensation for the closure of physical services (Bandyopadhyay & Boyd-Byrnes, 2016). Libraries understand that users must get their rights as library users, especially among students. Students throughout the COVID-19 situation have experienced difficulty in accessing information in the library to complete their academic assignments, such as preparation of final projects, teaching and learning processes, limited communication with lecturers and advisers, and difficulties for students to obtain data and information from completing their assignments (Kosciejew, 2021). If the libraries cannot carry out their duties properly, then other institutions might emerge and replace them in the future (Galluzzi, 2011).

### **Research Objective**

This study aimed to understand a new variety of library services viewed from perceptions of library and information science students through three entry points: general practices of students encountering COVID-19 concerning their academic and social world. Also related are library usage patterns viewed from their perceptions of libraries' responses to their information needs and the construction of new types of library services facing the COVID-19 pandemic. To achieve this goal, three essential questions need to be formulated as follows.

- (1) What are the social practices of students toward COVID-19 concerning their academic and social world?
- (2) What new library use patterns have emerged in terms of students' perceptions of the libraries' response to their information needs in countering the COVID-19 pandemic situation?
- (3) How are new forms of library services constructed to answer students' needs during the COVID-19 pandemic time?



## METHODOLOGY

To answer these questions, this research uses qualitative methods with constructivist and interpretive paradigms to see the phenomena through the eyes of students (Denzin & Lincoln, 1994; Laugu, 2019). The research uses this approach to temporarily set aside personal perceptions to fully capture all feelings, thoughts, and awareness of the object under study (Pendit, 2003, p. 290). Data collection techniques used in this research are observed through online news, online interviews, and call interviews. Online news refers to local and national daily newspapers that report on the world of education and the health crisis due to the COVID-19 pandemic. Meanwhile, online interviews were conducted with various social media facilities, such as WhatsApp and Zoom, while call interviews became a supporting technique conducted with several informants who lived in the research area. The primary interview technique is through a Google form distributed throughout May 2020, containing statements, scores, and a comments column. If informants do not fill in the comments column, they mean to agree with those statements. So, three types of interview was used, namely: statements, scores, and comments. However, the score only serves the degree of agreement with the statements. The data was used to support call interviews, conducted with several informants. Interviewing as a leading source is strengthened by observational techniques so that in the following discussion, interview sources are more prominent than other techniques (Laksmi, 2019, pp. 86-103).

To ensure the validity of the data obtained, the researchers carried out a validation process through triangulation techniques by comparing interview results from various informants and techniques, such as online news and call interviews. The data were analyzed using the Miles and Huberman analysis technique through three stages: data reduction, data display, and verification or conclusions (Connaway & Powell, 2010). In addition, these informants come from various regions in Indonesia nationally. However, they are limited to library and information science students limited to Islamic universities in Indonesia. Due to time constraints and the pandemic, this research made the restriction that implicates specific findings. The universities can be seen in Tables 1 & 2 below. The number of informants contacted was five people for each university in order to get more representative information. The technique of selecting informants relies on lecturers' and the library head's recommendations to whom to become informants in this research. General description of the informants about their number, gender, and location in Indonesia can be seen in Table 1 below.

Table 1

*Information on gender and location of informants*

No	University	Informant	Gender		Island
			Male	Female	
1	UIN Sunan Kalijaga Yogyakarta	5	2	3	Java
2	UIN Syarif Hidayatullah Jakarta	5	3	2	Java
3	UIN Sulthan Thaha Saifuddin Jambi	5	3	2	Sumatera
4	UIN Alauddin Makassar	5	3	2	Sulawesi
5	UIN Ar-Raniry Banda Aceh	5	2	3	Sumatera
		25	13	12	

Source: Researchers' data processing results, 2020

In addition, this research method shows in detail the number of informants involved along with background mapping related to semester and gender, as illustrated in Table 2 below. This table attempts to show the variance of informants related to the level of education and gender diversity involved in providing information on the issue of library services during the pandemic era. Also, the background of the institution and geographical area shows the diversity of informants because they come from many universities, located in various regions throughout Indonesia, from east to west part.

Table 2

*Information on the semester, gender, and college of informants, 2020*

Informant	Semester	Gender	College
Inf-01	4	Female	UIN Sunan Kalijaga Yogyakarta
Inf-02	8	Female	Idem
Inf-03	4	Female	Idem
Inf-04	8	Male	Idem
Inf-05	10	Male	Idem
Inf-06	6	Female	UIN Syarif Hidayatullah Jakarta
Inf-07	8	Male	Idem
Inf-08	8	Male	Idem
Inf-09	10	Female	Idem



Informant	Semester	Gender	College
Inf-10	14	Male	Idem
Inf-11	8	Female	UIN Sulthan Thaha Saifuddin Jambi
Inf-12	6	Male	Idem
Inf-13	8	Female	Idem
Inf-14	6	Male	Idem
Inf-15	6	Male	Idem
Inf-16	6	Male	UIN Alauddin Makassar
Inf-17	6	Male	Idem
Inf-18	6	Female	Idem
Inf-19	6	Female	Idem
Inf-20	10	Male	Idem
Inf-21	6	Female	UIN Ar-Raniry Banda Aceh
Inf-22	10	Male	Idem
Inf-23	8	Female	Idem
Inf-24	6	Male	Idem
Inf-25	6	Female	Idem

Source: Researchers' data processing results, 2020

## RESULTS AND DISCUSSION

### General Practices of LIS Students in the COVID-19 Pandemic Time

Students as agents of change in social contestation are known to be dynamic community groups. They move competitively to create better and are open to change. They are ready and critical in responding to every social phenomenon that arises in their society. The initial part of this study will look at the general situation of their social practices in the community and its education. Therefore, two core questions were asked, firstly the impact of the pandemic on social relations, both with colleagues in the same field of science and those from other fields, including other communities as a whole. Secondly, questions about their learning process were raised to understand their educational background to be the basis for understanding the following two main problems, i.e., the use of libraries and the emergence of new services.

The first question revolves around the social relations of library science students with their friends. The relationship is influenced by four issues that give birth to three patterns of interaction. The four issues are internet access, economic



capability, technology ownership, and social relations activities among students. The impact of the first issue regarding the availability of the internet has created limitations in interaction due to the fundamental problem in its connection, as three informants stated that: *"discussions held with friends in the field of library science are less effective because not all regions have good networks, the economy is declining and affects their internet quota needed when studying online (Inf-19); the discussion through Whatsapp maybe still run well because it requires relatively little quota. Nevertheless, meetings through face-to-face video call applications, such as Zoom and Meet, are rather expensive because they require many quotas (Inf-06). Online discussions are not very effective because constrained by the internet quota and network. Some regions do not have a good internet network, so discussions with friends become disrupted (Inf-24)."*

The three cited passages show that the availability of the internet has a significant contribution to the lack of communication between students in their social relations. Nevertheless, others also feel unaffected by the internet; even their social relations have increased by learning with other fields. Depending on the situation at hand, it can increase or vice versa. They understand that such a situation has a significant impact on their communication with fellow friends. This situation indicated with interviews of informants as follows. They said that *"discussions have not diminished because of this pandemic. Many aspects are open to discussion online. Although there are different challenges, including an increased budget for internet quota is not cheap for certain people. Technical problems online are also unavoidable, such as signal quality (Inf-02)."* Another said that *"the COVID-19 pandemic does not prevent me from discussing with friends because it is facilitated by technology media which are now advanced. Online discussion can occur anywhere, including athome... not limited time for study, attendance is not compulsory in classrooms. Even though the atmosphere is different, the discussion can be even more intense as such a condition of the Pandemic (Inf-10). Since this online lecture, friends have become more active in discussions than when studying offline or face-to-face. Almost all students are competing to ask questions, but the fact is that in physical class only a few students want to ask (Inf-03)."*

In addition to the lack of interaction, good internet networks increase the intensity of their communication because such freedom of expression through the virtual world is partly not possessed in the physical world. So, this condition is very dependent on the capabilities of students, whether they make it into an obstacle or



an opportunity to develop themselves. Another impact is the economic capability that intersects with the same access to modern technology. Both of them contribute to the interactions of students in socializing during the pandemic era. Besides, these activities also determine the intensity of their interactions, both among students and their lecturers, as seen in the following interview: *“many are ineffective, what more for final students who have difficulty with their thesis consultation, ineffective in online discussions or online media, not effective for all people. Many students face difficulties because of ineffective consultation (Inf-22); discussions outside of library science are important for broadening their horizons and staying informed about current pandemic conditions. I use my spare time to add knowledge outside my field, such as taking online training for my career in the future (Inf-10).”*

These explanations illustrate the relationship of students' social practices as a general condition that surrounds their world as learners during the pandemic era that has a multidimensional impact. The explanations above get split into four issues: internet access, economic capacity, technology ownership, and student activities. These four issues create three possible forms of environment among students. First, interaction decreases due to a slow internet network, low economy level, limited access to technology, and low activity level. Second, high interaction occurs because it is in the opposite condition. At the same time, the third is in a condition between the two; namely, student interaction runs dynamically because slow network conditions can be overcome in various ways, for example, visiting institutions that facilitate internet access. Meanwhile, the low level of economy and ownership of technology can be overcome by some students leaving their villages for the city to get a decent network to access information optimally.

In addition, general phenomena related to student learning processes, both related to subjects and other activities, can be grouped into five essential issues: the presence of lecturers, economic capabilities, student residence, learning styles, and access to technological means. These five issues are related to two phenomena: communication process and shift in learning styles, from traditional to new digital media. Furthermore, these two phenomena experience two situations; the first deals with limitations and needs, and the second address challenges and opportunities.

The first issue is the importance of lecturer attendance. Lack of communication occurs due to the limited lecturers' control over students so that their involvement in every student activity is needed. In addition, the shift in

learning style presented by the lecturer faced two situations, namely in the form of challenges due to the lack of stability of online learning and opportunities due to the birth of opportunities for students to learn a lot independently. This situation illustrates in several interviews with the following informants, which stated that *“direct control from lecturers is very influential for student knowledge, not to mention that all students have different criteria in capturing materials given. So interacting directly with lecturers is very effective compared to online lectures today (Inf-19). Group discussions also often encounter obstacles because, during discussions, there are friends who do not respond either due to lack of internet quota or because of poor network. So it requires a very long time to discuss one point (Inf-21). It is more exploratory and provokes curiosity for students to learn, but if there is a lack of supervision, they are worried that they will get wrong information (Inf-10)”*.

The next issue in the form of financial capacity and access to ownership of technology and housing has strong relevance to the sustainability of student education. This situation looks in the following interviews stated that: *“from the positive side, we can look for what is not understood by materials given by our lecturers. If in class, it might be difficult because some lecturers do not permit to hold cell phones during the teaching and learning process (Inf-24). [Therefore], with the emergence of the pandemic many institutions and individuals are competing to discuss various things in facing the challenges of the COVID-19 pandemic towards the implementation of several fields in terms of education, religion, culture, and other social activities (Inf-02).”*

The last issue shows the inefficient online learning style because of several things, namely some lecture materials that are difficult to understand by only accessing them online, as offline is usually easier than online. This issue becomes admitted by several students, such as informants 8, 18, and 20, and can be seen in detail in several interviews as follow: *“shifting from manual to virtual does not make it easy, but makes it difficult for friends who are in the village or who have difficulty getting internet signals. There must be constraints, such as interrupted video and limited internet quota. It makes it difficult for students to understand the lecturers’ explanations and library services; coming to the library makes me happy (Inf-04).”* Another informant said that *“honestly, I understand better when explained directly with lecturers rather than online because of internet network constraints, and I prefer to study on campus rather than online. We can go to the library to get many sources (Inf-06).”*

The results of this interview show the importance of conventional learning. Students feel that direct physical learning is much better than internet-based. Internet facilities have many shortcomings, such as signal instability that occurs during learning. Behind the online learning, access to library services is delightful for them if they get the opportunity to come directly to the library. Therefore, students assume that an offline learning process is still a representative form of learning for the older generation and the millennial generation. They also believe that learning or access to conventional library services is essential to maximize access to information.

### **Patterns of Library Use Concerning its Approach to Users**

The library usage pattern based on service advocacy response is found generally in four dimensions, i.e., the type of sources used, library efforts in providing services to users, pandemic-conscious advocacy for library needs, and intensity of library use by students. These four dimensions are the result of the exploration and interpretation of interview data obtained from informants. The four dimensions are then framed in four ways: access to information, library collections, sources used, and problems encountered in the pattern of library services. The first dimension in the form of information sources leads to the availability of alternative repository services supported by other sources in the form of e-books & e-journal libraries (Nurdin & Mukhlis, 2019) accompanied by the use of outside sources taken from the e-resources of the National Library of Republic of Indonesia.

The reality of this dimension can be seen in several informants stating that: *"[University Library] repository is an online library service that really helps all student activities to complete campus assignments, especially for the final students who are doing their final assignments (inf-02). Repository services are the first choice for students searching and utilizing local content, such as theses and academic papers, which usually search directly in the library (Inf-10). Access to get articles, e-books in full text and e-journals will greatly assist students in completing their college assignments (Inf-04)."* Another informant stated similar things as follows: *"COVID-19 emergency makes all aspects swell, online services either through social media or others are very helpful in the smooth running of information media ... [this] is considered the right solution [because there are no printed books served] (Inf-02)".* These interview results mention several sources served by libraries, both internal and external collections of university libraries. A service is a

form of university library advocacy in meeting, the needs of its students in the current global pandemic situation. Health emergencies resulting from COVID-19 forced all libraries to close their physical services (Ali & Gatiti, 2020) so that their print collections could no longer be a facility for users to fulfill their needs as library users.

The next dimension is innovation and library advocacy response to users to improve services through alternative media, such as Instagram and Twitter, to deliver services. The use of these media helps improve services, at least to maintain a minimum standard of service needs of users (Suwarno, 2020). Services obtained from outside their libraries rely on empowering part-time employees or lecturers concerned about library access issues experienced by students. In addition to its smoothness, there are also disadvantages from students' limited access due to the digital divide and students' financial ability (Suryatmojo, Kusumawardani, Alucius, & Widyatmanti, 2020, p. 133). This situation looks in informants stating that: *"the library carries out self-development activities by providing full-text articles and e-books in open access, online discussion rooms, and social media. I often follow the IG live library (Inf-01). OPAC and others are important to facilitate retrieval (Inf-11). OPAC becomes the most used in finding information provided by libraries (Inf-24).* Another informant stated that: *"in my opinion, virtual media is one of the ways that libraries can do in providing information to users, but not all visitors come from well-off families who can fully facilitate their children, such as the provision of internet quotas. In addition, a residence far from the city causes a slow network making problems in information access (Inf-21)."*

The last dimension in this library usage pattern is the intensity of library use expressed by students. This dimension can become apparent in the results of interviews with several informants as follow: *"a variety of tasks assigned to students force them to access various sources of references frequently in the library online, visits to library services will follow the needs, more or less in access depends on the amount of workload obtained by students (Inf-02). [Therefore], more and more assignments will encourage students to access libraries (Inf-11). Students are very overwhelmed with the assignments given by the lecturer. That is why students access [the library] up to 10 times (Inf-23). Only the occasional student accesses the internet 7-10 times per week (Inf-12)."* The other informants stated that: *"getting information can also be from friends who have part-time staff at the library, they can help what I need (Inf-05). Articles from browsing [open access] are more helpful in completing tasks (Inf-01). The task is primarily more about COVID-19, so we have*



*more to find articles from anywhere (Inf-25); not all students have a network conducive to accessing it because of limited technological facilities that are sufficient to follow online (Inf-19). Unfortunately, students cannot access it freely because of limitations in internet quota (Inf-11)."*

The informants' responses above illustrate four things related to the dimensions of the intensity of library use. Issues of access are primarily determined by the tasks given by lecturers so that the more tasks of the lecturers, the more intensive they are in using libraries. Meanwhile, access to library collections is supported by part-time employee involvement and students' own efforts to find sources of open-source access (Halsted, Clifton, & Wilson, 2014). Apart from these uses, there are obstacles encountered in the form of a lack of internet quotas to access information sources, both from the library itself and from outside the library.

### **New Services of Libraries among COVID-19 Pandemic Time**

Student perceptions, both based on their experience in using libraries and their ideas toward them, show several vital themes to give birth to new library services now and in the future. These experiences and ideas can be identified as four essential themes: the importance of social media, librarians before virtual cameras, virtual libraries' creative functions, and collaboration. The first theme in the form of inauguration toward the importance of social media, to be used in building relationships between libraries and users, cannot be ignored because the millennial era gave birth to the millennial generation that developed as part of the world of social media (Suwignyo & Purwanto, 2020). This issue becomes evident in interviews with the following informants stating that: *"social media helps facilitate the relationship between libraries and their users to be a creative and informative means for students (Inf-10); online services do encourage users to use social media in the fulfillment of information, social media are not only used as media to be active in education and science. It can be in the economic, social, and even political fields (Inf-02)".*

This theme is a new form of millennial-era library services. Social media is no longer used only for socializing but is also directed to bridge the delivery of library services. This issue means that the library cannot be separated from social media facilities to improve its relations with its users. This theme leads to the second theme of new library services, namely the presence of a virtual librarian at any time as a must-have. The millennial world is a virtual world that demands commensurate mutual communication, where face-to-face virtual communication is the key to the

success of millennial community library services. The presence of librarians in building library images, such as in virtual presentations through Instagram, is essential for promoting library services (Labibah, 2020). Such an issue looks in the following informants that stated: *“with frequent libraries doing live streaming, it makes students more productive and can develop their minds to broaden scientific insights. Libraries provide freedom of opinion, especially when users ask librarians (Inf-03).”* This point indicates that *“libraries should be ready to serve via digital long before COVID-19 struck out. Technology and lifestyle readiness of the majority of students whose time is used in the virtual world has the potential for libraries to attract students through digital facilities (Inf-10); it is already in the digital era, so inevitably, everyone would want to get it faster via virtual, especially with the current pandemic (Inf-13). Libraries often live with social media, such as Instagram and Facebook, to provide information on the development of libraries on an ongoing basis; even developments per second are made to encourage the use of libraries by students (Inf-15).”*

In addition to virtualizing the image of librarians, virtual presence for recreational purposes is also essential for users in creating new types of library services. Movie screenings in conventional services as part of library efforts to create an innovative situation among users can be manifested in virtual services. The ability of libraries to innovate in library recreation functions is needed, especially in a pandemic situation like in current days. Informant supports this issue that social media is beneficial in facilitating the relationship between the library and its users to be a creative and informative means for students to reduce the fatigue of students (Inf-10). Besides, virtual services are not all to be serious; they provide entertainment to deal with COVID-19. Libraries in this context become creative in providing services, for example, using particular games for education (Inf-14). Entertainment is very much needed in the virtual world to make users fresh in accessing library services (Inf-17).

The development of library recreation services is critical as an educational institution and student mentality (Nicholson, 2009). This point is essential as an alternative to the entertainment available in cyberspace with so many variants that some have no moral rules, which can damage the mentality of the millennial generation. The library world's new services will create a new order of virtual entertainment that is more dominant in educating the millennial generation. This recreational element does not eliminate the world of library information because



its services rely on information literacy, even entertainment services (Gumulak & Webber, 2011).

The final theme is new productive library services, which need to design based on collaboration with various information institutions (Madge, 2018). Each library has its limitations in many ways, especially in information collection. Collaboration with information institutions will build a network of information needed by users who may not own one library. Virtual technology facilities will have the capacity in that direction. Libraries do not have to have all digital collections if a partnership is built based on the suitability of the field being worked on (Evans & Carter, 2009). Some informants have touched on the theme of the collaboration to improve the new services owned by the library. They stated that libraries should have a strong collaboration with various publishers or other information institutions, allowing them access to external online collections related to their field of knowledge (Inf-07, 09, and 16).

In the perception of library science students under higher education institutions of the Ministry of Religious Affairs, university libraries show a change towards service virtualization. The virtualization indicates a service process that has begun to be driven by social media in delivering library information related to library policy direction and the types of primary library services, such as e-repository and e-journal services. Based on social media, librarians need to live in a more virtual world that requires them to always be in front of a virtual camera (Degkwitz, 2017). All aimed to answer the users' questions quickly and live. Users expect that the library can also provide entertainment and primary services, such as e-books and e-journals. In order to realize various new services, collaboration between information institutions must be carried out so that the needs of users can be handled quickly and adequately.

## CONCLUSION

This research proposes three essential issues about the innovation of new services of Islamic higher education libraries in Indonesia. These issues concern general phenomena of student social practices, patterns of library use, and the development of new library services. The first issue concerns the impact of the pandemic on social practices of relations, both with colleagues in the same field and those from other fields, and the learning process of students to understand their educational background as a basis for understanding the use of libraries the emergence of new services. The issue of social relations found that there are



influences in four domains that give rise to patterns of interaction. These are internet access, economic capability, technology ownership, and social relations activities among students. Issues regarding library usage patterns look in four dimensions: the type of sources used, library efforts in providing services to users, advocacy of pandemic awareness to deal with user needs, and intensity of library use by students. These four dimensions become formed in four ways, i.e., access to information, library collections, sources used, and problems encountered in the pattern of library services.

The last issue exhibits four themes: the importance of social media as a new introduction to library services, librarians before the virtual camera to respond to users' needs quickly, libraries' virtual recreation function to overcome the mental stress of the library users, and cooperation as a strategy to develop primary library services. This research generally shows that the COVID-19 pandemic condition creates a dynamic of library services and reveals the social practices of users, which leads to pessimism but on the other hand, there is optimism in dealing with services during the pandemic. Unfortunately, this study was limited to a more specific issue due to pandemic conditions that made it difficult to move further. Therefore, the other research on such cases needs to investigate broader locus to uncover more comprehensive perspectives.

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