### Covid-19 and its impact on Finnish public libraries

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**Abstract:** The aim of this study was to contribute to understanding how public libraries in Finland managed the situation caused by the COVID-19-pandemic by answering two research questions: 1) What were the effects brought by the COVID-19-pandemic on the functions of the Finnish public libraries and their daily operations and 2) what kind of influence did the pandemic have on the library staff's daily work and their feelings? Data were collected with a questionnaire responded by 251 library professionals. Also ten interviews were conducted among Finnish librarians. As a result, it was found that in some cases the libraries were able to innovate new forms of online services and the staff was able and keen to develop their skills in producing content on social media. In libraries where some or all the staff was temporarily laid off or their payroll was interrupted, the negative effect on motivation was evident.

Keywords: COVID-19, libraries, pandemic, Finland, Decision-making

### 1. Introduction

The SARS-CoV-2-virus spreading the COVID-19-disease was first found in Wuhan, China at the end of 2019. In the beginning of 2020 it spread from China to Europe, where Italy became the first large area affected by the virus, which was announced as a global pandemic on March 11th 2020 by the World Health Organization director Tedros Adhanom Ghebreyesus (Varpula 2020). In Finland, the coronavirus was first diagnosed at the end of January 2020. On the 21st of April, there were 4014 diagnosed cases of the virus in Finland. This means that there were 72 cases per 100 000 habitants (THL, 2020).

The Finnish Government issued a State of Emergency Act, which included closing down all the public and scientific libraries in Finland, effective on March 18th, 2020. The Act also closed down the schools, limited gatherings to a

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maximum of 10 people and later restaurants and cafeterias were ordered to close. (Finnish Government, 2020a; 2020b.) Due to the act, the libraries faced an unexperienced situation. On May 6th 2020 the libraries were allowed to start loaning out material and accept returns while library spaces were ordered to remain closed until the 31st of May, 2020. (Finnish Government, 2020c.)

The aim in closing the libraries was minimizing social contacts, thus preventing both users and staff from catching the virus. It has also been estimated that the virus could live on surfaces, such as book covers, from five to nine days (see Kampf, Todt, Pfander & Steinmann, 2020). This was also a factor in the decision of closing down libraries. This article presents the effects which the state of the pandemic brought on the functions of the Finnish public libraries and their daily operations. This study contributes in giving a general view on the library operations, tasks and the mindset of personnel caused by the exceptional situation.

### 2. Previous research

COVID-19-pandemic is an exceptional and unique phenomenon of which previous research is limited to turn for comparison. So far, research related to COVID-19-virus or similar phenomenon are focused on the fields of medicine and microbiology (e.g. Dong, Hu & Gao, 2020; Livingstone & Bucher, 2020; Remuzzi & Remuzzi, 2020; Porcheddu et al. 2020). However, communication studies journals have opened calls for papers related to for example the disinformation campaigns, media coverage and social media discussion around the pandemic.

Zach (2011) highlights the role of libraries as an information source, providing current and relevant information during epidemics. For example, during the 2003 SARS-epidemic in Ontario, Canada, libraries were responding to several inquiries about SARS. There, 69 libraries started a telephone and online service to inform the public on SARS. (Harris, Wather & Chan, 2005.) In previous research, the role of libraries has been considered as fulfilling information needs and providing information (compare McGuire 2007). These studies have not considered the viewpoint of a complete shutdown of libraries.

In crisis management studies the behavior of organizations and individuals has been researched for example in relation to natural catastrophes and other crises (Palttala et al. 2012). Regarding information needs and communication in crisis, such as terrorist attacks there is some recent research in Finland (Haasio et al. 2018). Terrorist attacks have also been studied from the social media communication perspective (Tikka, 2019). Also Hakala (2011) has approached crisis widely from a media phenomenon perspective, from the organization communication view point (Tikka, Hakala & Pedak, 2010) and analyzing crisis management communication (Hakala et al. 2014). However, this research mostly concerns a crisis as an individual one-time event caused by a violent attack or an environmental catastrophe in one country.

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### **3.** Theoretical framework

The situation in question is global, unexpected and new which has challenged the responses to it. There are no previous models that countries or citizens could have adapted, just like there is no previous research to compare this study with. From the viewpoint of information seeking and decision-making, we can look at the unanticipated decision-making situation described by Byström (1999). In the situation which Byström models for professional information seeking, the individual is forced to make decisions and obtain information in a completely new type of context. This applies to the global situation with the COVID-19pandemic and the State of Emergency Acts responding to it in different countries.

The measures planned and executed could not be based on similar previous situations and experiences, since there were no comparison points. The theoretical framework for this article is based on the Byström's (1999) model because of the consideration of the uniqueness of the situation and the measures taken, even though the view point is not solely related to information studies.

The application of Byström's (1999) disposition of different types of decisionmaking contexts in situations where coping is connected to a completely new, unexperienced situation is relevant. The shutdown of the libraries, the feelings caused by it within the staff and the concrete measures that were taken, are unforeseen situations applicable to Byström's model. In addition to the concrete measures and their execution, they also involve the aspect of information acquisition.

In Finland, the decision-making situations related to the shutdown can be outlined in three categories:

- 1. The in-house decision-making of libraries
- 2. Municipality level decision-making, where the libraries have no direct influence
- 3. The decisions made by the Finnish government

This article focuses primarily on the in-house decision making of libraries, the information acquisition related to it and its effect on the operative functions of the library during the crisis.

The gap-facing metaphor by Brenda Dervin (1992) applies also to understanding the decision-making and related information needs associated with the pandemic. Dervin (1983) describes problem situations faced by the information seeking individual. The problematic stop, a situation where an individual would not want to be in, describes the context of anxiety and uncertainty, where decision-making and measures are taken during the pandemic.

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### 4. Research problem and methodology

### 4.1. Research questions

COVID-19 has influenced society widely: economy and culture are in crisis. This article concentrates on the immediate effects on the Finnish public libraries' daily routine and staff.

The main research questions in this study are:

- 1. What were the effects brought by the COVID-19-pandemic on the functions of the Finnish public libraries and their daily operations.
- 2. What kind of influence did the pandemic have on the library staff's daily work and their feelings?

The contribution of this study is to help understand how crisis affects the routines of librarians. In many cases, surviving the crisis is possible by innovating new forms of services. Emotions also play a major role in crises. When facing a pandemic, many kinds of fears can be recognized. Our second research question is based on the assumption that the library shutdown caused by the pandemic affected the staff in different ways.

### 4.2 Data collection and analysis

The data was collected between March 26 and April 6, 2020 with a browserbased Webropol-survey form. The link for the survey was distributed in the Finnish Facebook groups called Kirjastot.fi (Libraries.fi) and Mediakasvatusta kirjastoissa (Media Education in libraries). The members of these groups include mostly library personnel and decision makers within their 6700 members, which secured reaching the active library personnel from the Finnish public libraries. The survey cover letter also advised that survey answers were sought only from the personnel working in public libraries. The reason to distribute the survey through Facebook groups instead of emails was that there were already temporary layoffs in motion so staff might not have been following their email. Because the study also concerns HR-operations during the shutdown, the responses of the personnel were essential.

Table 1 presents the profession division in 251 survey responses. Most respondents were library assistants (36.7%) and librarians (25.9%). 15.5 % of the respondents were managing position personnel, such as head librarian or library administration director. The other respondents (14.3%) ranged from a mobile library operator to a manager of services (Table 1).

Title	n	Percentage
Library administration director	24	9,56 %
Head librarian	15	5,98 %
Librarian	65	25,90 %

Table 1. The job title of the survey respondents.

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Information specialist	17	6,77 %
Library assistant	92	36,65 %
Special library assistant	2	0,80 %
Other, which?	36	14,34 %
Total	251	100,00 %

Municipality size	n	Percentage
Over 100 000 residents	52	20,72 %
50 000 - 99 999 residents	62	24,70 %
25 000 - 49 999 residents	31	12,35 %
15 000 - 24 999 residents	27	10,76 %
5 000 - 14 999 residents	50	19,92 %
Under 5 000 residents	29	11,55 %
Total	251	100,00 %

Table 2. The Municipality size of the survey respondents libraries.

Almost half (45.4%) of the respondents lived in larger municipalities (over 50 000 inhabitants) (Table 2). The library sizes of the respondents, presented in Table 2, are relevant to the analysis. For example, the libraries in bigger municipalities have better financial resources and wider personnel charts than the libraries in rural areas.

Respondents could also sign up for an interview in the survey by leaving an email address for further contact. 48 people offered to be interviewed and through random sampling ten of them were interviewed through Skype or Microsoft Teams -program. One interview was conducted through the phone because of the respondent's IT-challenges.

The interviews were saved on the researchers' computers and then transcribed and coded for analysis. Out of 15 interview requests, 10 interviews were agreed. The interviewees are anonymized in the analysis with codes R1-R10. These included 2 library service directors, 2 head librarians, 1 information specialist, 1 library educator, 1 head of services and 1 library assistant. The distribution of different professions enables considering both, the management and the subordinate, viewpoints in the study.

The interviews were analyzed using qualitative content analysis. Quantitative content analysis was used to analyze the Webropol-survey responses. All questions about the mood and views of the staff were answered with the Likert scale from 1 at totally disagreeing with the statement and 5 totally agreeing with the statement (Tables 3 & 4).

## 5. Results5.1 Users' reactions to the library shutdown

The users' reactions to the library shutdown were mostly understanding. In some cases, however, it may have caused disapproval and even angry feedback.

"For us, the library was closed on 17 May, right after the 16 May government notice. Some users were annoyed when they couldn't hoard books while everywhere else the libraries were still open for that day." (R7.)

The users had not always been informed of the shutdown and they thought that the library would still be open on March 17th. When this was not the case in some parts of town, anger as their first response is understandable. They felt unequal to those citizens whose hometowns still had libraries open for that day so that books could be collected for the shutdown.

Out of the respondents, 88.8 % stated that the numbers for loans had significantly risen before the shutdown after the announcement for it had been given. In many towns, the number of loans was historical on the March 17th, 2020 (R1; R3; R9). For example, in the Turku city library, that day recorded 24 000 book loans while on a typical business day the number is around 6000 loans (Turun kaupunginkirjaston lainaustilastot, 2020). Books and other material were loaned in enormous amounts because there was no estimate of the length of the shutdown. Especially in the bigger cities, the users rushed to loan books during that last day of libraries being open, while the user rush was not necessarily as remarkable in the rural areas (R4; R8). Even though most libraries where that did not occur (R2; R8).

One interviewee described the users' feelings:

"Many people miss the library, but understand that we are closed. However, it is nice to notice how wanted and important the library is as a service!" (R5.)

On the other hand, many users thought that once the library closed down, the staff had no reason to work. The perception of the profession and its tasks is seen in the users' comments:

"Now the misperceptions of the library field are obvious: "Well, now you are out of work, what do you have to do there?" (R9).

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Even though the general approach to the library shutdown was understanding, there was some critique, mainly for losing the access to services such as printing and copying in smaller towns (R2; R8).

### 5.2 Influence on the tasks and staff mood

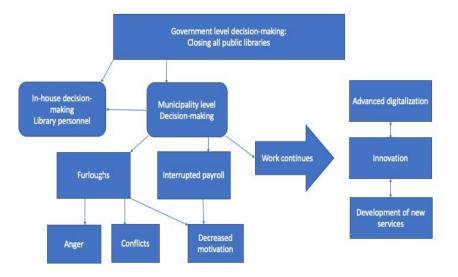
Because of the pandemic, there was a radical change in the library duties when physical user service ended. Reorganization of duties started immediately when the Finnish government issued the shutdown decision (R3). Part of the library staff was placed on other duties within the municipality, some municipalities issued furloughs or started cooperation negotiations. Fifth (21%) of the respondents stated that part of their municipality's library staff had been moved to work in other than library duties. For example, staff with a practical nurse certificate, had been moved to work in guiding duties in health centers (R10). In some municipalities, part of the staff were issued to call citizens over 70 years old to survey if they needed help from the municipality. Some staff members also moved to transport meals and alike duties. (R4.)

## Table 3. The feelings of respondents (n=251) in the situation caused by the pandemic

Statement	Response
The state of emergency has caused problems to my livelihood	2,44
I experience the current situation stressful regarding my work	3,68
I am worried for my job	3,22
I am worried about the future	3,96

The personnel were asked about their reactions to different issues around the exceptional situation. Table 3 presents the average of all the responses which indicates that stress, concern for their job and future in general was significantly higher within respondents. They did not view the pandemic as affecting their financial well-being significantly. This can be explained partly through the reorganization staff duties; only those who went through furloughs and interrupted payroll, experienced financial challenges because of the pandemic.

The anxiety grew because of the sudden and unique nature of the situation and especially the uncertainty related to the workplace. Partly it was also affected by the fear of getting infected with the coronavirus because some of the personnel belonged to the high-risk-group.



### Figure 1. Decision-making and libraries during the pandemic.

Figure 1 shows that as stated in Section 3, the decision-making in crisis was divided within three actors.

- 1. The in-house decision-making of libraries
- 2. Municipality-level decision-making, where the libraries have no direct influence
- 3. The decisions made by the Finnish government

The government ordered all public libraries to be shut down after which the municipality decided on the personnel politics; whether the employment continues normally or will there be part- or full-time furloughs while the libraries are closed. The libraries could then decide on the operative functions; what kind of duties are distributed to the staff and what alternative and replacing forms of services are developed and organized. (Figure 1.)

Duties and ways of working had to be re-evaluated in all libraries. The effect of the pandemic on duties is well described in that 59% of the respondents felt that the exceptional circumstance had affected their duties either a lot or quite a lot. Only 9.6% of the respondents felt no effect on their duties because of the situation. Over half, (55.7%), of the respondents agreed completely or partly that the situation caused from closing the libraries was stressful for them.

Most libraries reorganized their personnel's' duties to allow remote work when possible. Remote work is fairly new to libraries but it was seen to become more common when more possibilities are developed for it. There are many duties that are impossible to carry on remotely but only the duties essentially requiring

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presence were executed in the libraries. The problem was partly, that the library could not necessarily offer remote system access to the personnel (R3).

The biggest influence both, financially and mentally, was caused by the furloughs and payroll interruptions executed in libraries in some municipalities. The information on these was completely unexpected and the bitterness and anxiety they caused was clearly seen. The resentment was increased by the inequality between libraries; only some libraries took this approach in the situation.

In the cases, where only some of the staff were temporarily laid off, there was a sense of inequality with those who were kept employed. This divided the staff in two groups. When the furloughs are over and the staff returns to work, there can be challenges with decreased motivation and inner conflict. The same applies to the libraries where large payroll interruptions and furloughs were executed (R7; R9).

The bitterness and inner conflicts were a natural consequence from the payroll interruptions and furloughs, especially if executed only partly within the staff. Many employers felt that this placed the staff in an unequal position and the work of some was appreciated and valued higher. In one town, the personnel suggested that the furloughs would affect everyone thereby allowing for shorter lay-off periods. However, the employer did not agree with this solution, viewed as more equal by the personnel. (R7.)

Based on the survey responses, 13.7% of the respondents had faced significant financial difficulties because of the furloughs and payroll interruptions. Overall, 15.6% had been temporarily laid off because of the pandemic. There is no precise information on the total percentage of library personnel in Finland temporarily laid off because of the pandemic. Therefore, the survey response of 15.6% is an approximate of the total situation.

The duties executed in libraries during the shutdown divide into two categories depending on the library:

- 1. Reorganization of space and collections
- 2. Developing new forms of services

Even though the majority of the respondents, 83.9%, considered the library shutdown as justified, there were several emotional responses to the situation. The libraries were unprepared and this was a new type of situation also to the management. The management was forced to act and make decisions in an unexperienced situation. This applies to the completely new and unexperienced decision-making situation by Byström (1999) both, for the municipality and the in-house library management level.

### 5.3 Reorganizing the library operation

Many libraries developed new services because of the pandemic. When asked whether new forms of services were developed, 45.2% agreed fully or partly. Because the physical space was closed, especially bigger libraries with better resources, started developing and producing online services and content. For example, online book clubs and storytelling sessions were organized during the pandemic. Some of these had already been organized, while some were new to both, the organizing library and its users.

Even though the pandemic resulted as a digital leap in the libraries, as described by many interviewees (R3; R5; R6), also the inequality of libraries became more obvious (R8; R9). The interviews brought up that bigger city libraries had more possibilities to direct resources into new kinds of library duties and increase the supply of online services and produce services like online events, storytelling sessions and other alike during the pandemic. Smaller libraries in rural areas had only few personnel and in the worst case, even they were temporarily laid off, so this type of new form of user service was not possible. This created inequality, like one of the interviewees evaluated (R8).

The Tampere City Library, which is responsible for regional development, reviewed the possibilities for offering new service concepts for users during the pandemic. Finnish public libraries were for example operating the following services during the shutdown (Parviainen, Luomaniemi & Penttinen 2020.):

- virtual digital assistance
- instructional videos on using digital services (i.e. YouTube)
- online information service (chat, e-mail)
- E-magazines
- Spotify-lists created by the libraries
- streamed events (storytelling sessions, discussion forums, book clubs)
- Online book clubs
- guest interviews streamed online
- digital reading diplomas for high school students
- virtual reading events online
- library pod casts

There is also a service page Libraries.fi where a list on free to use online material and guidance for the exceptional situation has been collected (libraries.fi). Some of these innovations have been developed and produced during and because of the pandemic, some already existed but their marketing has been enforced after the shutdown. A good example of the latter is the OwnLibrary service of the Turku City Library, where concerts, audiobooks, e-books, old photos, streamed work out sessions and co-singing and -reading activities are available for use. (Parviainen, Luomaniemi & Penttinen, 2020.)

Table 4. The effects of the pandemic on the immediate loaning statistics of		
the libraries.		

Statement	Response
The use of online services has increased	4,08
Loaning e-books has increased significantly	3,68
The popularity of e-books continues to grow	4,07
The popularity of audiobooks continues to grow	3,99
The users will move to commercial book services, such as Elisabook or BookBeat	3,59

Table 4 shows that the respondents viewed that different online material have and will stabilize their position after the pandemic. Their popularity will grow and remain after the libraries return to their normal operations. It is significant that library professionals estimate the growth of commercial services offering audiobooks and e-books at the same time when libraries get more loans for their e-books.

# 5.4 Which effects does the pandemic have on the future of libraries?

The exceptional situation made it necessary to react fast. New working methods and forms of user service showed that, when willing, libraries are capable of reacting to changes:

> "I believe that at least some of the services developed because of the coronavirus will remain in the future. Remote work will become more common and the new online services that have now been developed will mostly be continued." (R3.)

The significant digital leap among the staff, caused by developing new forms of user service in the libraries that have invested in producing new online content, has been seen as a positive development. (R3; R7.)

"Many people who have not really used smartphones or tablets are now doing effortlessly doing Instalive. You can see that people are creative and willing to learn new things." (R3.)

Focusing on digital services was seen as a survival strategy for the libraries during the shutdown. It enabled the libraries to secure their operation and fulfill their users' needs for culture and information. In this situation, the personnel who previously had not shown effort to develop digitalization also showed interest to develop their own digital skills (R3). This might have been caused by the concern for their employment and seeing the possibilities for measures that could secure it.

On the other hand, also the users have taken a digital leap through using online material, such as audiobooks, e-books and online book clubs. It was stated in several interviews, that the use of online material was not seen as only a temporary phenomenon caused by the pandemic. However, the situation had encouraged trying new, unfamiliar types of services and user interfaces, which were predicted to grow in popularity also when the operation returns to normal. (R1; R3; R5; R6.)

The effects of the pandemic on the finances of municipalities and library resources are unknown. When writing this article, it remains open how deep the financial crisis of municipalities will be. A heavy crisis would also affect the budgets of libraries. This concern came up in most interviews and especially those working in management positions brought it up. (R3; R5; R6; R9; R10.)

Both, the interviews and the survey's open comment -field, expressed concern on employment; they suggested that the opening positions will not always be filled because of the tight municipality budgets (R4; R7; R10) as the following open comment describes:

> "I believe that this situation will affect the number and duties of the personnel. The state of emergency has revealed that some of the staff has very narrow job descriptions (Only about fourth of 20 employers have the type of job description that allows remote work even partly.) In the future the number of staff will decrease due to retiring staff (large number of people is retiring within five years) and I hope that job descriptions will be evaluated during recruitment and wide-range knowhow will be favored."

On the other hand, like the previous comment suggests, the wide-range knowhow of personnel might become more appreciated than before. This study shows that one central survival mechanism of those libraries not executing furloughs, was the digital leap. That requires a new kind of attitude, professionality and versatility. This was also highlighted in several interviews (i.e. R3.)

Even though the interviews brought up several positive effects on the operations of the libraries, a big challenge will possibly be the decreased work motivation and inner conflicts brought upon by the furloughs and payroll interruptions.

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Because these were planned and executed by the management of the municipality, not the library, the anger was directed towards the municipality officials and their perceptions on the significance of the libraries and their personnel:

"It took me about a week to feel this light rage... ...here you can see how the municipality views library work.. ...work motivation froze... ... and the motivation speech of the city feels ridiculous." (R9.)

There would be a lot of work in the libraries, but in those municipalities where furloughs were executed, this was seen as lack of respect and underappreciation of the profession (R9).

### 6. Conclusion

Considering the decision-making of the library shutdown and the operations caused by it, it is possible to distinguish between the measures that came as given and the measures that the libraries could independently decide on. The first type were 1) the decision for the temporary shutdown of the libraries made by the Finnish government, 2) the municipality level decisions on the possible cooperation negotiations or payroll interruptions and 3) the directions given by the regional government agencies on for example delivering book bags to the users. The libraries were left with very little decision-making power on their own operations. In practice, they could make decisions on how they would organize their operation within the limits and restrictions on personnel resources, defined by the municipality level decisions. These resources could be directed for example to producing online events or social media content (R1) or collection work could be focused more on acquiring e-material because of their growing demand (R7).

The study also shows that especially regarding the information needed to plan the operational level, this situation brought a completely new type of perfectly authentic decision-making situation where previous experience was non-existent to allow for modelling operations (Byström, 1999). This can also be applied to the actions of the municipality decision makers as well as the management in the libraries. The government decisions, experiences from abroad and the recommendations of researchers were the only guiding forces for decisionmaking when planning and executing the personnel furloughs and other operations of libraries.

Even though the tightening budgets in municipalities might result in reduction in library resources, the appreciation will remain. The fast reactions of many municipalities to the citizens' information demands and the need for culture has shown that library is an essential and significant service to the citizens, as stated in one open comment -response:

"The feedback from users has quickly shown that the library is a very important service, so hopefully the appreciation at least among the residents remains and even grows."

Some libraries showed the ability to react fast and act agile during the pandemic. A good example of this was the new operation forms in an online environment and their development. Whether libraries started this, was not purely within their own decision-making power but heavily influenced by the municipality-level decisions on the payroll and furloughs.

The executive function of the municipalities was central in choosing the survival strategy and measures during the pandemic. Some municipalities decided to interrupt the payroll and/or temporarily lay off a major part of the staff while some promised to continue the payroll. The first decision caused anxiety, concern and possibly decreased future work motivation. Also the study suggests that the work atmosphere can be expected to worsen, especially in those libraries where part of the staff remained working while others experienced furloughs.

In case the library remained in operation and the staff were told that payroll continues as normal and there will be no furloughs, the effects were partly the opposite. In these libraries, the staff were motivated to innovate and execute new service concepts for the library users and to develop virtual services and social media. The digital leap came true when the municipality did not force the operation down during the pandemic but instead understood its significance in a wider context than just as a book loaning operator.

The new innovations as a reaction to the crisis can be understood as gap bridging in the way Dervin (1992) approaches the term. The measures how libraries could service their users while the physical libraries were closed, created new types of information needs and required innovative solutions that bridged the gap. In the future, this process should be analyzed more closely to support the information seeking related to decision-making in libraries.

The study shows that, if during exceptional circumstances an organization is given the opportunity to continue its operation by developing new service concepts, the motivation of the staff stays good while also its skill level and innovative nature increases. These were at a completely different level in the municipalities where the decision-making considered that the operation can be developed virtually thus guaranteeing the continuation of employment compared with those municipalities adopting furloughs as their approach to the situation.

For future research, mapping out the long-term impact of the corona crisis on the libraries is essential. The possible reductions in the municipality budgets,

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changes in work atmosphere and stabilizing the new innovations are interesting topics that need further exploration once the long term effects can be studied.

Those libraries with their operation continuing to new services showed an exceptional agile and innovative approach to the crisis. Unfortunately, the fact that the field of public libraries was divided in two due to outside influence, may increase the inequality between the public libraries as service provides. At the same time, the significance of public libraries to citizens is again proven; libraries are needed and missed in everyday life as distributors of experiences, knowledge and art.

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