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The Impact of COVID-19 Lockdowns on Public Libraries in the UK: Findings from a National Study

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ABSTRACT

This paper explores how public libraries in the United Kingdom were impacted by the lockdowns imposed as a result of the COVID-19 pandemic. Freedom of Information requests were made to all UK public library services. The data received indicated that almost 65% of UK library services saw a reduction in physical loans of between 70% and 90% of pre-pandemic borrowing levels. The cumulative data also revealed that almost 120 million books that were issued in pre-pandemic years were not issued in the 2020/21 lockdown period. Meanwhile, 47% of library services saw their e-loan provision rise between 100% and 200% on pre-pandemic levels, although these numbers rose from a low base and were comparatively small when measured against physical loan losses. The data also highlighted that active membership of the public library services (members who had borrowed an item in the previous year) dropped to 40% of pre-pandemic levels across the UK. The evidence highlights that while e-loan provision rose significantly while physical library services were largely unavailable, this rise was from a very low base, and this rise in digital usage did not come close to mitigating the drop in physical borrowing that occurred across the UK. The findings of the paper suggest that even when the public had no choice but to move to digital, they did so in limited numbers when compared to usage of physical library buildings and collections.

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Introduction

The COVID-19 pandemic has inevitably had a significant effect on public library services across the globe. The compelled closure of library buildings during much of 2020 and 2021 brought about a *new normal*, forcing library services to encourage expanded use of other services like e-loans to service the needs of the community. This paper explores that impact, before examining in more detail how it manifested in the public library services of the United Kingdom.

The first part of the paper will provide an overview of the global impact of COVID-19 on library services, discussing issues like the changes made to opening hours, alternative services offered to patrons, and expansion of digital

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services. The paper will then present the results of freedom of information requests (FOIs) sent to public library authorities across the UK, exploring the impact of the pandemic on their services. This paper presents the first comprehensive picture of how the COVID-19 pandemic has impacted public libraries and the services they deliver across the whole of the UK. As such it adds to our understanding of how the public library sector across the world weathered the storms presented by the first global pandemic in a century.

The impact of COVID-19 on public libraries

The COVID-19 pandemic has been one of the few challenges that libraries have faced on a genuinely global scale, therefore many of the experiences and the subsequent responses from library services can be categorized from the literature to date. The following exploration of the literature explores some of the key emerging themes from around the world related to how public libraries have been impacted by and responded to the pandemic, and how, despite closure of physical library buildings for many months, libraries adapted to be able to provide services to their patrons.

Closures, restrictions, and alternative services

On March 17, 2020, the American Library Association (ALA) released a statement that libraries in the US should close to the public (Goek 2020). Libraries subsequently closed in March and April, with closures expected to last indefinitely (Grassel 2020; Public Library Association 2020). This was echoed across the globe, with most libraries closing during March and April (Ćirić and Ćirić 2021; Garner et al. 2021; Tammaro 2021). There were slight variations – with some libraries closing prior to official mandates, and others being able to remain open throughout lockdown (Garner et al. 2021).

Libraries soon started to offer alternative services including home delivery, as well as options to visit the location of the library and collect previously reserved items, without actually entering the library building itself (Bray 2020; Breeding 2020; Cowell 2020; Hoenke 2020). The terminology for this service varied between and even within countries, with the option variously termed curbside pickup (US) and click and collect, or variations thereof (UK and Australia). Across the US, curbside pick-up was a popular service (Bray 2020; Freudenberger 2021; Garcia-Ortiz 2021; Grassel 2020; Jones 2020; Matthews 2020), with many libraries offering some sort of curbside pick-up by July (Breeding 2020). The Public Library Association surveyed public libraries across the US from March 24 to April 1 and found that 22% mentioned providing curbside pick-up and 6% mentioned home delivery (Public Library Association 2020). A survey by the American Library Association in mid-May found 37% of respondents reported curbside pick-up or some form

of restricted access (Goek 2020). A number of libraries stated that curbside pick-up would be a service likely to be kept after the pandemic; however, a few suggested it would be dropped due to issues such as staffing and the amount of work involved (Real 2021).

In the UK, lockdowns and re-openings varied both nationally and locally, as some authorities were subject to local lockdowns. Generally public libraries started reducing services as of March 9, 2020, with libraries in Northern Ireland closing March 20, followed by England March 23. Welsh libraries then started to re-open at the beginning of June, with English, Scottish, and Northern Irish libraries following in July (Libraries Connected 2020; Scottish Government 2020).

Libraries started to open up during the summer, with some libraries offering restricted services as early as May (Bray 2020; Breeding 2020; Ćirić and Ćirić 2021; Garner et al. 2021; Hoenke 2020). The rapidly changing nature of the pandemic situation, as well as some confusion as to closure and working from home considerations were often cited as challenges during the lockdown period (Bray 2020; Breeding 2020; Freudenberger 2021; Garner et al. 2021; Hoenke 2020).

As stated above, click and collect/curbside pickup services were seen frequently, including services that used the front of the library as a pick-up area, and facilitated through text and virtual messaging services (Goddard 2020; Guevara 2021). Click and collect was also popular in Australia and New Zealand (Cowell 2020; Garner et al. 2021; Hoenke 2020). Home delivery and mobile services were also used by libraries across the globe (Begum et al. 2022; Carbery et al. 2020; Cowell 2020; Garcia-Ortiz 2021; Garner et al. 2021; Grassel 2020; Guevara 2021). Home delivery was seen as particularly effective for those patrons who were vulnerable or having to shield (Carbery et al. 2020). Johnson (2020) notes that although popular, curbside pick-up and home delivery is dependent upon library staff themselves being able to access library buildings and the materials inside.

Keeping communities connected

Many library services kept Wi-Fi services on throughout lockdown, or extended them to allow for a greater physical area to be covered (Goddard 2020; Goek 2020; Johnson 2020; Jones 2020; Matthews 2020; Real 2021; Santos 2020), with some libraries also providing users with Wi-Fi hotspots, Drive-In Wi-Fi (extending Wi-Fi connectivity to outside of library buildings), device loans, and using mobile libraries for Wi-Fi connections (Garcia-Ortiz 2021; Real 2021; Riggs 2020). In some instances this was coupled with available power outlets and seating arrangements provided by the library service outside the building, with one library noting that they advertised some parking spaces as Wi-Fi access spaces (Real 2021). Some libraries also provided pop-up laptop

programs outside the library buildings, along with staff supervision and assistance (Goek 2020; West 2020). Interestingly, in a survey of US library services, the Public Library Association found that 81% of respondents kept Wi-Fi on prior to COVID-19, with 12% providing or extending this in response to the pandemic (Public Library Association 2020). It is clear how important these facilities are, as 48.4% of respondents to a US library survey noted that their city/municipality does not offer free Wi-Fi in public spaces (Real 2021).

Those that did not provide Wi-Fi hotspots noted that costs, and lack of technical skills to provide assistance to patrons were a significant barrier (Real 2021). A library service in the Pacific Northwest kept Wi-Fi on throughout, allowing users to access the Internet from outside the library building. This, however, caused problems as attempts were made to use a stove on an available outlet and law enforcement were subsequently brought in (Bray 2020). Some city councils ordered library Wi-Fi to be turned off in case it led to groups forming outside library buildings, which would go against public health guidance (Goek 2020).

The library as social connection and social service provider was also key in many areas. During lockdown the library was a community resource for technical support and help with online learning while schools were closed, with library staff assuming different roles (Freudenberger 2021; Morris and Kammer 2021). Social assistance such as welfare checks were used to check on patrons (Garner et al. 2021; Santos 2020), with one library service in Texas carrying out almost 300 calls in the first week or so (Santos 2020). The library provided various important social services such as telephone assistance or printing forms for patrons who needed services completed but did not have the ICT resources to do so (Carbery et al. 2020; Guevara 2021), social assistance to help with employment and finance matters (Freudenberger 2021; Guevara 2021; Intner 2020; Jones 2020) as well as help with paperwork (Jones 2020). Libraries worked with other council departments and organizations to provide services such as outdoor activities (Grassel 2020; Santos 2020, 73), health services and information (Carbery et al. 2020; Freudenberger 2021; Garner et al. 2021), e-service offerings (Garcia-Ortiz 2021), and food provision (Garner et al. 2021). The importance of the library to the community was often highlighted; to provide information to the community, and as a way for the community to connect to each other, and the successful ways libraries did this during the pandemic lockdown (online book groups, social media, videocall platforms, chat applications, gaming servers) (Cleave and Geijsman 2020; Intner 2020; Morris and Kammer 2021; West 2020). West notes that the hybrid delivery model could become a mainstay for the future library service, with applications such as Zoom ideal to keep for the future (West 2020).

The digital turn

There was a substantial move to online offerings during the pandemic. Libraries provided various types of virtual programming and events (Carbery et al. 2020; Goddard 2020; Grassel 2020; Hadidi and Linscot 2021; Johnson 2020; Public Library Association 2020; Tammaro 2021). This included online stories (Grassel 2020; Jones 2020; Matthews 2020; Real 2021), activities and instructions on digital usage on YouTube (Cowell 2020; Grassel 2020), and webinars (Hadidi and Linscot 2021; Oyelude 2020). Online services such as stories for children were popular, which could become a mainstay of future library provision (Jones 2020; Matthews 2020; Real 2021). Some of this included collaborations with other institutions or services such as galleries, archives, and museums (LaPierre 2021), and services for business training (Hadidi and Linscot 2021). These services were often advertised through social media, along with instruction guides (Carbery et al. 2020; Ćirić and Ćirić 2021; Hadidi and Linscot 2021; Public Library Association 2020). Videoconferencing platforms were widely utilized both to provide assistance on digital technology for patrons, as well as for staff meetings and conferences (Cowell 2020; Johnson 2020; Real 2021; Tanzi 2020).

There was also a substantial increase and uptake of e-service offerings, such as e-books (Carbery et al. 2020; Ćirić and Ćirić 2021; Grassel 2020; Hoffert 2021; Johnson 2020; Jones 2020; Tammaro 2021). This was especially popular among younger readers (Goddard 2020). The Yarra Plenty Regional Library (YPRL) in Melbourne, Australia, saw a 206% increase in e-Loan downloads, noting that the message from the library was "Our physical libraries are closed but our digital library is open 24/7." (Cowell 2020, 252) Many libraries substantially increased their e-book spending (Freudenberger 2021; Real 2021; Santos 2020). A survey of public libraries in Connecticut found that 68% of respondents had moved funding of materials from physical to digital during the COVID-19 pandemic (Real 2021). However, the uptake in e-loan offerings was not always as high as expected (LaMagna, Danowitz, and Rodgers 2021), and there was a noted shift back to physical materials for some libraries when they started opening back up again (Hoffert 2021).

The importance of staff skills, and applying staff skills and training to content provision was noted as being an important aspect of online service delivery (Hadidi and Linscot 2021). A move to digital requires efficiency in providing a digital service (Ćirić and Ćirić 2021) along with the need to ensure staff are trained to provide such a service (Hadidi and Linscot 2021). Some libraries were able to provide a quick response, particularly if the infrastructure was already in place (Cowell 2020; Goddard 2020; Hadidi and Linscot 2021). For example, Hadidi and Linscot (2021) note that Plano Public Library, in Dallas, Texas, found it easy to transition to digital delivery as video on social media (Facebook Live) was already in use for delivering content. Likewise,

some libraries that had previously no virtual programming provision such as The San José Public Library were able to respond swiftly to the need for e-services such as online stories (Goddard 2020). The Yarra Plenty Regional Library (YPRL) in Melbourne, Australia, noted that communication (whether through e-mail, Intranet news hub information, video conferencing) was key due to the constantly changing nature of the pandemic situation (Cowell 2020).

The literature review has highlighted that while library buildings across the world were physically closed to patrons for significant periods during the lockdowns, the services were often able to adapt somewhat by providing access to materials for patrons via collection, and home delivery services, as well as reinforcing already existing e-loan provision. We will now explore the data for UK public libraries to see what effect these kinds of services had on the ability of the libraries to serve the needs of their patrons.

Research methods

Our study sought to examine how public library services in the UK were impacted by the COVID lockdown, and what this meant for the types of services they could deliver. To that end, our research questions in this paper are:

(1) How was active membership of UK public library services impacted by COVID?
(2) How was the physical lending of public library materials impacted by the lockdowns?
(3) How much did electronic loan usage change in UK public libraries during lockdown?

We chose to utilize freedom of information requests to UK public library services to gather in the data related to the COVID-19 impact on their services. The *Freedom of Information Act 2000* and the *Freedom of Information (Scotland) Act 2002* gives people and organizations access to information that is held by public authorities in the UK. This is done via both publication by the authorities and through information requests that can be submitted by the public.

The use of FOI requests was particularly suited to this research, as they are an ideal way to collect a large amount information, or information that is spread out across different authorities (Savage and Hyde 2014). Freedom of Information requests (FOIs) are a powerful research tool as they necessarily have a high return rate, due to the satisfaction of received requests being a statutory duty, and so, unless they are vexatious, related to a specific person, or are aligned with another disqualifying reason (such as pertaining to

national security), authorities are obliged to answer them, or ask for clarification or extension, within 20 working days. As such, they are less subject to variability in terms of response rates that can occur when using a method such as surveys (Bryman 2016). Despite their use for newspaper articles and other news media, FOI requests are not widely used by researchers (Bows 2017; Brown 2009; Walby and Luscombe 2017). However, we have had success with using FOI requests in the past (Liddle and McMenemy 2015; Robertson and McMenemy 2020; Robinson and McMenemy 2020), thus were well equipped to apply this type of research method.

The FOI requests were sent out between February 2021 and May 2021 either via e-mail or through online webforms provided on local authority websites. Relevant links to the e-mail addresses and forms were found by going to each local authority website and locating the relevant FOI page – either through links, such as via content pages, or the contact section provided at the bottom of the webpage, or the website search function.

The information requested related to the following seven areas:

1. Active memberships statistics
2. Past five years usage statistics for digital services
3. Past five years usage statistics for physical loans
4. Past five years costings for digital services
5. Support services available for use of digital services
6. Advice offered regarding privacy of use of digital services
7. Impact of COVID on library service opening hours

Due to the nature of the point when we sent out the FOI requests, some being received after the end of the 2020/21 financial year, and some before, not all datasets from each library service give a full account of that year. Some authorities collected data in calendar year terms, rather than financial years but our comparisons are primarily between years of individual library services so this distinction is not important for our analysis. What we collected, then, is a set of data that provides an up-to-date and indicative picture of how libraries had been impacted by lockdown up to the spring of 2021. This paper will present the data from the figures related to active members, digital and physical lending, as well as digital service costings.

Altogether we sent out 208 FOIs. As Table 1 shows, there were 201 responses received: a response rate of 96.6%. There were seven non-responses. As mentioned previously, receivers of an FOI request have 20 working days within which to respond or ask for clarification or extension. Most respondents replied in this time. As demonstrated in Figure 1, 122 respondents (60.7%) replied in less than 20 working days, with an average of 19 working days. Considering the difficult situation, the COVID-19 pandemic has put public service workers in, and the strain of having to work from home without the usual resources at hand, or the restrictions in force in the workplace, it is a very positive sign that so many replied within this short time

Table 1. FOI requests and responses.

Number of FOIs sent	208
Responses received	201
Non-responses	7

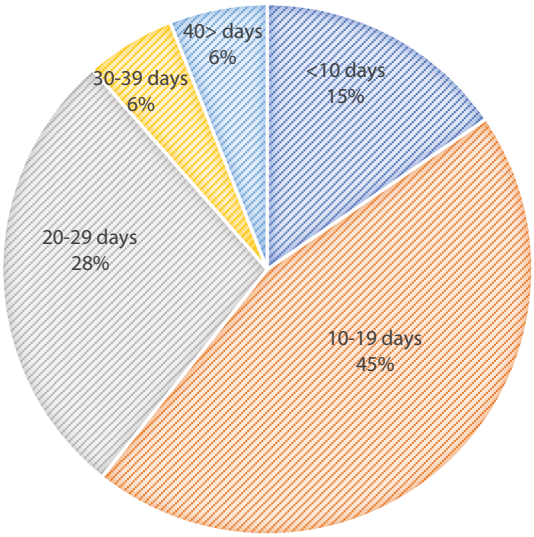

Figure 1. FOI response times (n = 201).

period. Indeed, we duly expected some delay due to the nature of the pandemic situation, and the caution messages that local authorities gave, warning requesters not to expect replies within the usual timeframe.

Results – Impact on UK public library services of COVID lockdowns

Active membership

In UK public library services, a key performance measure utilized is the concept of active members, defined as those library users who borrowed at least one physical or digital item in the preceding year. Most of the library services who responded to the FOI provided active membership data. In Table 2 we present the cumulative active membership levels reported.

Table 2. Active members per year.

2018–2019	2019–2020	2020–2021
12,733,293	12,236,668	5,138,630

These figures show a radical drop in active members during the COVID year to about 40% of 2018–2019 levels: in other words, of those almost 13 million active library users in 2018–2019, only just over 5 million were able to borrow from their library service in 2020–2021, leaving about 7.5 million previously active users with no service.

Physical loans

One of the key impacts of COVID-19 on the core mission of public library services was the closure of library buildings. Despite the valiant attempts of library services to provide options like curbside/click and collect and home delivery, these closures inevitably had a significant impact on the physical loans fulfilled by the libraries across the UK.

Our second question was on the impact of forced library closure on book lending rates. Of the 201 library services who provided data, 173 had full sets of data we could include in this comparison, accounting for just over 86% of the full dataset. Figure 2 presents the percentage drop in physical loans for public libraries across the UK, comparing the last 'normal' year (2018/19) with the year when COVID-19 just started to hit (2019/20) and to the year when library closures really impacted across the globe, enforcing closure of buildings due to lockdowns of the population (2020/21). In Figure 2 each column represents the number of library services organized by their percentage drop in loans, e.g., 22 library services saw a drop of between 91% and 96% of physical loans in 2020/21 compared to 2018/19 and 17 saw a drop of between 91% and 96% in 2020/21 compared to 2019/20.

From Figure 2, 112 (64.74%) of the library services saw a reduction of between 70% and 90% in physical loans when 2018/19 is compared to the lending achieved in 2020/21. When we compare the figures for 2019/20 to 2020/21, we see that 113 library services saw a reduction of between 70% and 90% (65.3%).

These are substantial figures, but they can be put into even starker context with some specific examples. Table 3 represents a sample of physical lending statistics from library services, representing both urban and rural geographies, and indicated the considerable drop in physical lending seen with the closure of library services in the year 2020 to 2021.

E-Loans

With access to physical library buildings limited, there was clearly the opportunity for library services to encourage and enhance their provision of electronic books. Indeed, research early in the pandemic highlighted that one of the key positive advocacy messages for public libraries during the lockdowns was the significant increases in e-loan usage that resulted (Libraries Connected

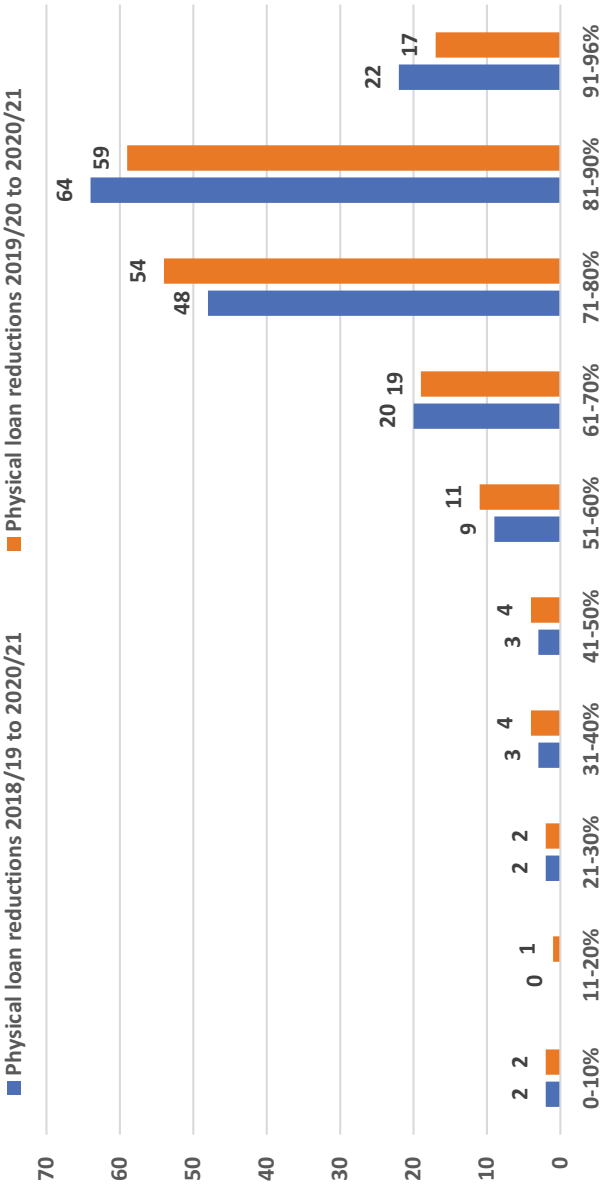

Figure 2. Reduction in physical loans across UK – 2018/19 and 2019/20 compared to 2020/21.

Table 3. Physical lending statistics from representative library services 2018/19 to 2020/21.

Library Service	2018/19	2019/20	2020/21
Bedfordshire	785,521	824,532	108,459
Bolton	562,446	555,211	130,248
Gloucestershire	1,767,182	1,781,222	335,991
Leeds	2,054,300	2,109,750	280,181
Sheffield	946,736	896,085	98,594

2020). Our data also certainly confirms a general increase in the use of e-loan services. Again, 173 of the 201 library services who responded to our FOI requests provided full data to allow a comparison of e-loan usage from 2018/19 to 2020/21, accounting for just over 86% of library services in the UK. Figure 3 presents the data related to the percentage rise in e-loans across the UK library services, e.g. 25 library services saw between 0% and 100% rise in e-loan borrowing in this period, 82 saw a rise of between 101% and 200%, and so on.

Almost all (95%) library services saw an increase in e-loan usage based on the responses returned, and although there was some variation, it was clear that the largest number (47%) saw an increase of between 100% and 200% when 2018/19 is compared to 2020/21. Some authorities saw even more dramatic rises, with 8% seeing a rise in e-lending use of over 500%.

Again, if we look at the specific examples from library services, we can put this in context. Table 4 provides an illustration of the kinds of rises in e-loan usage public library services in the UK saw during lockdown.

While the rise in e-loan usage is evident here, these remain modest numbers on the whole when compared to the physical borrowing figures. This led us to consider how much the e-loan lending increase mitigated for the significant drop in physical loans seen across UK libraries.

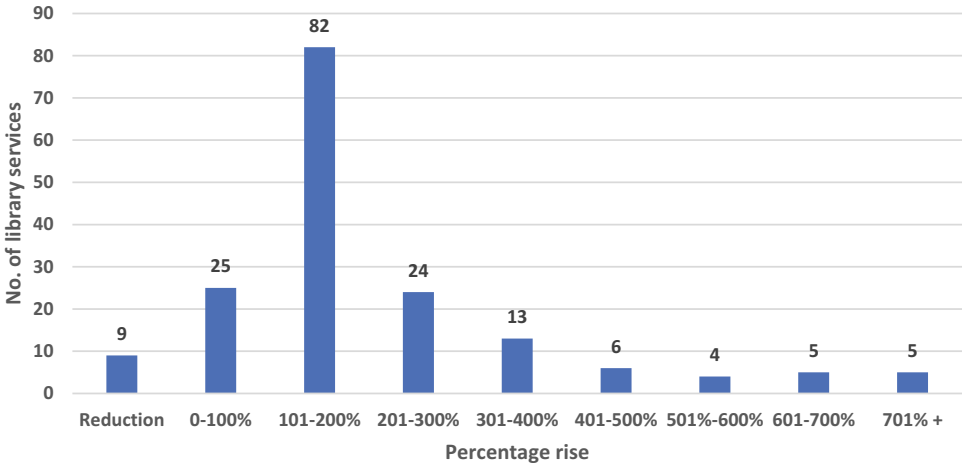

Figure 3. Percentage rise in e-loans from 2018/19 to 2020/21.

Table 4. E-loan lending statistics from representative library services 2018/19 to 2020/21.

Library Service	2018/19	2019/20	2020/21
Bedfordshire	16,363	18,511	46,209
Bolton	22,917	27,938	47,101
Gloucestershire	78,908	68,020	111,879
Leeds	56,625	59,285	103,467
Sheffield	22,423	28,911	75,016

Physical lending versus e-lending

An important consideration is how much the e-lending compensated for the significant drop in physical lending that occurred during lockdown. Did the e-loan services pick up the slack that resulted? Table 5 features the combined figure for physical lending and e-lending from across the UK for the periods 2018/19 and 2020/21.

When we combine the figures across the UK for all the library services who provided data, we see the startling impact of the COVID lockdowns on libraries. Almost 120 million items were not leant by UK public libraries in 2020/21 that were leant in 2018/19. Table 6 illustrates the situation in five of the library services, indicative of the pattern in the majority across the UK.

We can see that even with a rise in e-lending figures for authorities, this did not come close to alleviating the significant loss in physical lending that occurred during the COVID lockdowns. This is a significant finding, because the full FOI data confirms that this pattern was the case across the UK, and the question might be asked that given the e-lending service was often the only lending service on offer for some users, why the community chose not to utilize it in anywhere near the same numbers as they did physical library services.

E-Loan expenditure

Perhaps unsurprisingly given the increase in usage, library services also saw a substantial rise in cost of e-loan provision.

Table 5. Combined physical and e-lending comparisons.

Combined physical lending and e-loan lending 2018/19	165,051,171
Combined physical lending and e-loan lending 2020/21	46,812,618

Table 6. Physical lending shortfall versus e-lending statistics from sample of library services.

Library Service	Physical lending 2018/19	Physical lending 2020/21	e-lending 2020/21	Physical and e-lending combined 2020/21 (% of
Bedfordshire	785,521	108,459	46,209	154,668 (19.69%)
Bolton	562,446	130,248	47,101	177,349 (31.53%)
Gloucestershire	1,767,182	335,991	111,879	447,870 (25.34%)
Leeds	2,054,300	280,181	103,467	383,648 (18.68%)
Sheffield	946,736	98,594	75,016	173,610 (18.34%)

As can be seen in Figure 4, there was no clear overall pattern that emerged from the point of view of e-lending costs other than a rise among almost all. Again, when we highlight specific examples of library services this is illustrated, as can be seen in Table 7.

It would be interesting to explore the divergences in costs across authorities.

Further analysis

When we delve deeper into the figures, of those who were active library members, we see a reduced and changed pattern of borrowing. The 12.7 million active users in 2018–2019 borrowed on average about 13 books

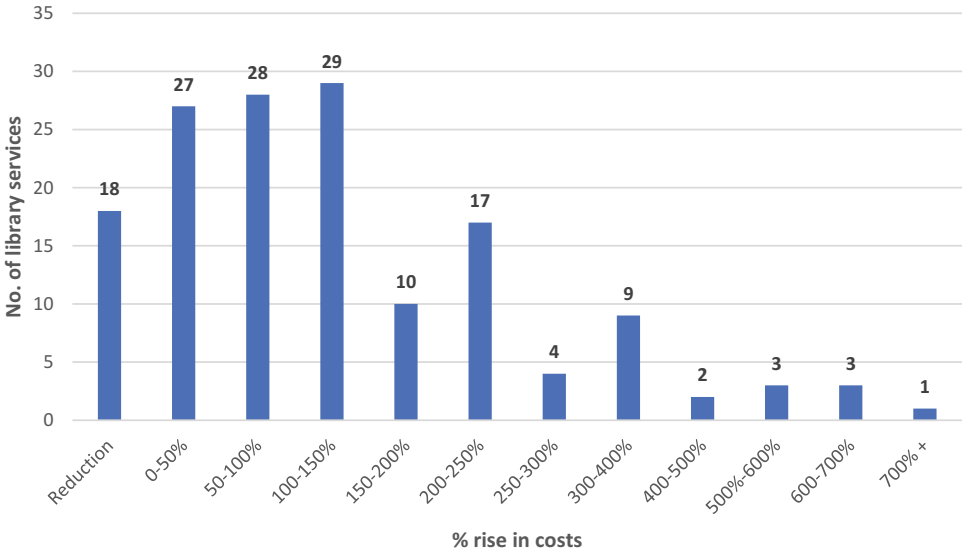

Figure 4. % rise in e-loan costings from 2018/19 to 2020/21.

Table 7. Sample of e-loan costs and lending for sample public library services 2018/19 – 2020/21.

Library Service	2018/19	2019/20	2020/21	% difference 2018/19 to 2020/21
Bedfordshire e-loan costs	£19,626.00	£23,815.00	£57,480.00	193% increase
Bedfordshire e-lending statistics	16,363	18,511	46,209	182% increase
Bolton e-loan costs	£265,123.89	£267,634.83	£212,995.04	20% reduction
Bolton e-lending statistics	22,917	27,938	47,101	105% increase
Gloucestershire e-loan costs	£36,376.41	£78,470.28	£132,441.98	264% increase
Gloucestershire e-loan lending statistics	78,908	68,020	111,879	41% increase
Leeds e-loan costs	£36,000	£36,000	£83,450	131% increase
Leeds e-loan lending statistics	56,625	59,285	103,467	83% increase

and less than 1 e-book per year; during 2020–2021 the 5 million active users borrowed above half as many books and about 2.6 e-books. So, the service offered by libraries had not only contracted in terms of active members, but those members were making less use of the service in terms of items borrowed. Table 8 also shows the clear preference for physical books over e-books: even during the main COVID-19 year, the average library member was borrowing over twice the number of physical as e-books.

The investment in e-books per active member showed a substantial increase, from an average of £0.51 per active member in 2018–2019 to £2.20 per active member in 2020–2021. Membership levels in 2020–2021 were much reduced against 2018–2019 but if we contrast this increased spend against the larger 2018–2019 membership levels then the spend level equates to about £0.89 per active member, an increase of about 75% per member which is a healthy increase.

Not all library services did increase their e-book budget, in fact as shown in Table 9, some library services reduced their e-book budgets. The data demonstrates a wide variety of responses with one library increasing their e-book spend from £18,500 in 2018–2019 to £294,000 in 2020–2021 and another dropping from £74,524 in 2018–2019 to £14,771 in 2020–2021.

If we correlate the use of e-books across the years, we see that there is a very high correlation between e-book borrowing per active member for 2018–2019 and 2019–2020 (Spearman rank correlation, $r = 0.93$, $p < .001$) suggesting a stable e-book borrowing pattern and a moderate correlation for 2019–2020 against 2020–2021 (Spearman rank correlation, $r = 0.67$, $p < .001$). This suggests that e-book borrowing during the COVID lockdown was based on existing e-book habits: those services with higher rates of e-book borrowing before COVID were the ones with higher rates during COVID.

We looked at the cost of each e-book loan (as measured by e-book spend divided by the number of e-book loans), as seen in Table 10. About 70% of library services saw a decrease in e-book cost per loan and 29% saw an increase. There is no criticism implied in these figures: an increase in cost

Table 8. Physical and e-book borrowing per active member per year.

	2018–19	2019–20	2020–2021
e-book loans	0.54	0.58	2.65
physical book loans	13.04	12.50	6.75

Table 9. Services that increased, decreased, or reported no change in e-book budgets.

	2018/19 – 2019/20	2019/20 – 2020/2021
increased	111 (67%)	133 (85%)
same	12 (7%)	3 (2%)
decreased	43 (26%)	21 (13%)

Table 10. Library services who saw an increase, decrease, or no change in e-book cost per loan.

increase in cost per loan	42
no change in cost per loan	1
decrease in cost per loan	103

per loan can come from predictive spend (spending more than is currently necessary for future demand) and a decrease in cost per loan can be from demand outstripping resources because not enough has been spent. We cannot provide an answer to which is the case here based on our existing data, but we leave it for further investigation.

One possible avenue worth exploring though is the correlation between spend on e-books per active member and e-book borrowing per active member. Before COVID (2018–2019) there was a significant but weak correlation between these two values (Spearman rank correlation, $r = 0.32$, $p < .001$) implying that e-book spend does not easily predict e-book use. During 2019–2020 this correlation became stronger (Spearman rank correlation, $r = 0.44$, $p < .001$) and during 2020–2021 this relationship strengthened even further (Spearman rank correlation, $r = 0.61$, $p < .001$) to a strong correlation. This suggests that the level of spend on e-books per member became a better predictor of e-book use per member over the COVID period. Given the drop in active membership levels in this final year, one hypothesis for this result is that those who were retained as active members were those already using e-books and more likely to use e-books during the pandemic. Again, we cannot answer this directly based on our data, but the *uneven* effect of COVID across library services and service users may be seen in data such as this.

Discussion

The picture of UK public libraries during the COVID lockdown was one of major reduction in core services, but also of significant resilience. While book lending in public libraries across the UK plummeted during the lockdowns, it is clear that library services utilized some innovative approaches to help keep communities connected and reading. The use of collection services and home delivery, as highlighted in the literature review as a response seen in several countries, kept that vital lifeline for communities. While the data clearly illustrates just how badly physical borrowing was impacted, and we must be mindful of the impact of this on citizens, it was revealed early in the lockdown that 60% of library services in the UK were able to provide a home delivery service. A number of library services (almost 1 in 5) were also able to also provide other social and technical support with the home delivery service (Libraries Connected 2020).

There was also admittedly a positive tale to tell regarding the growth in usage of electronic books. Nevertheless, this growth was clearly from a low base, and overall, this rise in usage did not come close to mitigating the drop in physical borrowing that occurred across the UK. If we are to be mindful of how important the borrowing of each book might be for individuals and communities, we must also be mindful of, how in the period of lockdown, tens of millions of books were not borrowed in UK public libraries.

The admitted good news story of the rise in e-book lending could be seen by some as a shift, or digital turn, in terms of public library services, and one that could be responded to by a reconsideration of the importance of, and need for, physical library buildings. However, the data clearly indicates that even when library patrons had no choice but to use digital services if they wished to borrow a book, the vast majority chose not to. As summarized by Libraries Connected in the early stages of the lockdown, "In the UK, e-lending increased; by the end of July 2020, 3.5 million more e-books had been loaned, but that this increase does not make up for physical lending, the numbers of which are much larger (Libraries Connected 2020). Our data proves this initial assertion beyond any reasonable doubt. Research by Reid and Bloice related to Scottish public libraries also highlighted the importance of the physical spaces (Reid and Bloice, 2021, p.64). The profession should be clear, then, that any moves to close or reduce physical libraries based on the drop in physical lending versus a rise in e-lending, would be built on erroneous evidence of impact of the latter.

Conclusion

The COVID-19 pandemic had various effects on UK public library services. Many institutions had to close their doors for a substantial amount of time in 2020 and 2021. This global experience for libraries has been unprecedented, and in considering just how public libraries were affected, we can discern that the lending, and presumably reading, of physical books took the biggest hit in likely the history of the public library service. The rise in e-lending was a good news story that took up only a small percentage of this slack but was clearly valuable to those library patrons who availed of it.

More research needs to be undertaken related to just how the lockdowns and lack of access to public library facilities impacted on citizens throughout the world. The loss of access to reading materials is clearly a significant issue, but so also was the loss of the physical space that communities value. It is to be hoped that as the pandemic subsides, public libraries can emerge and be reinvigorated.

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