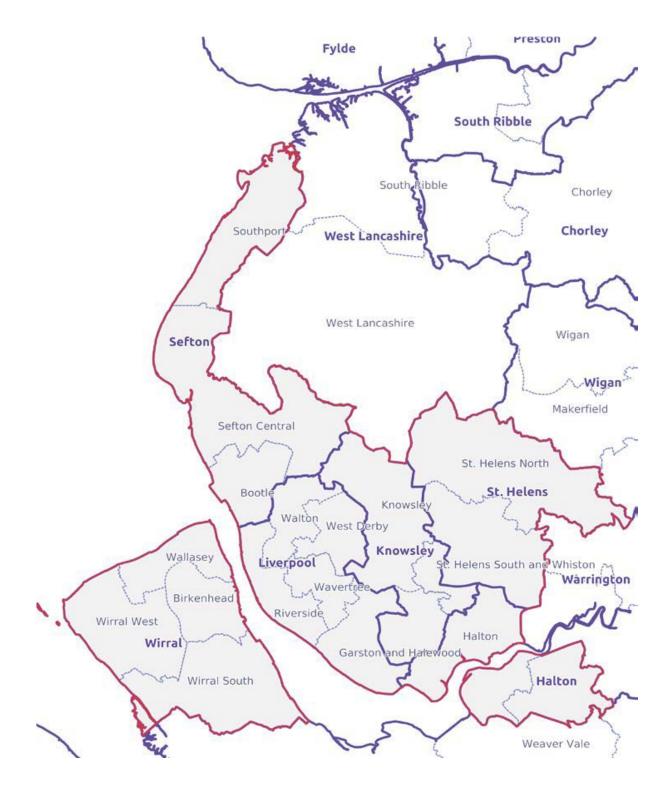# Responding to COVID-19 in the Liverpool City Region

COVID-19 and Digital Exclusion: Insights and Implications for the Liverpool City Region

Professor Simeon Yates

Map of Liverpool City Region Combined Authority (LCRCA) boundary (in red) and constituent local authorities

Data sources: Westminster parliamentary constituencies (December 2018 - ONS), local authority districts (December 2018 - ONS), and combined authorities (December 2018 - ONS)

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Key takeaways

1. Digital exclusion is not just about a lack of access to broadband; it covers an array of issues relating to levels of access, levels of digital skills, and education – it is about both breadth and depth of digital engagement.

2. COVID-19 lockdowns and associated public health measures have highlighted the extent and consequences of digital exclusion for individuals and households across the UK, especially in relation to education, employment – with many people unable to work remotely from home – health, wellbeing and access to public services.

3. Developing approaches to measuring and monitoring digital inequalities is critical to the creation of policy interventions that work towards ensuring a "100% digitally included population". A key part of this is the identification of citizens who are "limited" users of digital systems.

4. A much greater proportion of citizens are either limited or narrow users of digital services than might be expected. In the Liverpool City Region (LCR), we approximate that just under 600,000 citizens are limited or non-users of digital systems. Around 30,000 households with school age children are offline or led by limited users.

5. Digital inclusion and intervention strategies have to deliver more than cheap or free access – needing to meet citizens "where they are" and helping to build "spaces to be digital" within homes and communities. In pursuing social and economic recovery, policymakers should define a "minimum digital living standard", avoid "one size fits all" or "technology-led" solutions, and not ignore the skills needs of young people.

1. Introduction

The COVID-19 pandemic has brought issues of digital exclusion and inequality to the fore – and spawned the term "digital poverty". However, digital exclusion is not a new phenomenon. Exclusion from access to technology and information has been noted since the 1970s. The shift of both public and private services, systems and even everyday leisure activities online means that the combination of digital inequality with other aspects of social, economic, and cultural inequality can have significant impacts on citizens' lives.

Colleagues and I have been exploring these issues and policy interventions for the last decade regionally, nationally, and internationally. Importantly, digital exclusion and inequalities are not just about a lack of access to broadband (though access is the starting point), but also differential *levels* of access, skills, education, cost, and often networks of support. It is not just about material resources to use "digital" or access "digital spaces", but the social, cultural and economic capital to "be digital" and the "space to be digital" – the latter refers to both physical (could be a desk workspace) but also social space (such as privacy for Zoom calls). COVID-19 and other associated public health measures have extensively highlighted these issues.

Working with the [Good Things Foundation](#), our research (e.g. Yates et al. 2020a, 2020b, 2018, 2015a, 2015b) has drawn on Ofcom data on [Adults' Media Use and Attitudes](#) to track this "digital divide" over time. Unfortunately, elements of this divide stubbornly remain. Our analysis has informed the Good Things Foundation in the 2020 update of their [Digital Nation infographic](#), which gathers

the facts and statistics about digital inclusion and exclusion in the UK.

This policy briefing explores how we have utilised this data to identify different types of "digital users", and the demographics of these groups. A first approximation is then made of the numbers of citizens and households that are most digitally challenged in the Liverpool City Region (LCR). I conclude with several recommendations on how to address digital exclusion as the LCR seeks to "build back better" from the pandemic.

2. COVID-19 and digital exclusion

As society has responded to the challenges of COVID-19, issues concerning digital inequality have become abundantly clear – be they lack of access to digital tools for home schooling or accessing public services and support online (e.g. APLE Collective 2020). Importantly, this is not simply about those who are "offline" and those "online", but the fact that many citizens use digital systems for quite limited purposes. This is due to limited access or having limited digital skills, or both. For example, looking at the situation just before COVID-19, using the Ofcom 2019 Children's Media Use and Attitudes Survey data we found that 23.4% of 5-15 year olds in the poorest households (National Readership Survey (NRS) Grades D and E) do not have access to both an educationally useable device (laptop, desktop or tablet) and broadband (Ofcom 2020a). This equates to 524,871 UK children, of whom 74,225 are likely studying for their GCSEs.

If we consider the children who can only access a shared device or do not have access to broadband, the numbers rise dramatically. There is, therefore, a sliding scale of access and use, suggesting very different capabilities in responding to COVID-19 – in this case home schooling.

This pattern holds for all aspects of digital access and use, across all ages.

Much government policy remains focused on material access (availability of broadband) and those who are "offline" (non-users). There is also an assumption that once citizens have obtained access to digital systems and media or digital skills that they will continue to remain "users". However, evidence from both the UK and USA indicates that access can vary over time and the life course. For example, households might lose access due to high internet service provider (ISP) or mobile costs causing termination of contracts. Longer term, current users may cease to use some or all digital systems at key life stages. This is especially marked in post-retirement, when digital skills often become obsolete as technology changes.

These issues underline that assessing digital inequalities and their consequences requires a deeper understanding of this reality – that digital inequality includes but is not just about being offline. The COVID-19 pandemic is accelerating the pace of digital transformation within society, underscoring the need to scrutinise the rapid changes currently taking place and to strive for policy interventions that work towards ensuring a "100% digitally included population" (Milner 2020).

3. Types of users of digital systems

Over the last five years, in collaboration with the Good Things Foundation, colleagues and I have been developing an approach to measuring and monitoring digital inequalities (Yates et al. 2020a, 2018, 2015b). A key part of this has been the identification of citizens who are "limited" users of digital systems. Our analysis is based on the data collected each year by the Ofcom Adults' Media Literacy Survey. This year's analysis once again identified seven user groups – as described in Table 1.

Table 1. Types of user of digital systems in the UK

1	**Extensive users** (18%) – this group scores the highest probabilities across all behaviours, including a higher than average variety of apps and sites used.
2	**Non-political extensive users** (15%) – this group scores slightly lower across all behaviours as 'Extensive' users but notably excepting political uses, including a higher than average variety of apps and sites used.
3	**General (no social media) users** (8%) – this group has a similar behaviour to the 'Extensive' users but does not use social media, including a higher than average variety of apps and sites used.
4	**Social and entertainment media only users** (17%) – this group has low usage probabilities (below 50%) on all behaviours except social media and audio-visual media consumption, but within this a higher than average variety of apps and sites used.
5	**Limited (social media) users** (17%) – this group has low usage probabilities (below 50%) on all behaviours except social media and a lower variety of apps and sites used.
6	**Limited (no social media) users** (10%) – this group has low usage probabilities (below 50%) on all behaviours and a lower variety of apps and sites used.
7	**Non-users** (15%)

Source: Ofcom 2020b

Over time, the proportions of citizens within each of these groups has changed, with the development of the "social and entertainment media only" users as well as growth in "extensive" users.

How did we define users?

In our research, we do not start with a definition of what is an "extensive" user or a "limited" user – although, of course, non-users are predefined as those people who do not use digital devices and systems at home or elsewhere. Rather, our analysis considers the 17 digital media and systems "uses" measured by the Ofcom Adult Media Literacy survey (Ofcom 2020b). Using a method called "latent class analysis", we group the survey respondents according to their answers. The analysis categorises the respondents according to the similarity of their responses, creating groups that have similar "probabilities" for each of the "uses". This does not mean everyone in the group is the same – just that the people in the group are likely to be most similar.

By doing the analysis in this way, we avoid imposing a definition of the groups. Instead, we identify the groups and then try to understand them and their characteristics. Thus, we can see how groups change over time. This approach also allows some level of relative measure – these are "limited" users compared to

the rest of the population. However, in fact, the levels of engagement for "limited" users have changed little over time.

What can we say about limited and non-users?

We are particularly interested in understanding more about the different types of "limited" users, because they are most likely to be overlooked in the development of policies and practices to address digital inequality. Our analysis identifies three types of "limited" users who we view as being at risk of differing levels of digital exclusion and inequality.

The first of these groups is "social and entertainment media only" users, who represent around 11 million adults in the UK (or 17% of the population). These narrowly focused users are more likely to be younger people (under 35) who have left school at 18 or before, are in lower skilled work, poorer households and urban areas.

"Limited (social media)" users (17% of the population) and "Limited (no social media)" users (10% of the population) represent the second and third of these groups, equating to around 17 million adults. These groups are demographically very similar and are more likely to be older (above 55 years old), have left school at 18 or before, have a disability or health issues, and be unemployed or retired and financially vulnerable. They are more likely to be in the NRS social grades D and E (households on low or very low incomes). These groups significantly lack confidence in their digital skills.

Additional analysis also indicates the role of place in shaping access and skills. "Limited" users who do not use social media are more likely to live in rural areas, particularly those marked by deprivation such as in Wales, Scotland and Northern Ireland. "Limited" users who *do* use social media, by contrast, are more likely to live

in areas of urban deprivation in the East Midlands, Yorkshire and the Humber, North East England, and Northern Ireland.

Non-users (15%) – the final group – amount to around 10 million adults across the UK. Non-users do not directly engage with digital systems. Perhaps not surprisingly, the characteristics of non-users are very similar to "limited" users but are generally older, and even more likely to have health issues and to be living in social housing.

4. What is the picture in the Liverpool City Region?

Taking the percentages for the North West of England, it is possible to approximate the numbers of citizens in each of these categories within the LCR – see Table 2.

Table 2. Population of LCR by digital user group

	Population	Percent
LCR	1,429,910	
Extensive users (both types)	443,765	31.03%
General users	180,793	12.64%
Social and media only	213,665	14.94%
Limited users (both types)	361,586	25.29%
Non users	230,100	16.09%
Combined limited and non-users	591,687	41.38%

Breaking the data down further, we can approximate the following for LCR:

- 22.70% of working age residents (324,590) are "limited" or non-users.

- 30,560 households with school age children are offline or headed by limited users.

These are approximations. Detailed statistics at sub-regional level are not available at present. Given the importance of local contextual support solutions, collecting or accurately modelling such data is a future priority.

Why is this important?

Understanding the different ways in which citizens access and use the internet – and looking into the detail of digital exclusion – is key to planning interventions and support, and developing policies that address differences across ages and geographies. This analysis makes clear that there is a need to understand the capabilities – skills, equipment and context – of users in order to best help and support them.

At a time when the youngest workers, as well as the oldest, have been identified as most vulnerable to the economic fall-out of COVID-19 (Major et al. 2020), it is particularly important to consider the interventions needed to support the "social and entertainment media only" users. Young people with few qualifications are disproportionately represented in this group. It is critical that they are enabled to develop the digital skills needed for the workplace to avoid a long-term "generational scarring".

5. Policy interventions to help "build back better"

The issues presented in this briefing clearly connect with a range of policy goals detailed in the Liverpool City Region

Combined Authority's (LCRCA) *Building Back Better* economic recovery plan – most notably the commitment to: "…engage with Government on an ambitious national programme to eradicate digital poverty and secure funding to ensure everyone in our City Region has access to hardware, broadband connections and basic digital training" (LCRCA, 2020, p.23).

However, we should also move beyond an approach that solely focuses on access and training, towards one that considers the context in which citizens engage with digital. Importantly, such an approach needs to consider the ways in which digital can both enable citizens but also exacerbate or reinforce aspects of inequality. We need to understand that for all stakeholders – whether public, private or third sector organisations – digital exclusion and inequalities are "problems for everyone but owned by no one". For instance, if they are framed as a skills issue, they often fall to education providers alone to address. A different approach is required.

To help address these issues in the LCR in the social and economic recovery post-coronavirus, policymakers should consider the following:

1) Assess and understand what it means to be a digital citizen in the LCR – what basket of goods, services, skills, and competencies do individuals and households need in contemporary society? Defining this "minimum digital living standard" would provide a baseline on which to build policy interventions;

2) Avoid "one size fits all" or "technology-led" solutions. The evidence suggests that such interventions often fail, especially in the longer term. Liverpool has a positive history of developing digital inclusion strategies. A key feature of their success was the involvement of

multiple stakeholders across the City Region, from travel services, health services, employers, unions, regional and national charities, local government, and community groups. Linking these stakeholders allows interventions "where citizens are", but also makes digital inclusion a priority across all regional partners.

3) Do not ignore the needs of young people. The data presented here makes clear that many young people, especially those leaving education earlier, can become very narrow users of digital systems. Put bluntly, "Facebook skills" (or related to Instragram, TikTok and other services) are often of little use in a manufacturing business or when using digital health technology.

The LCRCA's *Building Back Better* recovery plan rightly highlights many digital economy opportunities within the City Region. We need to ensure that all citizens, at all ages and career stages, are able to engage with those opportunities.

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Policy Briefing 031   **#LivUniCOVID**