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Digital inclusion, exclusion and participation

ESSS Outline

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Introduction

This evidence summary provides an overview of evidence relating to:

Digital inclusion, exclusion and participation.

About the evidence presented below

We searched for academic research and grey literature using a wide range of search terms including: digital inclusion, digital exclusion, digital participation, digital literacy, digital capability, social exclusion.

While there is a large spread of literature discussing digital inclusion / exclusion - what is is, who it affects, and potential ways to combat it - there have been few robust attempts to evaluate or assess potential solutions, their impact or cost-effectiveness. More data and research is needed to understand and measure the long-term social and economic benefits of these initiatives.

Limitations come from studies reliant on self-reporting which may be subject to bias and use of cross-sectional survey data.

Accessing resources

We have provided links to the materials referenced in the summary. Some materials are paywalled, which means they are published in academic journals and are only available with a subscription. Some of these are available through the The Knowledge Network with an NHS Scotland OpenAthens username. The Knowledge Network offers accounts to everyone who helps provide health and social care in Scotland in conjunction with the NHS and Scottish Local Authorities, including many in the third and independent sectors. You can register here. Where resources are identified as 'available through document delivery', these have been provided to the original enquirer and may be requested through NHS Scotland's fetch item service (subject to eligibility).

Where possible we identify where evidence is published open access, which means the author has chosen to publish their work in a way that makes it freely available to the public. Some are identified as author repository copies, manuscripts, or other copies, which means the author has made a version of the otherwise paywalled publication available to the public. Other referenced sources are pdfs and websites that are available publicly

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Background

The internet and digital technology is very much at the heart now of how public, economic and social life functions. It has transformed how we work, communicate, consume, learn, entertain and access information and public services.

And while it's become integral to all aspects of life, the spread of access and use is uneven and many people remain digitally excluded (OIS, 2013; Selwyn 2004). Those who are excluded can be limited or unable to participate fully in society.

The risk is that the divide between those with digital skills, and those who struggle to overcome barriers to access and use, the growing social and economic gap between those who are connected and those who are not, continues to widen (ONS, 2019; The Wales Co-operative Centre with Carnegie UK Trust, 2018).

How much and how often you use the internet can offer an insight into who could be considered digitally excluded, providing a way to assess how the internet and digital skills impacts on people's lives (Good Things Foundation, 2017).

Definitions

The definition of digital exclusion has changed over the years, from a simple 'user / non-user' to exploring different levels of internet use and skills divisions (Carnegie UK Trust, 2016b). It has also grown to look at more than just internet use.

Broadly defined, digital exclusion is where a section of the population have continuing unequal access and capacity to use Information and Communications Technologies (ICT) that are essential to fully participate in society (Schejter, 2015; Warren, 2007).

Digital inclusion is about working with communities to address issues of opportunity, access, knowledge and skill in relation to using technology, and in particular, the internet.

Many different terms are used interchangeably – digital inclusion, digital participation, digital capability, digital literacy - but essentially it's about people being able to use digital technologies, particularly the internet, in ways that enhance their lives and contribute to helping them overcome other disadvantages which they might face (The Wales Co-operative Centre with Carnegie UK Trust, 2018)

Helsper (2012) identifies steps of digital engagement, ranging from basic use involving communication, intermediate use involving networking, and advanced use involving civic participation.

Digital literacy must be looked at as part of inclusion. Users of the internet can still be digitally excluded because they lack the skills to be able to navigate the digital world (ONS, 2019).

Who is affected?

Some groups are particularly affected, with a concentration of certain demographics within the digitally excluded (Just Economics, 2016).

The socially isolated tend to have more limited access to, and use of, the internet, devices and online services. The economically disadvantaged also have limited access but are more likely to try and seek out access in places like libraries. Those who fall under both categories suffer most disadvantage and have little or no use at all (Helsper, 2008). Studies show that overall non-users are increasingly older, less educated, more likely to be unemployed, disabled, and socially isolated (Helsper, 2016)

Ipsos MORI identified employment status, educational qualification, and age as strong predictors of whether or not a household has internet access (Carnegie UK Trust, 2016b).

It is worth noting that all groups are not homogenous and there can be differences within populations. It's also important to take into account changing trends over time. People digitally disengaged in the past are different from those now, so approaches to tackling it must be adaptable (Helsper, 2016).

Older people have consistently made up the largest proportion of internet non-users, and pattern of internet use by age is replicated when looking at digital skills (ONS, 2019).

A survey from Citizens Advice Scotland (2018), showed that of respondents aged between 65 and 79 years:

- Only 25% used the internet often
- 46% never used the internet
- 18% have difficulty using a computer
- 16% cannot use one at all

Jaegar (2012) describes the internet as 'inherently unfriendly' to people with many kinds of disabilities, with barriers to access and usage varying by the type and extent of disability.

Many studies have shows that people with disabilites are less likely to use the internet or have access at home than people without (Helsper and Reisdorf, 2016; Hollier, 2007; Dobransky and Hargittai, 2006).

In 2017, 56% of adult internet non-users were disabled. Though the percentage of disabled adults not using the internet has been declining, in 2018, it was 23.3% compared with only 6.0% of those without a disability (ONS, 2019).

Ofcom data shows 47.7% of the non-user population responders have a long-standing illness, disability or infirmity (Good Things Foundation, 2016b).

Outside of these two groups others are also affected by digital exclusion in different ways.

Place can exclude. Poor (or no) broadband and mobile infrastructure is more likely to be experienced in remote, small towns (CAS, 2018), which can mean that those in rural areas face the double disadvantage of limited access to physical services as well as those online.

Digital inclusion has an impact on younger people. In education the increased use of digital platforms and computer-centered resources means there is a potential cost being shifted from schools to families (Scottish Parliament, 2018). In 2018, 12% of those aged between 11 and 18 years (700,000) reported having no internet access at home from a computer or tablet, and a further 60,000 had no internet access at home at all (ONS, 2019).

People who are homeless make widespread use of phone and internet; almost as much as the wider population (Lemson and Crane, 2013; 2015), but their experiences of use (and barriers) are different.

Serving a prison sentence can often mean being excluded from changes in technology and software. Without proper access to, and current skills in, digital technology there is risk to reintegration into society (Toreld, 2018).

What seems to run through most of those affected by digital exclusion is poverty.

There is a strong relationship between the Scottish Index of Multiple Deprivation (SIMD) and internet uptake in Scotland, with internet uptake among the 10% most deprived in Scotland at 53% compared to 81% for the 10% least deprived (Carnegie UK Trust, 2016a). And while 77% of working-age adults in the lowest socioeconomic group use a smartphone, this group is less likely to be able to, and feel confident in, using the internet.

The Citizens Advice Scotland survey (2018) showed similar findings, with only 19% of respondents from the most deprived areas being able to use a computer at all. 51% of respondents living in the most deprived areas reported never using the internet, in comparison to only 8% of respondents living in the least deprived areas.

Social exclusion

These figures suggest we need to build a better understanding of the relationship between social exclusion and digital technology. There are a number of views here.

Digital participation can be a way to mitigate social exclusion by introducing disadvantaged groups access to the benefits of internet use (Helsper and Galacz, 2009).

Others suggest that offline social inequalities will translate into online social inequalities (Carnegie UK Trust, 2016b; Onoa, 2007). For example, access, design and implementation are often not considered from the perspective of those excluded, and so reproduce exisiting barriers and inequalities (Jaeger, 2012; Goggin and Newell, 2007; Dobransky and Hargittai, 2006).

Some have argued these structural trends are creating an entrenched digital underclass (Helsper and Reisdorf, 2016; Age UK , 2013; Choi and DiNitto, 2013).

But identifying causality is difficult given how intertwined society and technology now is. Few studies have shown a change in individuals' social inclusion through a sustained engagement with information and communications technology (Carnegie UK Trust, 2016b).

The scale of digital exclusion

The number of adults who have either never used the internet or have not used it in the last three months, described as "internet non-users", has been declining over recent years (ONS, 2019) but there has been a slowing in the rate of progress in people moving online and gaining basic digital skills.

There are 15.2 million people in the UK who are either non-users, or limited users of the internet (Good Things Foundation, 2017). A report from Citizens Advice Scotland (2018) found almost one in five respondents (18%) reported that they never use the internet.

In 2018, 8% of people in the UK (4.3 million people) were estimated to have zero basic digital skills (i.e. are unable to do any of the activities described here). A further 12% (6.4 million adults) were estimated to only have limited abilities online (missing at least one of the basic digital skills) (ONS, 2019).

Research from Good Things Foundation and CEBR suggests that at current rates, 6.9 million people will still lack digital skills by 2028 (Good Things Foundation, 2019b).

Why it matters

Access and use of digital devices and the internet are important for helping people stay in touch with friends, learn new things, and access a wide range of entertainment. But it goes much further than that. Digital inclusion is important for social equality, and to ensure equal access to the many benefits the internet offers (Williams, 2016; Broadbent and Papadopoulos, 2013).

The CEBR (2015) identifies five areas in which individuals with basic digital skills benefit:

- increased earnings
- higher employability
- cheaper shopping
- improved communication
- time saved through online services

They also argue the benefits of Basic Digital Skills training outweighs the costs involved, showing that the boost in tax receipts and NHS savings alone exceed the investment required.

Generally, studies suggest that individuals who use the internet to create and maintain social ties expand their social capital, connectivity, social engagement, and community attachment (Just Economics, 2016).

Digital participation can have an impact in minimising loneliness and depression among older people (Koss, 2014; Lelkes, 2013; Aguilar, 2010; Sum, 2008). Barnes (2006) finds older people who have internet access are three times less likely to be socially excluded. The Widening Digital Participation evaluation in England showed around half of people provided with digital inclusion support felt less lonely and isolated.

Accessing the internet has been found to improve social interaction in people with disabilities (Kydland, 2012), and is a way for people with learning disabilities to have a private life separate from carers, one where they can generally present themselves separate from their disabilities (Löfgren-Mårtenson, 2008).

For young people in education with no (or limited) internet access at home it can mean difficulty completing school work (ONS, 2019).

People on low incomes without access to online services are affected by the poverty premium and end up paying more for basic goods and services (Good Things Foundation, 2018b)

For those with dementia improved digital skills can provide access to therapy and resources, and reduces isolation. The Tinder Foundation (2016a) looks at the use of tablets, touchscreen, personalised interfaces and visual prompts by people with dementia.

The people who most need health and care services (older people, people with long term conditions and disabilities, people living in poverty / with social deprivation) are those least likely to be able to use digital health services. Without tackling digital exclusion, there is a risk that digital transformation widens health inequalities rather than narrowing them.

For health and social care organisations, supporting people to get online and use digital health resources could help achieve local priorities such as: physical and mental wellbeing, prevention, self care and self management, shared care and decision making, treatment adherence, and appropriate use of urgent and emergency care (NHS Digital, 2019)

Digital inclusion and wider use of Technology Enabled Care with older people, the housebound, and adults with disabilities could offer more and improved options for independent living. It also has the potential to improve health and care and quality of life, while reducing care costs and reduced burden on families and informal carers (Just Economics, 2016).

Accessing key services

The increasing use of the internet for accessing key services - such as banking, government and council services - has implications for those who are not equipped, unable or unwilling to use them. Digital exclusion (including a lack of private or secure internet access) impacts on peoples basic rights, and increasingly so as more move online by default.

Citizens Advice Scotland survey (2018) showed respondants unable to download or save online documents without help, or only able to access the internet through their phone, making completion of forms online very difficult. One example from the Sheriff Court showed a claim form with eleven pages even before any information is entered by the user, with fairly large sections of text required to explain the case circumstances.

What are the barriers?

For a long time policy and practice has seen the key barriers to digital inclusion as:

- The skills gap to use, or means to learn
- A lack of internet and / or device access
- The motivation and confidence to use, understand or engage

These barriers are well documented (Helsper and Van Deursen, 2017; Helsper & Reisdorf, 2012; Dutton and Blank, 2011).

The reasons given for not having internet access in the household in 2017 was that they didn't need it (64%), followed by a lack of skills (20%). 2% also identified a physical or sensorial disability as a reason. Other reasons include having access elsewhere, costs of equipment and access, and privacy / security concerns (ONS, 2019).

The digital exclusion heatmap shows several contributors to digital exclusion, including social factors such as age, education and income, as well as access to fast broadband and 4G connectivity (SCVO, 2018).

Understanding these causal factors is key to identifying potential solutions.

Skills

Technology changes and develops constantly. Many people can feel left behind and so stop engaging with the digital world. Older people for example can feel that it's too late in life to start learning, or as they've managed without a computer or internet so far see no reason to start. Citizens Advice (2018) showed the numbers of people - around 60% - unable to complete online forms without assistance.

The ONS report (2019) shows almost double the percentage of respondents with disabilites identified a lack of skills or knowledge as a reason compared to those without (15%).

Security or privacy concerns were also given as reasons for non-use. A Carnegie UK Trust study (2015) highlighted specific concerns such as privacy, confusion about different options, and worries about spam and viruses.

Access

Access is probably best considered in terms of availability, affordability and design.

The role of place in digital adoption is often overlooked (Williams, 2016; Farrington, 2015; Philip, 2016), partularly important with Scotland's rural landscape, where internet usage is lower than in the rest of the UK (CAS, 2018). 18% of adults in the Highlands have never been online and 37% of households in Scotland do not receive broadband speeds of at least 10MB.

From the CAS (2018) survey two of the three most common barriers preventing respondents from using the internet were financial. 18% reported that broadband costs were a barrier. 17% reported that phone and data costs were a barrier.

For those without a computer or internet at home, relying on libraries, or other people such as friends or family creates it's own problems. Timings are particulalry relevant for anyone with caring or work commitments (CAS, 2018). Having the ability to explore the internet or get comfortable with a computer or device at home can help with the development of digital skills (UWS, 2017).

Many people access the internet without using a computer, often only through a smartphone, so important that content is suitable for access and use on mobile devices.

Design of devices, services and content is also important for digital inclusion. 5% of those not using the internet reported that their disability prevented them from doing so (ONS, 2019).

For those with disabilities, or older people, this might mean taking sight or hearing problems, or physical dexterity (difficulties using a mouse or keyboard for example) into consideration (Friemel, 2016). Complicated presentation of information, colours, size and layout of text, can be offputting, or make websites and services unusable (Reform, 2019).

Motivation

Motivation is often highlighted as the most significant, persistant and hardest to address barrier to inclusion (Good Things Foundation, 2019a).

They break it down as:

- It's not for me - People who see no need or benefit to be online.
- I don't have the right support - either to get online or use the device.

- It’s too complicated - people who lack not just the basic digital skills but also an understanding of how the internet works.

Older people also highlight a concern that the internet could take away social interactions (Castle Clarke, 2016; Age UK, 2015; Olphert and Damodaran, 2013).

Basic digital skills

For a number of years the focus of digital inclusion support has been on helping people develop basic digital skills, which are often used as a framework for improvement and measurement.

The Tech Partnership framework lists five as a measure of digital inclusion:

- managing information - using a search engine to look for information, finding a website visited before or downloading or saving a photo found online
- communicating - sending a personal message via email or online messaging service or carefully making comments and sharing information online
- transacting - buying items or services from a website or buying and installing apps on a device
- problem solving - verifying sources of information online or solving a problem with a device or digital service using online help.
- completing online forms or creating something new from existing online images, music or video

The SCVO has a similar list:

- Communicating
- Handling information & content
- Transacting
- Problem solving

The fifth skill – being safe, legal and confident online – is embedded across the other four.

The framework also includes foundation skills required by those not using digital technology or using it in limited ways to help support skills and build confidence:

- Turn on your computer
- Update your password
- Connect a phone to Wi-Fi

- Contact friends and family online

It has been argued that lack of basic skills may no longer be the crucial barrier as more people have access to, and familiarity with, digital technology, and touchscreens have made technology easier and more intuitive for people to use (The Wales Co-operative Centre with Carnegie UK Trust, 2018).

Examples of support

The Online Centres Network has supported over a million people to learn basic digital skills through the Future Digital Inclusion programme. The programme helps people of all ages and backgrounds, with limited or no digital skills, with many experiencing significant barriers. The centres offer support, focused on motivation, tailored to individual needs and personally relevant outcomes (Good Things Foundation, 2019b).

For example, they have provided support to 47,500 jobseekers per year attempting to use the Department for Work and Pensions' employment portal (Reform, 2019).

In 2014-15, 192,000 people were supported by almost half a million digital skills sessions across the library network. (UK Government, 2017).

Since 2018, NHS pilot schemes between businesses charities and the public sector have helped almost 200,000 people improve their digital literacy (Reform, 2019). These have been tailored to the specific social, digital, and geographic needs of those excluded.

Examples include:

- A pathfinder scheme used peer support and digital champions to help teach isolated older people in Sunderland basic digital skills so they could access digital services more efficiently and improve their own care after leaving hospital.
- A pilot scheme in Tower Hamlets aimed to improve digital inclusion amongst the Bangladeshi community who historically had both a lower health engagement and were less likely to use digital means to help manage health or access health information.
- Digital Skills Partnerships bring together government departments, public sector organisations, businesses and charities to increase the digital capabilities of people across England. For example, the South East Local Enterprise Partnership aims to improve digital literacy to boost the local economy and help fill an estimated 35,000 digital vacancies for web and software engineers.

doteveryone piloted a number of approaches (UWS, 2017) to improving digital inclusion on a 'test and learn' basis :

- Digital Zones - supported spaces for digital skills learning and practice, providing regular drop in sessions and a relaxed environment.
- Deep dives - smaller, more focused groups helping to address lack of motivation for going online among those with specific needs (such as older and homeless people)
- Community engagement - grassroots engagement supporting sustainability through community ownership of activities.

Evidence from various projects has shown people learn best from repeated, informal, face-to-face and one-to-one support (SCVO, 2018).

NHS Digital set out design and accessibility principles, and promote web accessibility guidelines, to help ensure that online services are inclusive and designers take into account the needs of the digitally excluded when developing online services (Reform, 2019).

The role of libraries

Other support organisations can help with advice and training, but it's argued that limitations of resources and remit mean it often isn't practical or appropriate (CAS, 2018).

The one organisation most talked about, and frequently used, is libraries.

Libraries are increasingly used to help people develop digital skills and tackle the barrier of access by providing free Wi-Fi, computers, and other technology. Over half of UK residents have a library card and around 35% of people living in the most disadvantaged areas visit their library. Trained staff, supported by volunteers, can help support digital inclusion by offering training, helping people understand the benefits of the internet and online services, and increasing their confidence in the digital world (UK Government, 2017).

The Library Online Centres Network (Good Things Foundation, 2016a) found that most library stakeholders saw the demand for basic digital skills support increasing, alongside a high demand from job seekers to use computers in libraries. But only half agreed their library has local authority support to deliver digital inclusion, and almost all saw a need for more library staff training to deliver it.

They suggested for improving digital skills through libraries, including providing clear guidelines on what libraries can do, investing in digital champion training, working in partnership with more organisations, and offering more adaptive training with people.

Widespread library closures across the country will have an impact on this in terms of access. But also limits on computer time, lack of privacy, and lack of appropriate help / support can mean that internet access at libraries isn't always appropriate (UWS, 2017).

Libraries requiring a fixed adddress for membership also prevents many homeless people from accessing facilities (Lemos and Frankenburg, 2015; Pathway, 2013).

What other approaches can be taken?

Various figures, including those from the ONS (2019) do show a slow progression towards inclusion. But, if as some have suggested, looking at access, confidence or skills in isolation is not enough to tackle digital exclusion. As seen above, some are taking a more nuanced approach to individual, local and community barriers, and looking at a far broader scope of issues.

The complex interaction of factors which contribute to digital exclusion make it challenging to put solutions into practice. Like other hard-to-reach populations it requires a multi-faceted approach (UWS, 2017).

The Centre for Ageing Better (2018) makes the point that not using the internet and being digitally excluded can be two different things, and argue we should move beyond basic skills to build confidence and motivation to do things online that matter to people. Success should be measured by outcomes (such as health) not just the number of people getting basic digital skills.

Piercy identified 3 potential interventions for those hard to reach: peer support, home access and shared practice (UWS, 2017).

Good Things Foundation (2019b) suggests embedding digital inclusion across all types of public, private and community sector social support programmes, with efforts focussed on moments of transition and crisis, where people benefit from support services.

Better and more affordable access to the internet and devices are required across the board, for those at home, those on low incomes, in homeless hostels and day centres. Responsibility of addressing the cost barrier should be moved away from the individual or support organisation, and onto key players in the digital landscape such as technology companies or broadband providers (Good Things Foundation, 2019b).

It's key to think about methods of engagement. Research (SCVO, 2018) has shown that the formula for engaging people successfully is to not make the online all about the digital / tech element but:

- recognising that motivation to learn something new is unique to an individual
- hooking people in through a relevant, personal interest
- facilitating invaluable peer support.
- embedding all of this in a service currently being accessed, when people can see an immediate practical application

The Carnegie UK Trust (2016a) also highlight the importance of 'personal hooks' and finding online content that relates hobbies as a key way to encourage digital participation.

Support towards digital inclusion should be local and face to face (UWS, 2017), intensive, tailored, and an open-ended, particularly for those with low confidence and facing multiple barriers and disadvantages (Good Things Foundation, 2019b). The support should come from encouraging and informal volunteers / tutors combined with peer learning to effectively communicate the benefits of digital.

Digital ambassadors and champions

Ambassadorial and digital leader models can be used to address digital disengagement (UWS, 2017).

For example, Digital Communities Wales are working on an initiative to establish a movement of Digital Companions across Health Boards in Wales. The will work from a basic set of principles to support engagement with the basics of technology. It will be person-centred and underpinned by social and practical principles so that 'digital' is not presented as the main driver (The Wales Co-operative Centre with Carnegie UK Trust, 2018).

Their Digital Heroes programme offers intergenerational befriending where school pupils and students volunteer to support older people who are at risk of falling further behind as the use of technology continues to develop and expand.

Potential next steps

The Age Action Alliance asks if we need to rethink the engagement to action route and suggests that the focus should be to capacity build others to deliver digital inclusion and digital skills rather than aiming the message directly at intended beneficiaries. Funders should trial and invest in new models such as peer-to-peer support (Centre for Ageing Better, 2018) that is long-term, personalised and potentially of higher-cost.

Recommendations from the RSE (2014), CIVICA (2018) and Centre for Ageing Better (2018) include local interventions, coordinated at national level, tailored to the interests of particular communities and as a component of social inclusion activities. A large part of this will be about scaling up and accelerating initiatives that are already happening.

The Centre for Social Justice (2017) highlights the importance of digital leaders / digital champions in local government and also recommends core digital skills be built into every new apprenticeship, irrespective of whether the role requires them.

Providers of digital inclusion support should make person-centered, co-production and co-design standard practice (Centre for Ageing Better, 2018). Partnership opportunities should be explored across public, third and private sector (Reform, 2019; Centre for Ageing Better, 2018).

What is important is for key services to continue to have alternative offline options available, such as contactable telephone numbers and staffed public access points with paper forms available on demand (CAS, 2018).

Key papers

Carnegie UK (2016) The role of digital exclusion in social exclusion (pdf)

This research examines the relationship between digital exclusion – lacking access to online resources and services – and social exclusion. Social exclusion encompasses a range of impacts but broadly describes a situation where individuals are unable to participate fully in social life to the detriment of individuals and society as a whole.

Centre for Ageing Better (2018) The digital age: new approaches to supporting people in later life get online (pdf)

Research looking at what enables and prevents people in later life from getting online – focusing specifically on people in later life who have never used the internet, those who used to but have now stopped or those who have limited usage. It sets out potential implications for policymakers, funders, digital inclusion support providers and service providers.

The Centre for Social Justice (2017) Social Justice In The Digital Age (pdf)

This report looks at how we can remove barriers from people's lives, increase access, and train up individuals in the skills and understanding that will enable them to lead a fully digitally enabled life.

Citizens Advice Scotland (2018) Disconnected: Understanding digital inclusion and improving access (pdf)

Report looking at CAS's survey on digital access across Scotland. Respondents were asked about using computers, what devices they use to go online, where they go online, their abilities to perform basic tasks such as completing electronic forms, and any barriers they faced trying to use the internet.

Good Things Foundation (2017) The real digital divide? Understanding the demographics of non-users and limited users of the internet:an analysis of Ofcom data (pdf)

This report looks at trends for particular demographic groups in relation to use of the internet. It focusses on the groups of people that do not access the internet at all and those who access the internet in a limited way to build an understanding of these groups, who they are and how they can be supported.

Good Things Foundation (2019) Future Digital Inclusion: delivering basic digital skills for those in need (pdf)

This report is based on evidence collected as part of a realist evaluation of the FDI programme, to understand the mechanisms behind FDI, the resources that different types of Online Centre have at their disposal, and which are most important for different types of learner.

Helsper, E and Reisdorf, BC (2016) The emergence of a "digital underclass" in Great Britain and Sweden: changing reasons for digital exclusion *New Media & Society ISSN 1461-4448* (pdf)

This paper looks at motivations for being offline between 2005 and 2013 amongst non-users. Analyses of Swedish and British data demonstrate that non-user populations have become more concentrated in vulnerable groups. While traditional digital divide reasons related to a lack of access and skills remain important, motivational reasons increased in importance over time.

Just Economics (2014) Valuing Digital Inclusion: Calculating the social value to individuals of going online (pdf)

This paper provides a review of the current literature on the use of Technology Enabled Care in the provision of care and support to older people and disabled adults. It was conducted as part of an evaluation of an Assisted Living Technology to support the digital participation and improve quality of life.

NHS Digital (2019) Digital inclusion guide for health and social care (pdf)

A guide to help healthcare providers, commissioners, and designers ensure that services delivered digitally are as inclusive as possible, meeting the needs of all sections of the population.

Office For National Statistics (2019) Exploring the UK's digital divide (pdf)

This report explores the scale of digital exclusion in the UK and its impact, the characteristics and circumstances of those who are not currently using the internet, how internet use and digital skills vary for different groups of the population and barriers to digital inclusion.

Oxford Internet Survey (2013) Cultures of the Internet:The Internet in Britain (pdf)

OxIS has become an authoritative source of information about Internet access, use and attitudes in Britain. Areas covered include: digital and social inclusion and exclusion; regulation and governance of the Internet; privacy, trust and risk concerns; and uses of the Internet, including networking, content creation, entertainment and learning.

Reform (2019) Inclusive by default (pdf)

This report assesses the causes of digital exclusion and what can be done to make digital public services inclusive by default.

The Royal Society of Edinburgh (2014) Spreading the benefits of digital participation (pdf)

This report sets out a comprehensive overview of the current use of digital technologies in Scotland, the barriers to increased participation, and the responsibilities of a digital society. It makes recommendations, to the UK and Scottish Governments and their private and third sector partners, to harness digital technologies for maximum benefit.

University of the West of Scotland (2017) Rapid Review Of Evidence For Basic Digital Skills (pdf)

In order to help inform the development of the Digital Participation Challenge Fund, the SCVO commissioned UWS to produce a robust summary of recent evidence and learning (over the last 3-4 years) around basic digital skills development in the UK.

The Wales Co-operative Centre with Carnegie UK Trust (2018) Digital Inclusion in Health and Care in Wales (pdf)

The aim of the research is to provide key stakeholders with a robust evidence base on the potential for digital inclusion to improve the health and well-being of older people and people with a limiting long term condition, disability or infirmity in Wales.