The trend over the last decade has been for increasing internet use among the older population. However, a substantial group – including the majority of those age 75 and over – are not online.

Over 79% of all digital exclusion is among those aged 65 and over. Also worrying is that there is a group of lapsed users who have used the internet in the past but no longer do, and we do not know why.

Factors that most strongly explain the likelihood of an individual aged 65+ not using the internet are:

- Lower income
- Older age
- Living alone
- Mobility challenges
- Problems with memory or ability to concentrate (self-rated)

Older people are not only less likely than younger people to go online, but those who use the internet are more likely to be ‘narrower’ users, carrying out fewer activities. The most popular online activities among people aged 65+ are emails and finding information about goods and services. However, only around a quarter (27%) of this age group use social networking, compared to nearly all (96%) internet users age 16 – 24.

The benefits of being online include accessing services and information, for example public services and utilities. There is mixed evidence for reducing loneliness and improving quality of life.
When asked, most older people who are not online say this is because they don’t need it or are not interested. However, further exploration shows that people may not understand the benefits it can bring, and other factors that contribute include lack of skills and knowledge about the internet and digital technology, concerns about security, and the cost. On the other hand, some people make a well informed choice that it’s not something they need.

Digital inclusion providers need to find ways to engage older people through activities that interest them. Training needs to be personalised and flexible and delivered at the older person’s pace with ongoing support.

There are important gaps in the research evidence, including why older people become lapsed users, how to support the wide range of older people with many different barriers and challenges, and how digital technology interfaces need to be modified to improve the older user experience.

1 Digital inclusion of older people in the UK

Background

As the House of Lords Select Committee on Digital Skills' 2015 report noted, “Everyday activities—such as shopping, using a telephone and banking—increasingly require interaction with technology. Digital skills (the skills needed to interact with digital technologies) are now necessary life skills. Individuals and businesses alike will need skills to protect themselves online.” We would add to this list activities that more and more often require digital use: accessing essential services and utilities, getting the best deals and rates, communicating with companies, and more.

The Government’s ‘Essential Digital Skills’ list is intended to be used by people supporting adults to improve their essential digital skills. It covers the following areas:

- Communicating
- Handling information and content
- Transacting
- Problem Solving
- Being safe and legal online

This Evidence Review covers only the aspects of digital inclusion related to internet use (and tools to access the internet), and the term ‘digital exclusion’ generally refers throughout to those not using the internet.
However, as shown later, ‘use’ is not as simple or straight-forward as do/don’t. There are gradients of use and skills, and people move in and out of use. The Office for National Statistics (ONS) figures cited in this report, for example, define ‘recent internet use’ as occurring at least once in the last three months. Is someone who has only accessed the internet once in three months really that much less digitally excluded than someone who has not used it at all, especially compared with those who use it once per week, or every day? And what about those who have used it in the past but no longer do? Then there is ‘narrow’ versus ‘wide’ use, depending on the types of activities engaged in (discussed in Section 2).

Owing to links to other forms of exclusion, such as social and financial exclusion (see Section 4 below), understanding and addressing less-skilled and less-experienced use as well as digital exclusion is relevant to key areas of Age UK’s activity and strategic goals.

Many older people successfully access the internet and feel they benefit greatly and their lives are enriched by this. However, we should keep in mind that some people will simply never be inclined, or able, to engage with digital technology, for a variety of reasons. Age UK believes that³, while older people should be encouraged and supported to get online, those who do not should be able to access services and resources in other ways that suit them.

Also, as a recent report argues,⁴ not all non-use is problematic – some older people manage well without needing to access online services or resources, possibly through family or friends as proxies, and have a supportive social network. ‘Offline’ activity may also meet needs for face-to-face contact and getting out of the home that online use cannot. What is needed is a focus on helping people with the types and amounts of digital exclusion that worsen other exclusion and disadvantage, especially at times of crisis or major life changes.

Data used in this review largely comes from the Office for National Statistics and Ofcom, with some of our own additional analyses of the English Longitudinal Study on Ageing, and the Understanding Society survey.
Internet Use

Key Stats

- 4.5 million adults in the UK have never used the internet, of whom 3.7 million are aged 65+.\(^5\)
- Including those who have not used the internet in the last 3 months, there are 5.3 million adults in the UK who are not regular users, of whom 4.2 million are aged 65+.\(^6\)
- By this measure, over 79% of all digital exclusion is among those aged 65+.\(^7\)
- Use decreases with age. While 80% of the 65 – 74 age group are internet users, this falls to 44% in those aged 75+.\(^8\)

Since 2011, when the Office for National Statistics (ONS) began recording annual usage data, internet use in the UK has steadily increased. It currently sits at 90% for the adult population (age 16 and over). For people aged 16 – 44, it has reached 99%. Internet use by older people is still lower than by younger people, and decreases with age: of those aged 65 – 74, 80% have ‘recently’ (within the last 3 months) used the internet, while only 44% of those aged 75+ have.\(^9\) Internet use is similar for men and women in younger and middle age groups. Among those aged 65 – 74, men are a little more likely to use the internet than women, but there is a marked difference in the oldest age group as 51% of men aged 75+ have recently used it compared to 38% of women.

Figure 1: Percentage of adults who have used the internet in the last 3 months

![Figure 1: Percentage of adults who have used the internet in the last 3 months](source: ONS, Internet Users, 2018)
However, these figures are a vast improvement over the situation in 2011, and, for women in the 75+ age group, the percent has more than doubled.

Figured 2. Internet use by older people between 2011 – 2018

Source: ONS, Internet Users, 2018

Access to the internet

A separate issue to internet use is access to it\textsuperscript{a}. More older households have access to the internet than five years ago; single-person age 65+ households are still relatively low at 61%, but 88% of 2-person households with at least 1 person age 65+ have access.\textsuperscript{10} This is still lower than younger households, but an improvement since 2012.

\textsuperscript{a} ‘Households with internet access’ is not restricted to fixed broadband, though this is the most popular internet connection, with 98% of households having this type of connection; 48% have mobile broadband via a mobile phone connection.
Figure 3. Households with internet access by age, 2012 – 2017

![Households with internet access by age group](image)

Source: ONS, Internet access - households and individuals, 2018

Number of older people not using the internet

The headline measure often used for digital exclusion is the ONS estimate of those who have never used the internet, as seen in Figure 4. This number has steadily fallen since measures began.

Figure 4. Percent of older people who have never used the internet from 2011 – 2018

![Percent who have never used the internet over time](image)

Source: ONS, Internet Users, 2018
While the statistics above are based on annual surveys, we also have data from the English Longitudinal Study on Ageing (ELSA), which tracks the same people over time. Our analysis of data for years 2002 - 2014\(^1\) shows that the biggest change has been in people aged 75+ (Fig. 5; each set of bars is from a data collection ‘wave’ taken two years apart, the first in 2002 and the last in 2014). In this age group, the most dramatic change has been in women: the number of female users has doubled, from 20% to over 40% in this timeframe. However, non-use is still higher than use in these women, while use is higher than non-use in men in this age group.

**Figure 5. Changes in internet use and non-use by people age 75+ over seven data collection waves (2002 – 2014), by gender.**

Source: Age UK analysis of ELSA data
However, there is a substantial number (over half a million) of older people who used the internet in the past but not in the last three months\textsuperscript{12}. While these ‘lapsed users’ have declined slightly in the 65 – 74 group, from about 5% in 2011 to about 4% in 2018, in the 75+ age group they have actually increased from 4% to over 6%. These ONS data don’t reveal \textit{why} people have stopped using the internet.

**Figure 6. Percentage of older people who have stopped using the internet (i.e. not used in the last 3 months) from 2011 – 2018**

Further exploration shows that lapsed use is not straightforward. When individuals who were age 75+ in Wave 7 of ELSA,\textsuperscript{13} i.e. in 2014, were viewed over all seven waves (i.e. 2002 – 2014), there was a lot of movement in and out of use/non-use over time. Figure 7 shows this for the 209 women and 167 men concerned. In general, non-use (light grey bars) declined over time, but you can see how there is a lot of mixture of light and dark grey (internet use).
Figure 7. Internet use and non-use change over time for people age 75+ at Wave 7, by gender.

Women

Men

Source: Age UK analysis of ELSA data
Digital exclusion overall

Taken together, the best proxy measure for digital exclusion is the population currently offline, which can be calculated by adding together the ONS estimates for those who have never used the internet and the lapsed users (have not used in the last 3 months). This equates to 5.3 million adults in the UK who are not regular users, of whom 4.2 million are aged 65+.\textsuperscript{14}

While we now have a better idea about internet use over time among the oldest age groups, more research is needed around the factors that influence this and measures that could be taken to support people to become and remain active internet users.

2 Who are the older digitally excluded?

We have analysed the Understanding Society (USoc) dataset Wave 7 (2015 – 2017)\textsuperscript{15} to identify the characteristics of older people associated with use of the internet.

Factors that most strongly explain the likelihood of an individual aged 65+ using the internet or not, in rank order of contribution, are:

- Income
- Age
- Household composition
- Mobility
- Memory or ability to concentrate (self-rated)

Characteristics that are mentioned in the literature as having an effect on internet use but were not found to be significant in this analysis, were educational attainment, health (self-reported), and gender. The USoc finding about gender contrasts with ONS data; this could be because the ONS data is for households rather than individuals, and is not analyzable by gender and age.

Further analysis of the data from USoc tells us that, among people age 65+:

- There is a decreasing likelihood of using the internet as age increases. People at older ages (75+) are nearly five times more likely not to be using the internet than those aged 65 – 74.
- People with the lowest monthly income (bottom 20%) were over 2.5 times less likely to be using the internet than those in the top 20% of the income bracket.
- Older people living on their own are more than two times less likely to be using the internet than households of two or more people.
- Those with mobility problems are 1.44 times less likely to be using the internet than those without problems.
- People without memory problems are nearly twice more likely to be using the internet than individuals with memory problems.

Data from ONS reports give additional clues about the groups at most risk of digital exclusion. As nearly 1.6 million women aged 75+ live alone, and over a third (34%) of all ‘never users’ are women aged 75 or over (1,647,000), it is reasonable to assume that a large proportion of the households without internet access are occupied by single women aged 75+.

In addition, Ofcom statistics reinforce the importance of socio-economic group regarding internet use. Non-use is more likely for adults in DE households (22%, vs 4% for AB households and 7% for C1 households), with a high number of older adults in the DE socio-economic group.

Figure 8. Summary of access to and use of devices / media at home, by socio-economic group (all ages)

<table>
<thead>
<tr>
<th>Socioeconomic band</th>
<th>AB</th>
<th>AB</th>
<th>C1</th>
<th>C1</th>
<th>C2</th>
<th>C2</th>
<th>DE</th>
<th>DE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Access</td>
<td>Use</td>
<td>Access</td>
<td>Use</td>
<td>Access</td>
<td>Use</td>
<td>Access</td>
<td>Use</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>97%</td>
<td>93%</td>
<td>95%</td>
<td>91%</td>
<td>94%</td>
<td>88%</td>
<td>91%</td>
<td>84%</td>
</tr>
<tr>
<td>Computer</td>
<td>88%</td>
<td>83%</td>
<td>78%</td>
<td>73%</td>
<td>69%</td>
<td>62%</td>
<td>54%</td>
<td>48%</td>
</tr>
<tr>
<td>Standard TV set</td>
<td>59%</td>
<td>52%</td>
<td>66%</td>
<td>56%</td>
<td>70%</td>
<td>62%</td>
<td>73%</td>
<td>65%</td>
</tr>
<tr>
<td>Smart TV set</td>
<td>61%</td>
<td>57%</td>
<td>50%</td>
<td>47%</td>
<td>41%</td>
<td>38%</td>
<td>32%</td>
<td>30%</td>
</tr>
<tr>
<td>Tablet</td>
<td>78%</td>
<td>71%</td>
<td>69%</td>
<td>63%</td>
<td>60%</td>
<td>53%</td>
<td>49%</td>
<td>42%</td>
</tr>
<tr>
<td>Radio set (DAB or otherwise)</td>
<td>69%</td>
<td>55%</td>
<td>58%</td>
<td>49%</td>
<td>57%</td>
<td>45%</td>
<td>48%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: Ofcom, Adults’ Media Use and Attitudes Report – 2018 (Fig. 2).

Newer users of the internet tend to be older and in the DE socio-economic group, and are less confident online.¹⁹

---

¹⁹ Social grading divides up households based on the job of the highest income earner. Social grade D comprises semi-skilled and unskilled manual workers and E comprises state pensioners, casual and lowest grade workers, unemployed with state benefits only. Source: Ofcom. 2018. Adults’ Media Use and Attitudes Report
A further categorisation of users is **narrow** versus **broad**. ‘Narrow’ internet users are defined as those only carrying out up to four out of 15 types of online activities (medium users carry out 5 – 9 types, and ‘broad’ users carry out 10 – 15 types). A quarter (25%) of all UK adult internet users are narrow users, with those aged 55+ and in the DE socio-economic group more likely to be narrow internet users.\(^2\)

These findings are potentially important not just for formulating policy and targeting appropriate services and interventions but also to help us understand what might be driving non-use of the internet at older ages. The figures also highlight that, while internet use is rising among older age groups, there is still a substantial proportion who are not online, particularly among those aged 75+. This shows how important it is that, as more essential public and private services move online, alternative ways to access them continue to be available.

### 3 Older people using the internet

**How do older people access the internet?**

Figure 9 below shows some of the devices that people use. Mobile phones have become the top device for all ages. Since 2015, use of desktop and laptop computers has decreased in all age groups, whereas use of other devices has increased, especially among older users. However, not all of this use is to access the internet. Figure 10 shows use of devices to go online, and it can be seen that older users are far less likely to use phones and smart TVs to do this than younger users.

**Figure 9: Summary of use of devices/media at home, by age**

<table>
<thead>
<tr>
<th></th>
<th>All adults</th>
<th>16-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile phone</td>
<td>89%</td>
<td>96%</td>
<td>95%</td>
<td>94%</td>
<td>93%</td>
<td>84%</td>
<td>78%</td>
<td>72%</td>
</tr>
<tr>
<td>Computer</td>
<td>67%</td>
<td>71%</td>
<td>64%</td>
<td>76%</td>
<td>79%</td>
<td>62%</td>
<td>57%</td>
<td>45%</td>
</tr>
<tr>
<td>Tablet</td>
<td>58%</td>
<td>58%</td>
<td>66%</td>
<td>66%</td>
<td>62%</td>
<td>57%</td>
<td>48%</td>
<td>28%</td>
</tr>
<tr>
<td>Smart TV set</td>
<td>44%</td>
<td>47%</td>
<td>46%</td>
<td>54%</td>
<td>55%</td>
<td>42%</td>
<td>27%</td>
<td>16%</td>
</tr>
<tr>
<td>Wearable technology</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>15%</td>
<td>14%</td>
<td>6%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Ofcom, Adults’ Media Use and Attitudes — Report, 2018 (Fig 1)

\(^{2}\) See Appendix for the list of activities. Narrow users mostly tend to use email (67%), some do transactions (43%), other communications, and finding information
Figure 10: Devices used to go online, by age of user

<table>
<thead>
<tr>
<th></th>
<th>All adults</th>
<th>16-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphone</td>
<td>70%</td>
<td>95%</td>
<td>93%</td>
<td>90%</td>
<td>83%</td>
<td>50%</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>Computer</td>
<td>62%</td>
<td>65%</td>
<td>58%</td>
<td>74%</td>
<td>72%</td>
<td>59%</td>
<td>48%</td>
<td>38%</td>
</tr>
<tr>
<td>Tablet</td>
<td>52%</td>
<td>51%</td>
<td>58%</td>
<td>64%</td>
<td>57%</td>
<td>49%</td>
<td>39%</td>
<td>24%</td>
</tr>
<tr>
<td>Smart TV</td>
<td>16%</td>
<td>23%</td>
<td>18%</td>
<td>25%</td>
<td>20%</td>
<td>12%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Wearable tech</td>
<td>2%</td>
<td>4%</td>
<td>2%</td>
<td>5%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Ofcom, Adults’ Media Use and Attitudes – Report, 2018 (Fig 15)

What do older people use the internet for?

The table below shows the results for older people from the ONS Internet Access Module on internet use, ranked by the preferences of the 65+ age group (GB). Although the ranking is similar to younger age groups, those aged 65+ who are online appear to place a relatively higher emphasis on communication and information-finding, and less on transactions such as internet banking.

Figure 11. Internet activities of people aged 65+ compared to 16 – 24, GB

Source: ONS, Internet access - households and individuals, 2017
For those who use the internet, the most common online type of communication among all ages is sending and receiving emails, and the percentage of older people doing this is not far behind younger people. In fact, it is the same for the 55 – 64 group (not shown in Fig. 11) as the 16 – 24 group (though it is much lower among the older groups). However, older people communicate in other online ways far less than the younger cohorts. Figure 12 shows the averages of use for the different age groups for other online communication options (red numbers indicate significantly lower than overall average, green is significantly higher).

**Figure 12. Communication online in the previous week, by internet users**

<table>
<thead>
<tr>
<th></th>
<th>All internet users</th>
<th>16-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send/ receive emails</td>
<td>75%</td>
<td>76%</td>
<td>80%</td>
<td>82%</td>
<td>75%</td>
<td>75%</td>
<td>62%</td>
<td>54%</td>
</tr>
<tr>
<td>Communicating via instant messaging</td>
<td>46%</td>
<td>69%</td>
<td>60%</td>
<td>54%</td>
<td>41%</td>
<td>35%</td>
<td>18%</td>
<td>9%</td>
</tr>
<tr>
<td>Make video calls e.g. via FaceTime, Skype</td>
<td>27%</td>
<td>39%</td>
<td>40%</td>
<td>30%</td>
<td>26%</td>
<td>18%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Make voice calls e.g. via FaceTime, Skype</td>
<td>20%</td>
<td>26%</td>
<td>30%</td>
<td>25%</td>
<td>20%</td>
<td>13%</td>
<td>7%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Ofcom, Adults’ Media Use and Attitudes – Report, 2018 (Fig. 29)

One thing highlighted in a recent review is that older people specifically mentioned liking visual interactions with people, either via photos or videos. Another study found that people of all ages find that these visuals make communications feel more ‘real’ and intimate, and can lessen feelings of social isolation.

**4 The benefits of internet use for older people**

Digital technology has the potential to offer many opportunities for people of all ages. Benefits include helping people to stay connected or reconnect with others, accessing services and amenities including online shopping, getting practical help
and information, education and learning, and pursuing hobbies and interests, to name a few. However, rigorous evidence about the benefits is lacking.

**Accessing public services**

Central and local government information and services, including aspects of the NHS for example, are increasingly becoming 'digital by default', designed to be accessed online. For people who use the internet, this can make access quicker, easier, and cheaper. For people who do not access the internet, some Government and Local Government bodies offer alternative ways to access support or provide assistance with digital access. Public bodies have a duty under the Equalities Act 2010 to promote equality of opportunity for people with protected characteristics, including age and disability.

But the reality is that this support and assistance does not always provide what older people need. Some are even told to go online to print forms when they say they need paper ones.\(^{23}\) As an example, Age UK carried out a 'mystery shopping' exercise, ringing 100 randomly selected local councils in England asking for options to claim benefits for people not using the internet.\(^{24}\) Two-fifths (41) of the councils said that claims could only be made via the internet – mainly using their online system. Most of these did offer some help, for example, the option to go to the council buildings for help with a claim, but 14 of the 100 councils required an online claim and did not offer support that would allow someone who had never used the internet to claim benefits that they were entitled to.

Some older people turn to family or friends for help with digital access, but a number worry about being a burden or losing some independence, or are uncomfortable concerning matters of personal or financial topics; this could expose some to the risk of financial abuse.\(^{25}\) Others have no one who could help them.

Local Age UKs report that many older people come to them for help to access services. They, and other voluntary organisations, are increasingly finding it difficult to meet this demand and maintain funding for their services.\(^{26}\)

There is also a challenge in ensuring that people in all parts of the country, including rural areas, can access reliable broadband. The Government has delivered its commitment to reach 95% of homes and businesses in the UK with superfast broadband (24Mbps or faster). It is now bringing in a Universal Service Obligation (USO) to give everyone the legal right to request high speed broadband connection (10Mbps or faster) by 2020.

**Accessing other services and goods**

Similar benefits and issues exist for other types of services and markets.
Online technologies, including comparison and switching tools, have been seen by many as a boon for consumers, allowing them to 'shop around' for the best deals on goods and services such as utilities, banking, telecoms, and insurance. However, they risk excluding people who do not use the internet – most of whom are older people – and these consumers are in danger of paying more for their goods and services. Indeed, people age 65+ are especially likely to pay a significantly higher price than others for the same service in essential services and other markets because they are less likely to compare prices and switch to other suppliers or contracts.

**Alleviating loneliness and social isolation**

People have argued that accessing the internet should be beneficial for older people by reducing social isolation and feelings of loneliness. In fact, many studies have shown that this is the reason that older people want to get online – to reconnect or strengthen existing bonds with family and friends (though not many wish to meet new people by this means).

Anecdotal evidence and short-term evaluations often give glowing reviews, but actual research is very limited and results are mixed and inconclusive. While recent reviews of studies from 2000-onward reveal that a positive impact was found in some studies, neutral and even negative effects were found in other studies. Where studies have found positive effects, they are usually around strengthening existing social connections, especially by increasing contact with family and friends. The type of interactions people engage in online could matter as well: in a US study on older Facebook users, the users who targeted specific content to individuals (rather than broadcasting to people in general, or passively consuming content) were less lonely and more satisfied with their social roles. While it is not known if this type of engagement caused a change in loneliness levels, it does seem plausible that engaging directly with specific people would be more satisfying than broadcasting-type posting or passively consuming content.

However, even when a positive effect was found, this did not last more than 6 months after the interventions. The authors of these reviews point out many short-comings of the studies that could lead to conflicting results. These include small sample sizes; non-comparable intervention types; using frequency of internet use rather than what people are using the internet for; and, most importantly, that receiving an intervention – usually training on internet use and interacting with a teacher or peers – could itself be the factor that lowers social isolation and loneliness.

As with studies on new users, studies of people who are already using the internet have found it difficult to tell what the effects are, if any, and in which direction the
causation lies. Also, the vast majority of studies on experienced internet users are in adolescents and younger adults. Some studies indicate that internet use leads to a positive (or negative) effect, whereas other seem to be the opposite, e.g. people who are lonelier seek out social interaction online. Other studies find no effect.39

One problem with many of the studies above is the inclusion of all generic ‘internet use’. What about studies targeting social interaction specifically? Social networking sites in particular seem like an obvious place for people of all ages to reduce isolation and feelings of loneliness. But take-up by older people is much lower than other age groups.40 41 Research has found that this is often due to a perceived lack of purpose for engagement, problems with user interfaces, preconceptions about social networking sites, and concerns about privacy.42

There are, however, many more studies on younger adults, and they could give an indication of effects in older people. More and more of these studies are finding negative associations. For example, younger adults who use social media more tend to feel more socially isolated and lonely43, and more depressed44 than those who use it less, but the direction of causation is not known. Another study indicated that relying on connectivity through technology actually decreases social connections in real life.45 One proposed reason is that viewing others’ seemingly exciting and full lives on social media can cause people to feel more dissatisfied with their own social lives, and more socially isolated and lonely.46

Quality of life and wellbeing

Another proposed benefit of internet use, possibly related to social isolation and loneliness, is improved mental health, specifically lower depression and anxiety. There are very few studies about this in older people, and again the results are mixed, with some positive and others negative.47 For example, a large analysis48 of four waves of the US Health and Retirement Survey reported that older people who said they used the internet had a reduced probability of reporting being depressed by about 33%. The largest effect was seen in people living alone. However, another study of community-dwelling older adults from the National Health and Aging Trends Study49 found that digital use was unrelated to depressive symptoms or wellbeing.

Other proposed benefits of internet use by older people are increased self-esteem and feelings of control over one’s life, but so far studies have not found a significant impact on these.50

It is clear from research that internet use is not a panacea for improving all older people’s quality of life, but the areas that internet use does seem to positively affect in some older people in certain situations are helping them to: connect to the outside world, gain social support, and engage in activities and interests.51
5 Reasons for not using the internet

Various surveys have asked people why they do not use the internet. One of the largest is an annual survey by the ONS. Below are responses from households where the main respondent was age 65 or over.

Figure 13. Reasons for households not having internet access at home, age 65+ (GB)

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't need internet (not useful, not interesting, etc.)</td>
<td>64</td>
</tr>
<tr>
<td>Lack of skills</td>
<td>20</td>
</tr>
<tr>
<td>Have access to the internet elsewhere</td>
<td>12</td>
</tr>
<tr>
<td>Other reason</td>
<td>10</td>
</tr>
<tr>
<td>Equipment costs too high</td>
<td>8</td>
</tr>
<tr>
<td>Access costs too high (telephone, broadband subscription)</td>
<td>8</td>
</tr>
<tr>
<td>Privacy or security concerns</td>
<td>7</td>
</tr>
<tr>
<td>Physical or sensorial disability</td>
<td>2</td>
</tr>
</tbody>
</table>

Base: Households in Great Britain without internet access.

Source: Office for National Statistics, Internet access - households and individuals, 2017

Qualitative research for Age UK\(^{52}\) echoed most of these reasons, with some interesting additions:

- Lack of skills, knowledge, and experience with the internet
- Lack of belief in/understanding of the value of being online
- Not for them at their life stage
- Outside their comfort zone
- The internet is ‘unsafe’
- Perception of high cost of equipment and internet connection
- Worry about loss of face-to-face interactions, or talking on the phone, or need/motivation to get out of the house
- Use by proxy through family
Attitudes: perceived lack of need

As Figure 13 shows, 'not needing or being interested' in the internet is cited by most older non-users as the reason for non-participation in the ONS survey. This is corroborated by other sources as well. However, further exploration shows that 'non-interest' isn't clear-cut, and people could actually feel lack of confidence, low self-efficacy, or that the risks are too high. It is not known how many people change their mind when they are shown the benefits.

But a lack of interest can also be from a well-informed choice: perhaps they do not need to access services or resources online, or they may use family or friends for proxy access.

Skills and training

Lack of skills was mentioned as the main reason for non-participation by a large proportion of older people.

Education and employment experiences can have a large effect on digital technology use in later life. People who obtained these skills in their working lives are more likely to continue using them in retirement. But in social classification grades D (semi-skilled and unskilled manual workers) and E (casual or lowest grade workers, pensioners, and others who depend on the welfare state for their income), non-use is disproportionate – these grades make up 25% of the UK population but 45% of those who do not use the internet. This may be because of a lower likelihood of exposure to use of digital technology at work. Likewise, the level of traditional literacy skills impacts older peoples' use (or not) of the internet; internet use requires a certain level of literacy and cognitive competences which are often overlooked.

Issues around privacy, scams, fraud, and other cyber crime

Internet safety is a legitimate concern for people of all ages. Most surveys of older adults mention concerns about privacy. Control over privacy settings has been confusing and opaque, and breaches of customer data held by companies is often in the news. Older people are less likely to feel confident in knowing how to manage access to their personal data online: less than half (47%) of people aged 75+ feel very or fairly confident, compared to 85 per cent of those 16 – 24. People aged 75+ are also less likely to be aware of the ways online companies collect information about what they do online (e.g. 'cookies', registering with a website, social media accounts). It remains to be seen what effect the new General Data Protection Regulations will have.
However, cyber crime has the potential for great loss and suffering. The ONS estimates that, in the year ending March 2018, adults (all ages, England and Wales) experienced 1.2 million incidents of ‘computer misuse’ crime, including computer virus and personal information-related crimes. While older people are less likely to be online than younger people, given that they are also less likely to have the IT skills and experience required to keep them safe online, preventing the exploitation of older people online should be a priority.

Older people are a major target of scams and fraud because of perceived or actual vulnerability (cognitive decline, living alone, socially isolated, etc.) – for example, in 2014, Trading Standards found that 85% of doorstep crime victims were age 65+. The internet exposes users to many more potential scams and fraud.

As an example, online interactions have made romance fraud more widespread; Action on Fraud receives seven reports of this every day (all adults), which is most likely a small fraction of what occurs, and a quarter of the victims lose £10,000 on average.

Other issues

As mentioned above, some of the top reasons given for not using the internet could actually be a cover for low self-efficacy – a belief in what one can do. This can make a new task, such as learning to use a computer or navigate the internet, seem stressful and daunting and something to avoid. It plays a larger role in people deciding not to engage with digital technology in the first place, or giving up when trying to learn, than problems with memory or other cognitive issues.

Older people age 75+ are more likely to say they are ‘too old’ to start using the internet. One possible reason for citing a lack of interest may be that older people feel they do not have a lot of time left to use new skills such as digital engagement. An example of this comes from a Good Things Foundation/Centre for Ageing Better report, in which a non-user in her 80s admitted that while the need to be online would continue to grow in the future, she felt justified in remaining offline because “I don’t think I’m going to be here.”

An under-explored barrier is digital design for older users, taking into account factors like vision, hearing, motor control issues, cognitive challenges, interface preferences, user pathways, and so forth. While there is guidance regarding design features such as text font size and contrast/colours, technology design has mostly been driven by technology-push factors rather than user demand-pull ones.

Another under-explored issue that may be quite significant is the importance of contact ‘in real life’. Offline activities can fulfil needs that digital engagement does not reproduce well, such as face-to-face interactions, for instance social interactions when going to the shops. In addition, some older people want to support local
shops, as they see that a lack of customers can lead to closures of shops and banks, leading to a loss of employment and poorer community.\textsuperscript{75} \textsuperscript{76}

There is the additional issue of access to hardware to try it out, given that it is expensive and it is easy to buy the wrong thing. While libraries would be an obvious, free source of access to the internet, they are increasingly closing (and not very private for transactions).

6 What works

Skills and training courses

Older people undertake digital training courses for a variety of reasons: some feel forced into it because ‘everything and everyone is going online’, some are merely curious to see what all the fuss is about, and others have specific purposes in mind that they want to do, such as emailing friends and family, or pursuing a hobby.\textsuperscript{77}

Traditional ‘one-size-fits-all’ group courses seem to be less effective in getting non-using older people online than younger non-users.\textsuperscript{78} The more intractable non-users with multiple disadvantages and barriers need intensive, individualised, long-term support, which is not cheap.\textsuperscript{79}

A summary of advice from various sources\textsuperscript{80} \textsuperscript{81} \textsuperscript{82} follows.

Engaging older people in digital learning:

- Make the content relevant to the learners, showing the value of going online. Focus on the activities of interest that can be done online, as well as important and necessary things like accessing services, rather than just ‘going online’ or ‘using the internet’.
- Help learners build self-efficacy – show them that they CAN ‘do it’.
- Make the learning flexible and at the pace of the learners. One-on-one support at the older learner’s pace and aligned to her or his interests is more likely to sustain her or his engagement. For some older people, learning may take longer given changes in thinking skills as we age.
- Group sessions might be best if all of the learners are older people, who may feel less embarrassed about their own skill and knowledge levels if they are with others ‘in the same boat’. For example, training for a mixed group which is appropriate for younger job seekers might not be best for older people.
• Avoid the use of jargon, and explain terms that are necessary – don’t assume prior knowledge.
• Ensure ongoing training and support are available to help people continue to use their skills and know who they can contact if problems arise.
• Physical accessibility and transport are very important factors. Many older people prefer to attend training near home or somewhere easily accessible or familiar, and not after dark or in bad weather conditions.
• Some studies and evaluations have suggested that intergenerational teaching works, but this needs to be handled with care. Some research has found that young family members get impatient with older people’s slower learning speeds and need for information to be repeated (sometimes many times), and they tend to use jargon and assume prior knowledge. Intergenerational teaching programmes can avoid these problems by ensuring that the younger participants understand older learners’ needs as part of preparation for the programme.

Because of the potential for cybercrime, it is imperative that training programmes teach people how to use internet safely, protect themselves from scams and fraud, protect their privacy, and so forth. Age UK recommends, for example:

• Protect computers, tablets, smart phones, etc. with antivirus and antimalware software.
• Beware of email: spam, phishing, malware and hijacking of legitimate email addresses to trick recipients.
• Awareness of fraud and scams such as around banking, passwords, and payments.

Finding out about courses

One potential problem is reaching older people to advertise courses that are available. Family and friends are one of the biggest resources for finding out about courses on offer; other main ones are local libraries, media publications, local groups, and advertising through a variety of sources.83

7 The future of digital inclusion

What are the future trends?

Despite the gains in internet use by older people since 2011, for the foreseeable future a considerable number of older people will not be using the internet. Statistics indicate that, at current rates of progress, a significant minority of older people will
continue to be offline for many years to come. This has implications for services being offered only online.

Gaps in the evidence base

It is not known why some trends among older people have occurred, such as why internet users become 'lapsed users', and other information about movement in and out of use. Other gaps are:

- Is it possible to convince non-users who say they 'don't see the need' to change their minds? What works?
- What support do older people need to continue using the internet (and not 'lapse')?
- What additional barriers do older people in lower socio-economic groups face, and what are their support needs?
- What changes to the older user experience with technology (e.g. interfaces, 'look and feel', how things work) would help increase uptake and use?
- Households effects - how do older couples support each other in internet use (or not), and what is the impact of bereavement? What special challenges are there for single people and how can they be supported?

Further reading


Applying the brakes: Slowing and stopping fraud against older people, Age UK, 2018. While most of this is offline fraud, there are lessons that can apply to digital use. Available at [https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/safe-at-home/rb_mar18_applying_the_brakes.pdf](https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/safe-at-home/rb_mar18_applying_the_brakes.pdf)

If you have any questions or feedback on this evidence review, please contact [stats@ageuk.org.uk](mailto:stats@ageuk.org.uk)
Appendix 1

The 15 types of use as defined by Ofcom\textsuperscript{84} are:

1. Email – send or receive emails.
2. Transactions - online shopping (purchasing goods/ services/ tickets etc.), trading/ auctions e.g. eBay.
3. Communications – Communicating via instant messaging e.g. Facebook Chat, Skype Chat, Snapchat, making voice calls using a VoIP service e.g. Skype, making video calls e.g. via FaceTime, Skype.
4. Banking
5. Social media – using social networking (such as Facebook, LinkedIn, Bebo or Snapchat), using Twitter (browsing, reading, posting on site).
8. Health – find information on health-related issues.
9. Government services – Using local council/ government sites e.g. to find information, to complete processes such as tax returns, to contact local MP.
10. Watch short video clips – Watching short video clips (e.g. on YouTube, Dailymotion, Vimeo or Facebook).
11. Watching TV content – watching TV programmes or film content online.
12. Radio/ audio services – listening to radio, streamed audio services (free) e.g. Spotify (free) or Deezer (free), streamed audio services (subscription) e.g. Spotify Premium, Apple Music or Deezer Premium.
13. Upload/ add content to the internet – uploading/ adding content to the internet e.g. photos, videos, blog posts.
14. Games – playing games online or interactively.
15. Remote - Accessing files through a cloud service such as Dropbox, Google Drive, Microsoft OneDrive or Apple iCloud, remotely control TV services at home such as Sky+, Sky Q or Tivo using an online device, remotely control or monitor household appliances e.g. fridge, cooker, washing machine, tumble dryer and/ or home heating, lighting or security system or home energy consumption.
References

1. The House of Lords Select Committee on Digital Skills. Make or Break the UK's Digital Future (Feb 2015)
10. Office for National Statistics. Internet access - households and individuals, 2018


59 City of London Police and National Fraud Intelligence Bureau, 2017


