



## National Survey for Wales, 2018-19 Internet use and digital skills

11/09/2019  
SB 37/2019

Questions about internet access and personal use of the internet have been asked in each year of the National Survey since 2012-13. New questions about people's online activity and their digital skills were introduced in 2017-18 and these questions were asked again in 2018-19.

### Key findings

In 2018-19:

- 87% of households have access to the internet. 98% of households with at least one child under 16 had internet access, compared with 83% of households with no children.
- 89% of adults use the internet. 98% of those aged 16-49 used the internet compared with 49% of those aged 75 or older.
- For those of working age (16 to 64), 98% of those in employment used the internet compared with 94% of those who were unemployed and 93% of those who were economically inactive.
- 94% of people who use the internet accessed it at least daily with 74% accessing it several times a day.
- 40% of internet users had, in the last three months, performed online activities associated with all five basic digital skills.
- 95% of people used a search engine, 88% sent a message via email or instant messaging and 79% bought goods or services online.
- Those aged 16 to 49 and those educated to degree level or above were more likely to have carried out activities in all five digital skill categories, in the last three months.



**of people  
use the  
internet**

### About this bulletin

This bulletin provides more detailed analysis of the 2018-19 results for the questions on **internet use and digital skills**. It also compares results over time.

The full questionnaire is available on the [National Survey web pages](#).

More tables can be found in the [Results viewer](#).

### In this bulletin

<a href="#">Introduction</a>	2
<a href="#">Household internet access</a>	3
<a href="#">Personal internet use</a>	4
<a href="#">Frequency of access</a>	6
<a href="#">Online activities and digital skills</a>	6
<a href="#">Terms and definitions</a>	10
<a href="#">Key quality information</a>	12

## Introduction

[Digital Communities Wales: Digital Confidence, Health and Well-being](#) is the Welsh Government's digital inclusion programme. It works with organisations from all sectors that can help reach digitally excluded people. The programme focusses on improving the digital capabilities of citizens and health and social care staff, allowing more people to become active participants in their own health and wellbeing.

The Digital Inclusion Strategic Framework and Delivery Plan (March 2016) set out a goal for reducing digital exclusion for adults aged 16 and over so more people can benefit from being online and using digital technologies. It covers the period to 2020. The [Digital Inclusion progress report and forward look](#) (April 2018) provided an overview of key activities across Wales since the release of the Framework and Delivery Plan, and identified key challenges for the 12 months that followed. National Survey findings are used alongside evidence provided by other organisations (e.g. Ofcom, DWP, local authorities, private sector) to identify digital needs in Wales.

In addition to increasing digital inclusion amongst the people of Wales, the Welsh Government's [Programme for Government 'Taking Wales Forward'](#) focuses on helping people gain the basic digital skills needed for the 21st century.

The National Survey is used as the main measure of digital inclusion in Wales and the consistency of question wording throughout this period makes it possible to track trends in internet use and access. [Questions about digital skills were first asked in 2017-18](#) and the results are discussed in a previous bulletin. In 2018-19 it was decided to ask the same set of skills questions but to extend the period of reference from four weeks to three months. This brought the National Survey in-line with other external surveys that take place.

## Household internet access

The 2018-19 National Survey for Wales asked people if their household had access to the internet, if they used the internet themselves and, if they did use the internet, how frequently they did so. In 2018-19 87% of households had access to the internet. This has increased from 73% in the 2012-13 National Survey and from 43% in the 2004 Living in Wales Survey<sup>1</sup>.

**Chart 1: Household internet access, by year and whether household contains children<sup>2</sup>**

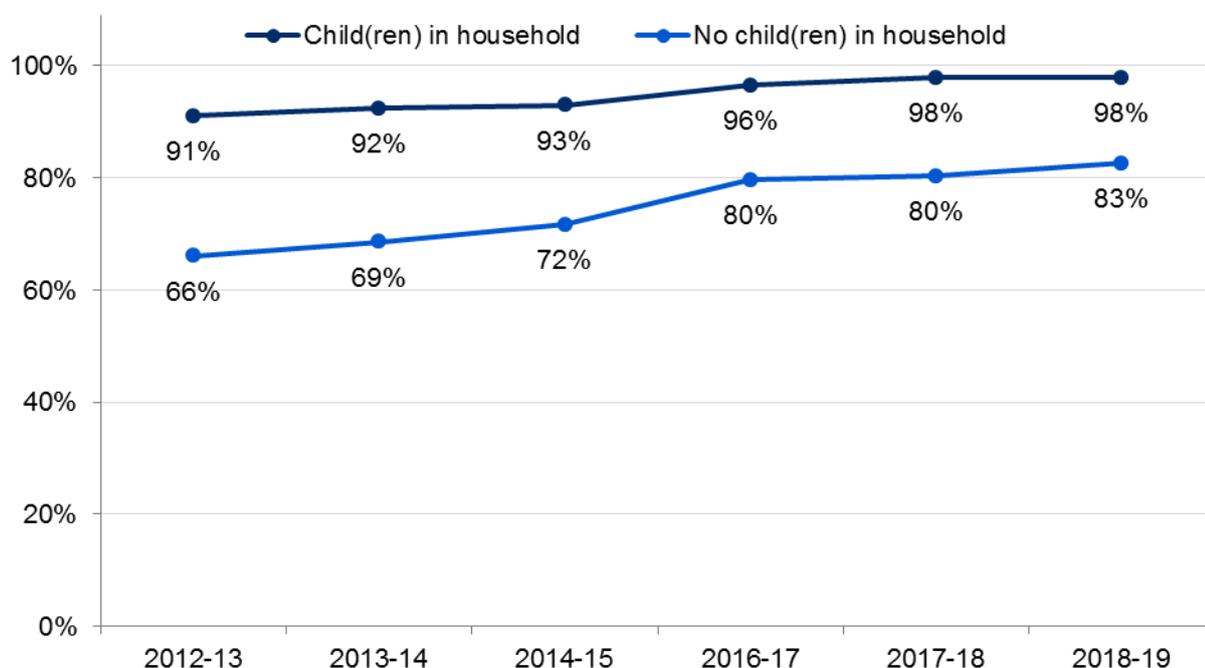


Chart 1 shows that:

- Since 2012-13, the percentage of households with child(ren) and with internet access has increased from 91% to 98%; and for households without children and with internet access, it has increased from 66% to 83%.
- The gap in levels of internet access between households with and without children is narrowing. This may be because the majority of households with children already have internet access so there is less scope for increase.
- Since 2017-18, there has been an increase in internet access for households that don't contain children.

Household internet access varied by WIMD<sup>2</sup> levels of area deprivation. In 2018-19, 92% of households in the least deprived areas had internet access. This has increased from 85% in 2013-14. In 2018-19, 83% of households in the most deprived areas had internet access, an increase from 67% in 2013-14.

<sup>1</sup> The [Living in Wales Survey](#) was a predecessor to the National Survey that ran from 2004 to 2008. Like the National Survey, it asked people whether their household had access to the internet. As such, it can be used to track the long-term trend in internet access.

<sup>2</sup> WIMD - see [Terms and definitions](#).

Households in social housing were less likely to have internet access (75% of such households) than those in private rented (90%) or owner occupied (89%) accommodation. Those in employment were more likely to have internet access at home (96%) than those who were unemployed (84%) or economically inactive (78%).

## **Personal internet use**

The Welsh Government's [Digital Inclusion progress report and forward look \(2018\)](#) states that "There is a need to keep pace with technological advances, and support people to gain maximum benefit from the vast opportunities they present. Despite significant progress over the last five years, there are still too many people missing out on these opportunities. Those who remain digitally excluded are in danger of being left behind in society, as more and more services, including vital public services, go online" (Introduction, para. 4).

The 2018-19 survey results showed that 89% of adults aged 16 or over used the internet at home, work or elsewhere, leaving 11% of people "digitally excluded". This figure was broadly similar to that reported by the [Internet users, UK: 2019](#) publication by the Office for National Statistics (ONS) which showed 90% of people aged 16 and over in Wales had used the internet in the past three months. This varied by UK region from 87% in Northern Ireland to 90% in Scotland and to 93% in the South East of England. The figure for the UK as a whole was 91%.<sup>3</sup>

---

<sup>3</sup> Care must be taken when comparing results with other surveys due to differences in question wording and methodology, which could have an effect on the results.

**Chart 2: Personal internet use, by year and age group**

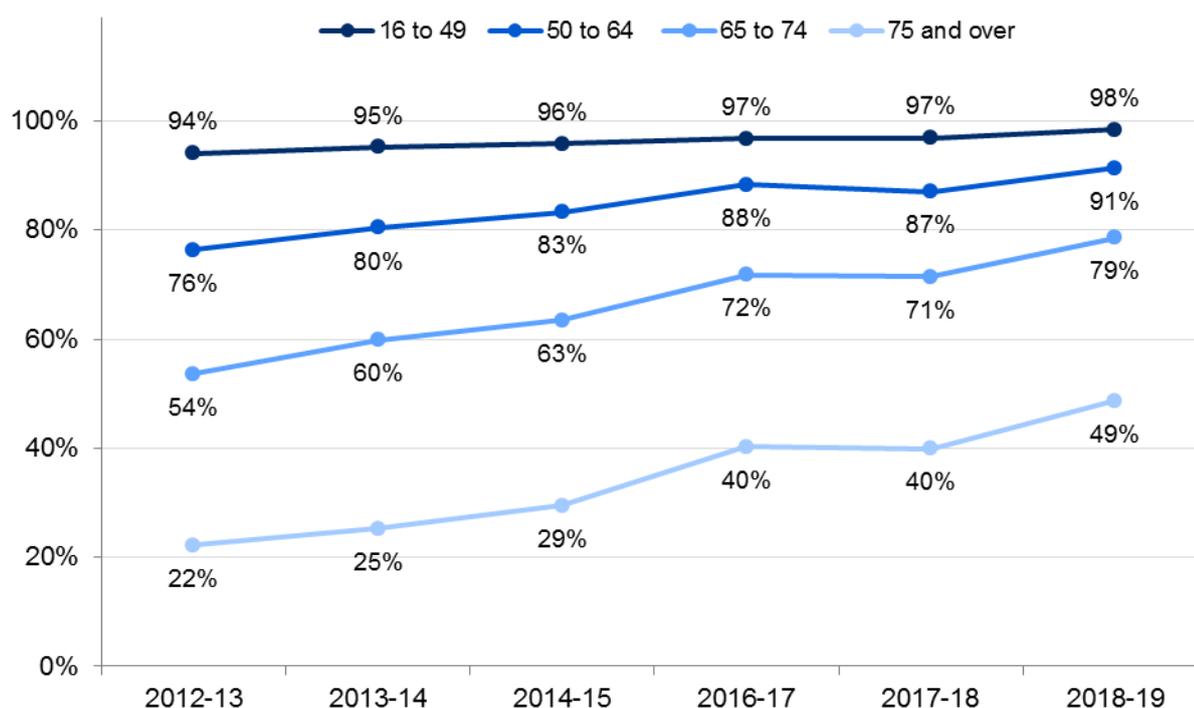


Chart 2 shows the proportion of people that use the internet, over time and split by age group.

- All age groups show an increase in internet use between 2012-13 and 2018-19.
- The majority of people aged 16 to 74 are internet users. In 2018-19, 98% of 16 to 49 year olds, 91% of 50 to 64 year olds, and 79% of 65 to 74 year olds were internet users.
- 49% of people aged 75 or over were internet users in 2018-19, up from 22% in 2012-13. Some of this increase is likely explained by previously younger internet users now falling within the older cohorts, together with new users accessing the internet for the first time.
- There was an increase in internet use between 2017-18 and 2018-19, particularly among older users. Part of this increase may be explained by an additional question asked in 2018-19 to check for users who were not aware they were using the internet<sup>4</sup> A further 2% of people were included in the personal internet use figure as a result of asking this question.

Personal internet use in 2018-19 varied by a number of other demographic factors:

- 90% of men used the internet, compared with 87% of women. This difference mainly occurs in the 65 and over age group. 69% of men aged 65+ use the internet, compared with 62% of women.
- 79% of people with a limiting long-standing illness, disability or infirmity used the internet, compared with 93% of those without such a condition.

<sup>4</sup> People may have been using devices that require internet access such as Smart TVs or performing activities they did not realise required the internet such as watching catch up TV or Skype. In 2018-19, a question was added to check whether people who said they did not use the internet did actually access the internet in this way.

- When looking at the working age (16 to 64) population, 98% of those in employment<sup>5</sup> used the internet compared with 94% of those who were unemployed and 93% of those who were economically inactive.
- Of those with educational qualifications<sup>6</sup> at degree level and above, 96% were internet users; of those with no qualifications, 68% used the internet. This is an increase from 2017-18, when 53% of those with no qualifications were internet users.
- People in private rented homes were most likely to use the internet (95%), followed by people in owner-occupied homes (89%) and people in social housing (81%).

## Frequency of access

94% of people who use the internet accessed it at least daily, with 74% accessing it several times a day. Frequency of use varied noticeably with age. 86% of internet users aged 16 to 49 accessed the internet several times a day compared with 40% of internet users aged 75 and over.

We also found:

- 66% of those with a limiting long-term illness used the internet several times a day, compared with 77% of those without a limiting long-term illness.
- 81% of those with higher education qualifications used the internet several times a day, compared with 55% of those with no qualifications.
- 89% of those who were economically inactive accessed the internet at least daily, compared with 97% in employment and 95% who were unemployed.
- Those in private rented accommodation were more likely to access the internet at least daily (97%), compared with those in owner occupied (93%) or social housing (92%).

## Online activities and digital skills

In 2018-19 internet users were asked whether they had performed any of ten listed online activities within the past three months. Chart 3 shows that the majority of internet users had recently used a search engine (95%), sent a message via e-mail or instant messaging (88%), bought something online (79%) or used online banking (72%).

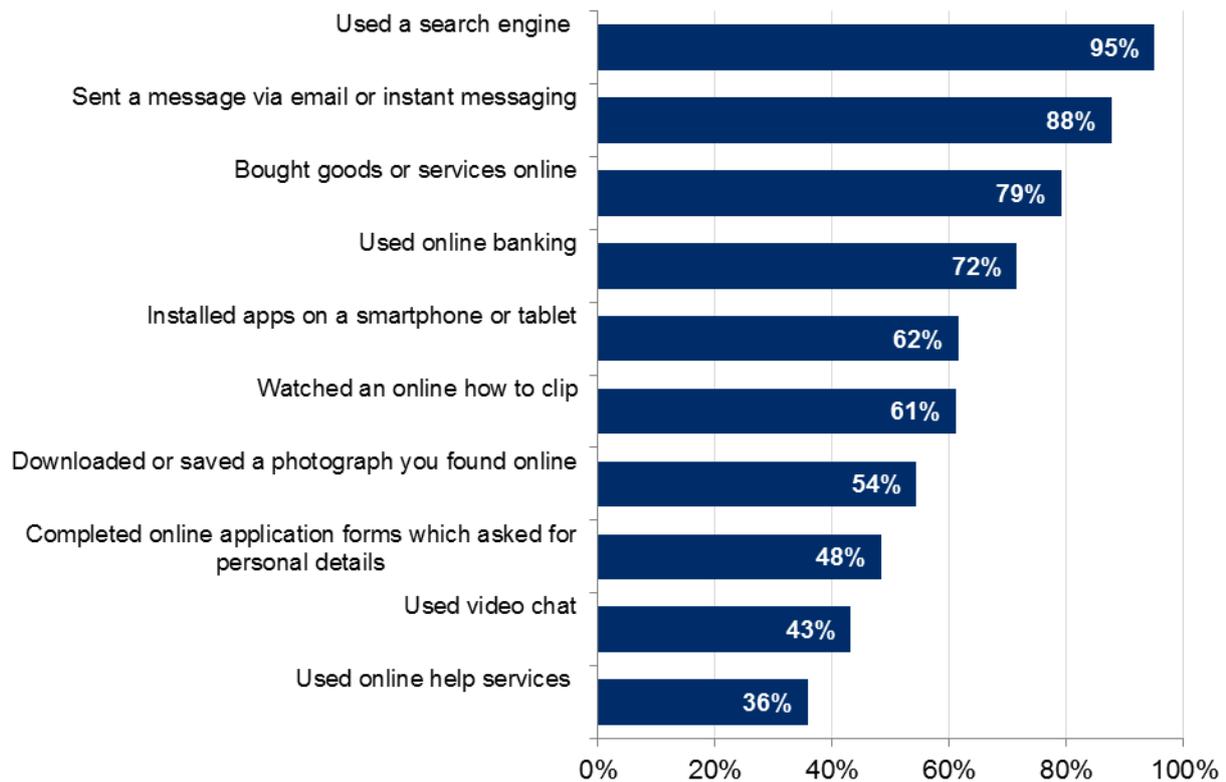
In 2018-19 the largest variations in results were seen when cross-analysing by age and qualifications. One of the biggest differences was “installing apps on smartphones or tablets”: 76% of 16 to 49 year olds had done this, compared with 21% of those aged 75 or over. Using a search engine was the activity with the smallest difference between age groups: 97% of 16 to 49 year olds, and 84% of those aged 75+.

---

<sup>5</sup> Employment status - see [Terms and definitions](#)

<sup>6</sup> Qualifications – see [Terms and definitions](#)

**Chart 3: Online activities completed in the last three months**



Internet users with educational qualifications at degree level and above<sup>7</sup> were more likely to have carried out each of the online activities than users with no qualifications.

- The largest difference between the two groups was seen in the use of online banking. The proportion of people with higher educational qualifications that had recently used online banking was 81%, compared with 47% of people with no qualifications.

The Welsh Government's [Digital Inclusion progress report and forward look \(2018\)](#) highlighted the importance of meaningful engagement with technology in improving employability, financial inclusion and access to services. It has also identified five categories of basic digital skills, which are deemed important in helping new and limited internet users to access these opportunities. The five categories are "Managing Information", "Communicating", "Transacting", "Problem Solving" and "Creating", each associated some of the online activities asked about in the National Survey.

<sup>7</sup> Qualifications – see [Terms and conditions](#)

**Table 1: Basic digital skill categories and associated activities**

Digital skill category	% of internet users that did at least one associated activity	Activities associated with this category
<b>Managing information</b>	96%	<ul style="list-style-type: none"><li>• Used a search engine</li><li>• Downloaded or saved a photograph found online</li></ul>
<b>Communicating</b>	90%	<ul style="list-style-type: none"><li>• Sent a message via email or instant messaging</li><li>• Used video chat</li></ul>
<b>Transacting</b>	89%	<ul style="list-style-type: none"><li>• Bought good or services online</li><li>• Used online banking</li><li>• Install apps on a smartphone or tablet</li></ul>
<b>Problem solving</b>	67%	<ul style="list-style-type: none"><li>• Watched an online “how to” clip</li><li>• Used online help services</li></ul>
<b>Creating</b>	48%	<ul style="list-style-type: none"><li>• Completed online application forms</li></ul>

For each of the five digital skill categories, Table 1 shows the proportion of internet users that had performed at least one online activity associated with the named category.

Grouping the online activities into five basic digital skills categories gives an indication of the range of skills people undertake, with some people exhibiting skills in all five categories and others in only one or two.

- 40% of internet users performed activities in all five categories
- 29% of internet users performed activities in four of the five categories
- 18% of internet users performed activities in three of the five categories
- 7% of internet users performed activities in two of the five categories
- 6% of internet users performed activities in only one of the five categories

In 2017-18 the same questions were asked about online activities but with reference to a shorter time frame, of four weeks rather than three months. The 2017-18 results were similar to those in 2018-19 with the majority of internet users having used an internet search engine, sent a message via e-mail or instant messaging, bought something online or used online banking. The longer

period of three months in 2018-19 captured more online activity. For example, you may have completed an online application form within the last three months but it's less likely that you'll have done so within the last four weeks. [The Lloyds Bank Consumer Digital Index 2019](#) also reported on digital skills in the UK as a whole but also in Wales. Whilst this report highlights similar patterns of online activity the sample size was small and skill categories had changed between 2018 and 2019. The National Survey remains the authoritative source used by Welsh Government in assessing digital inclusion in Wales.

### **Further analysis – number of digital skill categories**

Cross-analysis suggested that people with the highest educational qualifications tended to carry out the greatest number basic digital skills (over a three month period). Variation was also seen by age, gender, economic status, type of tenure, whether an internet user was in material deprivation, mental well-being score, whether the user has a limiting long term illness.

However, we know that these demographic factors are often linked to each other. We used statistical methods<sup>8</sup> to investigate the relationship of each factor with whether an internet user has all five basic digital skills. This allows us to interpret the results with greater certainty by considering one factor in isolation whilst holding other factors constant.

The results show that the following are the key factors that related to carrying five digital skills:

- being aged 16 to 49
- educated to degree level or above

Age and qualification level have the strongest links with the number of digital skills displayed. However, we also found that, when controlling for other factors, there was an association between area deprivation and having all five basic digital skills. The direction of this association is not known (so area deprivation could lead to low digital skills, low digital skills could lead to living in a more deprived area, or some other factor could lead to both) and as with all analysis of this type we cannot identify causality. Similarly, there was an association with having all five basic digital skills and a person's agreement or disagreement with whether they can access information about their local authority in the way they would like to. Unlike the cross-analysis results no significant relationship was found between having all five digital skills and tenure, or economic status.

---

<sup>8</sup> This method is known as logistic regression. Information about the method can be found in [Regression analysis](#)

## **Terms and definitions**

### **Welsh Index of Multiple Deprivation**

The Welsh Index of Multiple Deprivation (WIMD) is used as the official measure of deprivation in Wales. Deprivation is a wider concept than poverty. Deprivation refers to wider problems caused by a lack of resources and opportunities. The WIMD is constructed from eight different types of deprivation. These are: income, housing, employment, access to services, education, health, community safety and physical environment. Wales is divided into, 1,909 Lower-Layer Super Output Areas (LSOA) each having about 1,600 people. Deprivation ranks have been worked out for each of these areas: the most deprived LSOA is ranked 1, and the least deprived 1,909. For this bulletin, we have grouped the people living in the 20% of LSOAs that are most deprived based on WIMD score and compared them against the 20% of the LSOAs that are least deprived. – see also Material Deprivation below.

### **Urban / rural**

“Urban” includes settlements with a population of 10,000 or more and small towns and their fringes, where the wider area is less sparsely populated. “Rural” includes all other areas.

### **Material deprivation**

Material deprivation is a measure which is designed to capture the consequences of long-term poverty on households, rather than short-term financial strain.

Non-pensioner adults were asked whether they had things like ‘a holiday away from home for at least a week a year’, ‘enough money to keep their home in a decent state of decoration’, or could ‘make regular savings of £10 a month or more’. The questions for adults focussed on whether they could afford these items. These items are really for their ‘household’ as opposed to them personally which is why they were previously called ‘household material deprivation’.

Pensioners were asked slightly different questions such as whether their ‘home was kept adequately warm’, whether they had ‘access to a car or taxi, when needed’ or whether they had their hair done or cut regularly’. These also asked whether they could afford them, but also focussed on not being able to have these items for other reasons, such as poor health, or no one to help them etc. these questions were less based on the household and more about the individual.

Those who did not have these items were given a score, such that if they didn’t have any item on the list, they would have a score of 100, and if they had all items, they had a score of 0. Non-pensioners with a score of 25 or more were classed as deprived and pensioners with a score of 20 or more were classed as deprived.

Parents of children were also asked a set of questions about what they could afford for their children.

In this bulletin the non-pensioner and pensioner measures of deprivation are combined to provide an ‘adult’ deprivation variable. The terms ‘adult’ and ‘household’ deprivation may be used interchangeably depending on context.

## Qualifications

Respondents' highest qualifications have been grouped according to the National Qualification Framework (NQF) levels, where level 1 is the lowest level of qualifications and level 8 is doctoral degree or equivalent. For the National Survey, respondents have been grouped into 5 groups, those with no qualifications are in the lowest category and respondents with qualifications at levels 4 to 8 have been grouped together in the highest qualification category.

To provide more meaningful descriptions of the qualifications, these short descriptions have been used in this bulletin.

National Qualification Framework levels	Description used in bulletin
NQF levels 4-8	Higher education (Level 4+)
NQF level 3	'A' level and equivalent (Level 3)
NQF level 2	GCSE grades A to C and equivalent (Level 2)
Below NQF level 2	GCSE below grade C (below Level 2)
No qualifications	No qualifications

## Online activities and basic digital skills categories

In 2018-19, the National Survey presented internet users with a list of 10 online activities and asked if they had performed any of these in the previous three months. The [Digital Inclusion progress report and forward look \(2018\)](#) provides a broad framework for the classification of these online activities into five basic digital skills categories based on their relevance to each overarching skill.

As discussed in the report between the 2017-18 and 2018-19 survey the time period for the question on digital skills categories changed from 4 weeks to 3 months. As a result direct comparisons between years is not advisable.

Results on types and numbers of online activity undertaken cannot in themselves provide an indication of the different degrees of competence or confidence in performing a given activity. Also, while online activities can be grouped based on their relevance to a particular digital skill, there is currently no evidence to suggest that an individual who has performed a given activity within one skill category is more likely to have performed other activities in the same category than in a different category. As such the digital skills categories are best viewed as broad internet user objectives rather than a measure of internet users' ability or potential.

Finally, there may also be additional online activities associated with each of the five basic digital skills for which data was not collected. This may also affect cross-comparability of digital skills categories as currently they do not contain an equal number of activities.

## Key quality information

### Background

The National Survey for Wales is carried out by The Office for National Statistics on behalf of the Welsh Government. The results reported in this bulletin are based on interviews completed in 2018-19 (1 April 2018 – 31 March 2019).

The sample was drawn from the Royal Mail Small Users Postcode Address File (PAF), whereby all residential addresses and types of dwellings were included in the sample selection process as long as they were listed as individual addresses. If included as individual addresses on the PAF, residential park homes and other dwellings were included in the sampling frame but community establishments such as care homes and army barracks are not on the PAF and therefore were not included.

The National Survey sample in 2018-19 comprised 24,762 addresses chosen randomly from the PAF. Interviewers visited each address, randomly selected one adult (aged 16+) in the household, and carried out a 44-minute face-to-face interview with them, which asked for their opinions on a wide range of issues affecting them and their local area. A total of 11,922 interviews were achieved.

### Interpreting the results

Percentages quoted in this bulletin are based on only those respondents who provided an answer to the relevant question. Some topics in the survey were only asked of a sub-sample of respondents and other questions were not asked where the question is not applicable to the respondent. Missing answers can also occur for several reasons, including refusal or an inability to answer a particular question.

Where a relationship has been found between two factors, this does not mean it is a causal relationship. More detailed analysis is required to find whether a factor causes change in another.

The results are weighted to ensure that the results reflect the age and sex distribution of the Welsh population.

### Quality report

A summary [Quality Report](#) is available, containing more detailed information on the quality of the survey as well as a summary of the methods used to compile the results.

### Sampling variability

Estimates from the National Survey are subject to a margin of uncertainty. Part of the uncertainty comes from the fact that any randomly-selected sample of the population will give slightly different results from the results that would be obtained if the whole population was surveyed. This is known as sampling error. Confidence intervals can be used as a guide to the size of the sampling error. These intervals are calculated around a survey estimate and give a range within which the true value is likely to fall.

In 95% of survey samples, the 95% confidence interval will contain the 'true' figure for the whole population (that is, the figure we would get if the survey covered the entire population). In general,

the smaller the sample size the wider the confidence interval. Confidence intervals are included in tables of survey results published on StatsWales.

As with any survey, the National Survey is also subject to a range of other sources of error: for example, due to non-response; because respondents may not interpret the questions as intended or may not answer accurately; and because errors may be introduced as the survey data is processed. These kinds of error are known as non-sampling error, and are discussed further in the quality report for the survey.

### **Significant differences**

Where the text of this release notes a difference between two National Survey results (in the same year), we have checked to ensure that the confidence intervals for the two results do not overlap. This suggests that the difference is statistically significant (but as noted above, is not as rigorous as carrying out a formal statistical test), i.e. that there is less than a 5% (1 in 20) chance of obtaining these results if there is no difference between the same two groups in the wider population.

Checking to see whether two confidence intervals overlap is less likely than a formal statistical test to lead to conclusions that there are real differences between groups. That is, it is more likely to lead to "false negatives": incorrect conclusions that there is no real difference when in fact there is. It is also less likely to lead to "false positives": incorrect conclusions that there is a difference when there is in fact none. Carrying out many comparisons increases the chance of finding false positives. Therefore, when many comparisons are made the conservative nature of the test is an advantage because it reduces (but does not eliminate) this chance.

Where National Survey results are compared with results from other sources, we have not checked that confidence intervals do not overlap.

### **Regression analysis**

Where further analysis has been carried out selection of the initial variables used in the regression was based on; the results from cross-analysis, policy direction, and the practicality of using the variable. The results for some factors were only available for a sub-sample of respondents, or there were a large number of 'missing' results which resulted in a substantial drop in the sample size on which the regression model could be tested. For this reason some variables/factors were omitted from the investigation. The final models consisted of those factors that remained significant even after holding the other factors constant. These significant factors are those that have been discussed in this bulletin and the use of regression analysis is indicated by the statement that we have 'controlled for other factors'. It is worth noting that had a different range of factors been available to consider from the survey, then some conclusions about which factors were significant may have been different.

More details on the methodology used in the regression analysis in this report are available in the [Technical Report: Approach to regression analysis and models produced](#).

## Technical report

More detailed information on the survey methodology is set out in the [technical report](#) for the survey.

## National Statistics status

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in 2017 following a compliance check by the Office for Statistics Regulation [[letter of confirmation](#)]. These statistics last underwent a full assessment [[full report](#)] against the Code of Practice in 2013.

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- provided more detailed breakdowns in the [Results viewer](#) and made it easier for users to compare results across years;
- updated the survey topics annually to ensure we continue to meet changing policy need; and
- made regression analysis a standard part of our outputs to help users understand the contribution of particular factors to outcomes of interest.

## Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

## Further details

The document is available at: <https://gov.wales/national-survey-wales-internet-and-media>

## Next update

Not a regular output

## We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to [surveys@gov.wales](mailto:surveys@gov.wales).

## Open Government Licence

All content is available under the [Open Government Licence v3.0](#), except where otherwise stated.

