THIRD SECTOR
Dumfries and Galloway

DIGITAL EXCLUSION IN DUMFRIES AND GALLOWAY

September 2022

REPORT BY THIRD SECTOR DUMFRIES AND GALLOWAY

"Scotland's future will be forged in a digital world. It's a world in which data and digital technologies are transforming every element of our nation and our lives – people, place, economy and government"

Scottish Government: "A changing nation: how Scotland will thrive in a digital world"

"Digitally excluded people have limited or no access to digital tech and the internet, leading to lower skills and confidence. Being digitally excluded can lead to social exclusion and impact on social and economic problems"

Charity Digital – Topics – What does digital exclusion mean for the charity sector?

Foreword

In 2020 Third Sector Dumfries and Galloway (TSDG) commissioned desk-based research to assess the extent of digital exclusion in the region. The research identified that there were potentially high levels of digital exclusion. However, that data was largely based on national research. We discussed this with the Institute for Research and Innovation in Social Services (IRISS) and we agreed we needed to know more. As a result of the 2020 research outcomes, TSDG commissioned primary research for Dumfries and Galloway.

This research report could not have been achieved without the support of our partners, including South of Scotland Enterprise and Dumfries and Galloway Council.

TSDG would also like to thank the Project Research Team for their work in delivering this project: Natalie Anderson, Emma Bowden, Stuart Harrison and Dr David Vickers.

Special mention needs to be made of our Project Reference Group (see appendix 1) in the design and piloting of the questionnaire. This group, along with other Third Sector Organisations (TSOs) and Public Sector Organisations (PSOs), (see appendix 2), was responsible for administering the questionnaire. TSOs were remunerated for their contribution to the project. There is no doubt this research would not have achieved such a significant number of responses to the questionnaire without their help.

The report begins with an executive summary that provides an overview of the research data. The findings section provides a detailed analysis of specific groups and underpins the headlines. The discussion section pulls all this data back together into a series of considerations.

We hope the research report will help to inform wider strategic discussions with key partners and stakeholders across Dumfries and Galloway.

Norma Austin Hart

Chief Executive Officer

Third Sector Dumfries and Galloway

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1. **Executive Summary**

In 2020 Third Sector Dumfries and Galloway carried out desk-based research into digital exclusion (TSDG, 2020). That research identified there was only a partial picture on digital exclusion in Dumfries and Galloway and relied on extrapolation of data from national research. The 2020 research also gave us a working definition of the issues surrounding digital inclusion/exclusion of **Access**, **Motivation** and **Skills** which we employ in this report.

This report aims:

- To develop a more in-depth understanding of digital exclusion in Dumfries and Galloway, particularly focused on third sector service users.

- To test the data from the original 2020 report.

The report is based on 898 responses to a survey of service users of Third Sector Organisations (TSOs) and/or Public Sector Organisations (PSOs). Respondents undertook an in-depth questionnaire (average completion time 24 minutes). TSOs were involved in the project from the outset in designing the questionnaire, promoting the research, facilitating survey completion and the administrative process.

The key findings from the report have wider implications for TSOs and PSOs, partnerships, public service organisations and policy makers at the local and national level. The findings include:

Access - The goal posts have moved as there are now few respondents with no digital access. Instead, the concern is quality of access. Issues include connectivity (speed and reliability), quality of device (type and age) and the move towards online access (reduced face-to-face transactions, design of web services).

Motivation – This is now the main barrier. There are many people who know how to but don't want to use online services and many who have no intention of learning to use them. There are still strong preferences for face-to-face services and getting friends and family to undertake transactions. Changing these will be challenging as they are highly valued.

Skills – The issues around skills are not about providing training courses as very few people are willing to learn to use services and facilities (circa 1% i.e., 9-10 people). There are respondents who lack confidence or those who are asking for support when they 'get stuck'. They are not asking for courses but to be helped on a one-to-one basis. Due to motivational issues, there is also a challenge in convincing people that there are benefits to them in learning to use the internet. These benefits may be unique to an individual's interests e.g., talking to family on Zoom/Teams, watching You Tube clips on their hobbies, reading aloud to them, finding things they cannot remember etc.

There is a substantial literacy barrier and a smaller English language issue which affect more than just digital inclusivity.

These new primary findings for the region have significant implications and opportunities for those developing service strategies, digital strategies and designing and developing online services for the vulnerable in our region.

ACCESS

Only 6% have no internet

Current issues include:
- Quality and age of device
- Frequency of access
- Sharing devices
- Connectivity / speed
- Access to devices for children

SKILL

- 1.2% want to learn how to do things digitally
- 8% have literacy issues
- People want ongoing support

DIGITAL INCLUSION

MOTIVATION

- 19% of respondents have no desire to do internet transactions
- 18% of over 80s have no digital access and 12% have knowledge but no motivation to use this
- 21% of respondents prefer to conduct transactions face to face, by landline or through the post
- 36% of respondents who live in social housing prefer offline transactions

Those on the lowest incomes are 40% less likely than those on the highest incomes to have a device other than a mobile phone in the household

Those on the lowest incomes are more likely to access the internet by mobile phone, this reduces access quality, they are also less likely to use email and internet

Connectivity – 42% think that speed and reliability are average or poor

I can only use it when I have support from a carer due to physical disability

Those with disabilities access the internet and email less frequently

11% of people who had digital access mentioned affordability as an issue

In the LGBTQ+ group there is a higher level of skill than the general population survey

Carers have a slightly higher level of skill than the general survey population

Those in social housing:

- are much less likely to have or use email
- have a strong preference for face-to-face interactions for conducting transactions
- are less likely to use or learn internet skills

3. Introduction and Context

During Covid-19 TSDG was invited to lead on several digital inclusion projects. As a result, TSDG identified key gaps in strategic understanding and in October 2020 commissioned further research into digital exclusion in Dumfries and Galloway.

The purpose of this desk-based research (TSDG, 2020) was to investigate the extent of digital exclusion in Dumfries and Galloway. National UK and Scottish research evidence was analysed, a population ratio was then applied to estimate data for Dumfries and Galloway.

The 2020 report also provided us with a nationally recognised definition of digital exclusion, which has been used in this current report.

Digital exclusion is defined as a lack of:

- **Access** (infrastructure, affordability and design)
- **Motivation**
- **Skills**

The 2020 report found:

- Up to 30% of the population in Dumfries and Galloway were digitally excluded by lack of access, skills, or motivation.
- Those most likely to be digitally excluded were also likely to be disadvantaged in other ways such as age, disability, or poverty.
- There was **no primary research** about digital exclusion for Dumfries and Galloway; the data in the report required to be tested in a primary context.
- No one agency was identified as the 'lead agency' for digital inclusion in Dumfries and Galloway.
- There was no overall strategic approach to digital exclusion in Dumfries and Galloway.

The 2020 report also identified that there was little specific data on digital exclusion in Dumfries and Galloway and as a result this was likely to mean that data analysis double counted where groups overlapped. For example, age, disability, sex. This double counting meant that any projections could have been inaccurate for Dumfries and Galloway. The two other key variables to be aware of were the rapidly changing context of technology, and the COVID pandemic. As a result, TSDG commissioned specific Dumfries and Galloway research, resulting in this current 2022 report.

Project Aims

1. To develop a more in-depth understanding of digital exclusion in Dumfries and Galloway, particularly focused on third sector service users.

2. To test the data from the original 2020 report.

Project Timeline

A project reference group was established in October 2021 to agree the frame of reference for the project and initial contact was made with IRISS (Institute for Research and Innovation in Social Services) to get support and test the research plan. This led to the design of the questionnaire, the contracting of TSOs and PSOs and the training of administrators.

The questionnaire was open for completion from January 2022 until the end of March 2022, with a response of 300 questionnaires anticipated. The final number of completed questionnaires was 898.

Analysis of the questionnaires commenced in April 2022 and an interim reporting session was held in June 2022 to generate interest and thinking around how this research might impact current and future service provision and development. This report was then finalised over the period June 2022 to end of August 2022 for launch in September 2022.

4. Methodology

The methodological approach taken in this questionnaire enables a deep understanding, particularly of individual behaviours and preferences. It is not intended for this data to be extrapolated to a wider population as the primary purpose is about getting a critical sense of the realistic meaning of, if and how technology is consumed rather than statistical regularity for its own sake (Danermark, 2002; McEvoy and Richards, 2006; Sayer, 2010; and Zachariadis et al., 2013, Arnold, 2014).

Using this approach means the research focuses on issues of authenticity and fairness (Pozzebon, 2004; Oates, 2006; Kline and Myers, 2011) as well as the more traditional measures of reliability and validity. It is not intended to extrapolate directly from the results due to the fact we have used an opportunity sample (or non-probability sample) comprising of a pre-existing group (i.e., TSDG member organisations and PSO partners). However, as Oppenheim (1992) suggests, such a cross-sectional survey design is appropriate where there is little control over the respondent group, and little is known about them from previous research. The outputs of such research are primarily useful in deepening understanding and bringing about change and not focused on causal relationships.

The methodology therefore employs mixed methods of quantitative and qualitative techniques. Mixed methods research can provide stronger inferences than a single method or world view (Teddlie and Tashakkori, 2009). As such, *"there is more insight to be gained from the combination of both qualitative and quantitative research that cut across different multiple methodologies and paradigms than a dichotomous qualitative/quantitative approach"* (Creswell, 2009 p 204).

Method

The research team began the process by assessing the key questions to address, what the end-product of the research data would look like and how it would be analysed. It was decided that the issues of access, motivation and skills needed to be tested as these were raised in national research and the previous desktop study undertaken by TSDG.

Whilst it seems counter-intuitive, the team recognised that digital exclusion/ inclusion had to be investigated through an online questionnaire to reduce the resource requirements of the analysis process. For those digitally excluded this was best overcome through the administration of the questionnaire by TSOs and PSOs. Research issues of validity and reliability of a survey instrument being administered by different people was largely overcome by the insistence that all those administering the questionnaire undergo standardised training. In addition, different respondents (service users) had different circumstances and therefore the questionnaire was administered in different ways. Service users (respondents) could complete the survey themselves online, by working one-to-one or in groups with an administrator (sometimes face-to-face and others on the telephone) and in some cases by paper format where the data was submitted afterwards electronically by the TSO, PSO or TSDG. Contracts were signed by TSOs, PSOs and TSDG prior to training and any research activities being undertaken.

Anonymity, and both data and identity protection have been critical throughout this survey process, and this is maintained in the report writing. Each respondent has been assigned a code by their respective TSO/PSO. TSDG and the Associates analysing the data cannot connect those codes to an individual. Where the data may allow for an individual to be identified by others this is managed. Examples may include small data sets where there is only one person of a specific demographic identifier e.g., over 65 or a combination of identifiers e.g., over 65, in DG9 and male. This data is left out of analysis. In other cases, where comment boxes are employed, other identifiers are removed e.g., mention of smaller geographic places or specific individuals. Throughout the research process and the subsequent analysis we have been guided by ethical principles from Scotland's Third Sector Research Forum (2021).

Throughout the design stage of the questionnaire the views and experience of the Project Reference Group (PRG) was invaluable in developing questions and methods of data capture as this allowed the research team to draw upon years of unique experience from TSOs working in specific contexts. Additional advice and guidance were provided by IRISS (Institute for Research and Innovation in Social Services).

It was also important that this work was given enough time and it was decided to deviate from the original project plan and take an extra month to get the questionnaire into its most robust state through additional testing, re-testing and dual piloting.

A 3-step approach of **question design**, **general appearance of the questionnaire**, and **planning and piloting** (Sekeran and Bougie, 2013) was employed.

Question Design

1. *Content and wording*
   The language used in questions has an influence on response rate (Remanyi, 2012) and the wording needs to be consistent with that used by respondents. In the design phase the focus was on using plain English and avoiding technological jargon. The pilot study not only tested the general questionnaire framework and flow of questions but also crosschecked questions for respondent understanding. As a result, one question was reworded.

2. *Types of questions*
   Open, closed, multiple choice, rating and free response text questions were used throughout the questionnaire. However, due to the number of questions required, the open and free text response questions were minimised to shorten the time expected to complete the questionnaire. This is important in ensuring a higher completion rate.

   Quantitative demographic questions were used to overcome the overlapping of categories or double counting issues raised about previous reporting in the 2020 TSDG research report. Quantitative questions were also used to direct the flow of the questionnaire. For example, 'do you have access to the internet?' is a closed question which then takes the respondent down a different avenue of questions dependent upon their response. Qualitative and semi-qualitative data involved questions with free text response boxes as well as a range of multiple check box questions to test usage of technologies. For example, asking if respondents used their internet access to keep in touch with family, do shopping, watch television programmes, play games, contact

politicians etc. This approach results in a deep trawl of service users and allows us to investigate a much wider range of questions and issues.

3. *Sequencing of questions*
Great care was taken over the sequencing of questions with detailed mapping and modelling of question flows with several iterations of testing and retesting a variety of response scenarios (Oppenheim, 1992).   The research team recognised the questionnaire could be repetitive, especially for those who had to answer in all the questions, and this was balanced against time required to complete the questionnaire and improving the simplicity of responses.

The questions were sequenced in such a way that all respondent demographic data could be captured and those with limited or no use of technology could move quickly from sections on mobile phones, internet usage and e-mail, whilst still capturing the relevant data.

General Appearance of the Questionnaire.

1. *Layout*
The initial template design for the questionnaire took into consideration font size and style, translation issues and professional appearance. It was then tested with the PRG and the only substantive change was related to colour differentiation. This is a fundamental feature in ensuring the face validity of the questionnaire.

2. *Length of the questionnaire*
The research team were mindful of the balance between time to complete and the 'one-shot' at getting as much information as possible. The initial target of 300 responses was exceeded due to a combination of the length and ease of the questionnaire and the endeavour of the TSO's and PSO's administering the questionnaire. With an average completion time of 24 minutes the questionnaire is within most people's attention span.

Planning and Piloting

1. *Piloting and changing*
The questionnaire was piloted twice. First, TSDG staff were asked to complete the questionnaire several times with specific identities of service users in mind. This involved online (computer completion, QR code smart phone completion), one-to-one face-to-face administration and telephone/video conferencing administration. Second, two TSOs administered the questionnaire. One TSO allowed service users with known computer knowledge to complete the questionnaire remotely by themselves. The other TSO ran sessions with service users in a computer room with 'floating' administrators on hand to help if required. The latter group also tested issues such as taking a break and returning to the questionnaire. The pilot tests were highly successful and no major changes were required.

3. *Planning ahead*
   From the outset the questionnaire was designed as electronic/online to ensure it was easier and quicker to analyse. This also meant the need for administration training was pre-empted to standardise data collection as much as feasible.

As well as the PRG members, TSDG invited all its member organisations to participate in the survey. This resulted in 68 organisations expressing initial interest, with 42 applications submitted online and 41 of those organisations attending the administrator training. Finally, 34 TSOs and 4 PSOs signed the contract agreement and administered the questionnaires (see **appendix 2** for a full list of participating organisations). Each TSO administering the questionnaire had to provide an interim report on progress and identify any issues. There were no issues identified with the questionnaire or the administration, however, one organisation requested paper copies that they could input later. Each participating TSO also had to provide an evaluation of the process at the end of the administration of the questionnaires. This ensured that the process remained robust throughout as there were no adaptations or issues raised.

Questionnaire

Depending upon responses, the maximum number of questions a respondent could be asked to answer was 52 and the minimum number was 24.

The questionnaire was split into four sections:

1. Demographic questions
2. Mobile phone questions
3. Internet questions
4. E-mail questions

Prior to these four sections, respondents were asked if they had completed this questionnaire before, the method they were using to respond and to give their consent to the data being used for this specific purpose. If they had previously completed the questionnaire they were not permitted to proceed.

Demographic questions were designed using a widely accepted set of definitions for digital inclusion research (Just Economics, 2017). Questions included age, sex, sexual orientation, relationship status, household numbers and ages, disability status, carer status, income, work status, benefits status, education level, ethnicity, understanding of English, literacy as a barrier to technology, postcode, accommodation status and religion.

Mobile phone questions included access and ownership, frequency of usage and what it is used for as well as whether there was access to other devices.

Internet questions included the number of devices in a household, access and ownership, frequency of usage and what it is used for. In addition, questions were asked around how respondents preferred to conduct transactions or consume services (e.g., face-to-face, online, telephone etc.) and how much they valued doing it in this way. Finally, respondents were asked if they knew how to carry out transactions online, whether they wanted to or whether they wanted to learn how to do this. This was specifically to assess perceived skill levels and motivation to use technology.

E-mail questions were focused on whether respondents had e-mail addresses and frequency of usage.

The full questionnaire is reproduced in **appendix 3.**

Responses

In total there were 898 responses to the questionnaire. 11 respondents had previously completed the questionnaire leaving 887 full responses. The majority of respondents were able to complete the questionnaire themselves online, either remotely or with the TSO's / PSO's device in-person.

Table 1 How the questionnaire was administered to participants

How the questionnaire was administered or completed	
Independently online and remotely	429
Independently online in person (with admin support)	277
Telephone interview	48
In person in an administered group	40
No response to question	33
Video call interview (e.g. Zoom)	27
Paper copy (uploaded later)	26
Don't know/prefer not to say	7

The average response time to complete the questionnaire was circa 24 minutes. This figure varies based on the number of questions required to be answered and also the administration process used.

In total this resulted in 145,632 data items or the equivalent of 340 hours of data.

Analysis

As with all projects, time and other resources are finite and the initial analysis of the data and the basis of this report has been largely focused on ***single data categories*** (univariate analysis) e.g., age, income, disability status etc.

The research team are aware that the data captured through this process would enable a whole series of multi-dimensional questions to be answered, linking a variety of demographic groupings with responses to technology usage. This means that the data can be mined and re-mined to answer specific questions, some of which could not have been identified at the outset. This would require additional resource and therefore would need to be focused on specific requirements to ensure that resource is employed in a targeted manner.

Single data category analysis involved isolating each category and then considering responses to mobile phone, internet, and e-mail questions. For example, age was split into its seven categories (i.e., 18-24, 25-40 and so on). Then for each age grouping, if

technology was used, how it was used and for what, was explored. Each age group's access to technology, types of technology available, and preferences for how services are consumed and how much this preference is valued (e.g., face-to-face, online etc.). This process was repeated across 16 categories. The initial analysis of quantitative data involved the isolated data sets being categorised through custom sorting and semi-automatic data analysis in Microsoft Excel. Qualitative data was initially analysed using a text analysis software tool (Text Analyzer). This enabled expressions, phrases, and words to be identified and clustered. Further analysis was then conducted using another software tool (QDA Miner) to categorise the data to identify any patterns and clusters.

The combination of these methods resulted in this report and a set of initial research findings. However, the report and the univariate analysis also prompts further multivariate questions that will only be answered by additional data analysis.

5. Research Findings

5.1 Age

ACCESS	MOTIVATION	SKILL
• Access is lower for the 80+ group • Device ownership is low for the 80+ group	• Frequency of mobile and internet usage declines with age • More preference for face-to-face transactions for those aged 80+ • Issues with motivation to use digital across most age ranges	• Slightly higher level of wanting to learn how to use internet for tasks in younger groups (age 16-24)
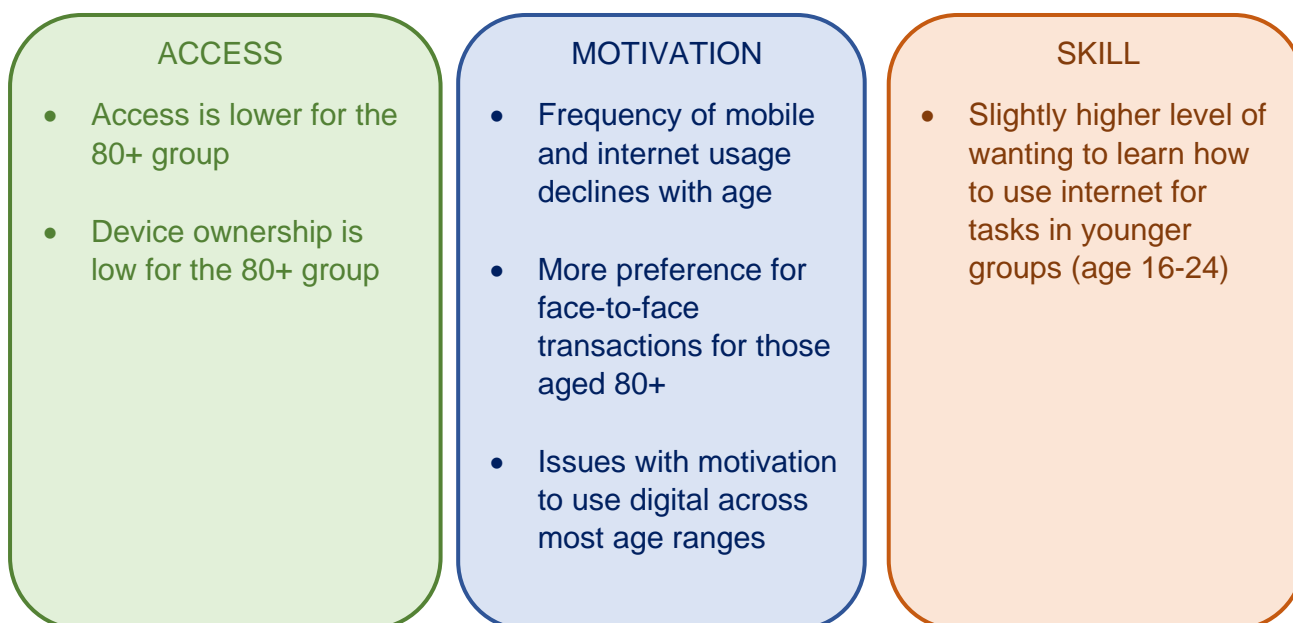
Introduction

The analysis in this section focuses on age bands. The respondents were asked to indicate their age range. Age was a prominent differentiator in previous research, with older people tending to be identified as digitally excluded.

Multivariate analysis might also look into comparator issues such as income, household type and benefit status and relationship status.

Demographic Data

As this is an opportunity sample, we do not expect it to statistically reflect the demographics of Dumfries and Galloway. However, there are large enough sample sizes in all age groups of 18 and over for us to conduct meaningful analysis of the data and to draw out inferences. Only 0.6% of respondents preferred not to answer this question.

Table 2 Number of respondents by age band

Age	Number of respondents	Percentage of respondents
16-17	24	2.7
18-24	68	7.7
25-40	114	12.9
41-54	155	17.3
55-64	175	19.7
65-79	261	29.4
80+	85	9.6
Prefer not to say	5	0.6

Those who respond **'prefer not to say'** are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

I find them difficult to use and I have a landline

Access

The number of people who do not own or have no access to a mobile phone is 38 which in a total survey population of 887 is relatively small at 4.3% (see section 5.16 below). This suggests that access to a mobile phone is not a major issue. However, the age specific data highlights that 21.1% (18 people) of the 80+ age range do not have a mobile phone or access to one.

Table 3 Number with access to a mobile phone by age band

Age	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
16-17	24	0	100%	0
18-24	63	2	95.6%	3
25-40	109	1	96.5%	4
41-54	152	2	99.4%	1
55-64	166	4	96.6%	6
65-79	242	4	98.8%	3
80+	66	1	78.9%	18
General Survey Population	836	13	95.7%	38

Frequency

Frequency of mobile phone usage is much higher in under 40-year-olds and tails off significantly for those over 80. Younger people use their mobile phones throughout the day whereas over 40's tend to use it daily.

Table 4 Frequency of mobile phone usage by age band in percentages

Age	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	Don't know	Never
16-17	79.2	12.5	4.2	0.0	0.0	4.2	0.0
18-24	70.6	16.2	1.5	0.0	0.0	10.3	1.5
25-40	83.8	13.5	0.9	0.0	0.0	1.8	0.0
41-54	0.0	83.7	11.8	3.9	0.0	0.0	0.7
55-64	0.0	74.6	17.3	4.6	1.7	0.0	1.7
65-79	0.0	71.8	21.6	2.9	2.0	0.0	1.6
80+	0.0	41.2	33.8	14.7	7.4	0.0	2.9
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

The frequency of usage of mobile phones for voice calls is significantly lower in the 80+ age range. The peak daily activity is in the 25-40 age range. This data supports the earlier view from research that in the 80+ age range usage drops dramatically. This does not necessarily apply to the 65 to 79-year-olds. Even in the 80+ age group usage is still around half of the respondents with access. However, this is also the age range where infrequent and non-usage is greatest.

Table 5 Frequency of mobile phone usage for voice calls by age band in percentages

Age	Frequency of usage of mobile phone for voice calls			
	Daily	Weekly	Monthly	Never/Yearly
16-17	79.2	8.3	8.3	4.2
18-24	71.0	22.6	3.2	3.2
25-40	92.7	6.4	0.9	0.0
41-54	83.8	11.7	3.9	0.6
55-64	77.2	17.4	3.6	1.8

65-79	71.3	22.1	2.9	3.7
80+	38.9	33.3	18.1	9.7
General Survey Population	74.7	17.7	4.4	3.2

Of those using a mobile phone the frequency of voice calls is significantly lower in the over 80 group. This may have implications for isolation.

> *I need my own iPad, as my school laptop will be returned after the exams*

Internet

Access

There are 57 non-internet users of which 43 are over the age of 65. However, in a combined respondent population of 337 in the 65-79 and 80+ age ranges, 43 people equate to circa 13%. For 80+ age band alone those without internet access are 28%.

Table 6 Non-internet users by age band

Age	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
16-17	18	6	100.0%	0
18-24	58	10	100.0%	0
25-40	103	6	95.6%	5
41-54	145	8	98.7%	2
55-64	157	11	96.0%	7
65-79	228	14	92.7%	19
80+	58	4	72.1%	24
General Survey Population	771	59	93.6%	57

Including those with no mobile phone, the total of non-internet users is 74 across the survey population. Over 65-year-olds account for 58 of those. This is 78% of those with no internet access but only 6.5% of the total survey population. However, as a percentage that accounts for 16.7% of the over 65s surveyed.

Frequency

The frequency of internet usage clearly decreases with age.

Table 7 Frequency of internet use by age band in percentages

Age	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
16-17	100	0.0	0.0	0.0	0.0
18-24	92.6	5.9	1.7	0.0	0.0
25-40	97.3	1.8	0.9	0.0	0.0
41-54	90.3	6.5	1.3	0.6	1.3
55-64	83.4	11.8	2.4	0.6	1.8
65-79	82.2	8.7	1.2	1.2	6.6
80+	55.6	4.8	9.5	1.6	28.6
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

Devices per head of household tend to be similar across age ranges and except for the 80+ group there is little discernible difference. Many over 80s live alone, so the data indicates a number of households with less or no devices.

Table 8 Number of devices per head of household by age band

Age	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
16-17	2.1	1.5	1.1	1.3	1.0	3.0
18-24	1.7	1.4	1.0	1.4	0.8	2.4
25-40	1.3	1.1	0.8	1.3	0.8	2.1
41-54	1.5	1.1	1.0	1.3	0.7	2.1
55-64	1.4	1.0	0.7	0.8	0.4	1.6
65-79	1.5	1.0	0.5	0.8	0.4	1.3
80+	0.5	0.8	0.3	0.4	0.0	0.5
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 1 and 2 Preference and value placed on transactions and services

Age – Average of how respondents prefer to conduct transactions in %
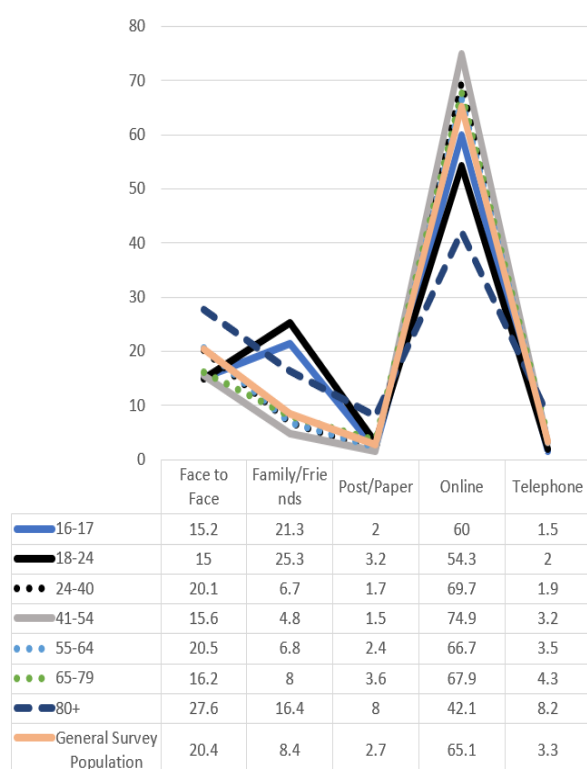
Age – Average of how much respondents value conducting their transactions in this way in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
16-17	15.2	21.3	2	60	1.5
18-24	15	25.3	3.2	54.3	2
24-40	20.1	6.7	1.7	69.7	1.9
41-54	15.6	4.8	1.5	74.9	3.2
55-64	20.5	6.8	2.4	66.7	3.5
65-79	16.2	8	3.6	67.9	4.3
80+	27.6	16.4	8	42.1	8.2
General Survey Population	20.4	8.4	2.7	65.1	3.3

	No Value	Low Value	Value	High Value
16-17	13.9	23.9	34.9	27.3
18-24	11.2	6.8	48.6	33.3
25-40	3.4	5.8	54	36.8
41-54	2.8	4.5	51.4	43.4
55-64	4	12.3	48.1	35.6
65-79	5	11	46.1	37.9
80+	9.4	5.3	41.2	44.1
General Survey Population	4.9	8.6	48.7	37.8
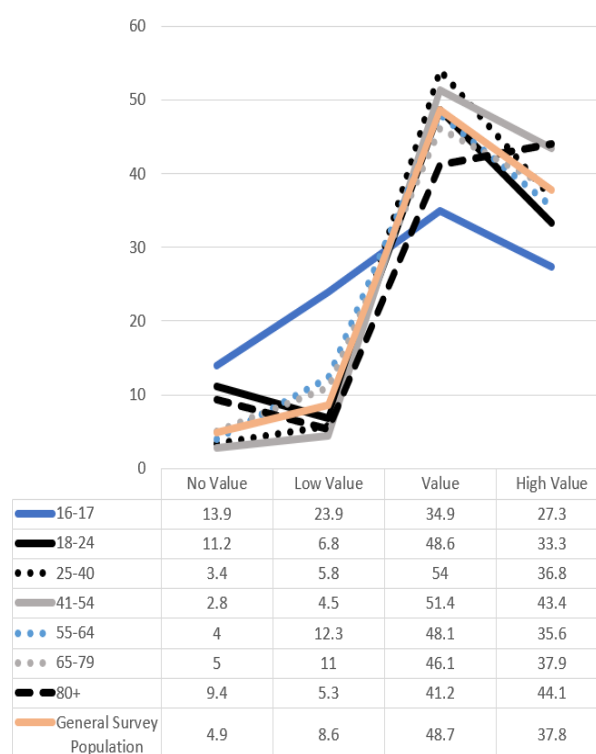
Respondents aged 65+ appear to have a stronger preference than other groups to conduct transactions face-to-face. Younger people are more likely, for several activities, to ask others to do it for them (this appears to be due to life stage/experience e.g., paying bills, handling government interactions, grocery shopping). Middle age ranges conduct more transactions and interactions online than their younger and older counterparts (hence the higher average).

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a general level of satisfaction with their skill level and motivation to use it.

Table 9 Average percentage of internet skills across 17 transactions and services

Skill level	Age							
	16-17	18-24	25-40	41-54	55-64	65-79	80+	General Survey Population
Yes	66.7	55.1	76.0	80.5	77.2	75.8	61.2	74.2
No but would like to learn how to	5.4	2.1	1.7	1.7	0.6	0.5	0.3	1.2
Yes but no intentions of doing so	24.9	29.8	19.6	13.1	17.0	16.9	26.0	18.4
No and no intentions of doing so	3.0	12.9	2.7	4.7	5.2	6.8	12.6	6.2

The data indicates most age bands either use the internet for transactions or they know how to. Resistance to learning how to and then use technology is highest among the 18-24 and 80+ groups.

E-Mail

Access

Having an e-mail account generally reduces with age, with a majority of those 80+ not having an account.

Table 10 E-mail access by age band

Age	Number of respondents with no e-mail address	% non-users in their own age band	% non-users against total survey respondents
16-17	1	4.2%	0.1%
18-24	5	7.4%	0.6%
25-40	12	10.5%	1.3%
41-54	10	6.5%	1.1%
55-64	19	10.9%	2.1%
65-79	52	19.9%	5.8%
80+	52	60.5%	5.8%
General Survey Population	145	-	16.1%

Frequency

Of those with an e-mail account frequency of usage is lowest in the 80+ group followed by those in the 18-24 group. So not only do these groups have less access to an e-mail address but when they do have one, they use it less.

Table 11 Frequency of e-mail use by age band in percentages

Age	Frequency of e-mail use in %				
	Daily	Weekly	Monthly	Yearly	Never
16-17	61.9	28.6	9.5	0.0	0.0
18-24	44.8	41.4	13.8	0.0	0.0
25-40	80.0	16.0	3.0	0.0	1.0
41-54	76.6	16.6	5.5	0.0	1.4
55-64	75.5	13.3	8.9	0.6	1.9
65-79	81.5	12.5	4.0	1.0	1.0
80+	52.9	29.4	8.8	2.9	5.9
General Survey Population	71.8	17.0	6.2	0.7	2.6

There is additional data on age in Appendix 5.

5.2 Household Income

ACCESS	MOTIVATION	SKILL
• Fewer devices in lower income groups. • Lower income groups are more likely to access the internet by mobile phone thus reducing access quality • Lower income groups less likely to use e-mail and internet	• Lower income groups are less likely to have e-mail • More preference for face-to-face transactions in lower income groups • Less desire to use internet skills or to want to in lower income groups	• Lower income groups may have less skill than other groups • Similar low levels of wanting to learn across all income groups

Introduction

The analysis in this section assesses the question responses against five household income bands.

Demographic Data

Table 12 Number of respondents by household income band

Income		
Income band (£)	Total number in this income band	%
Up to 12500	162	18.3
12501-20000	163	18.4
20001-30000	116	13.1
30001-40000	70	7.9
40001+	90	10.1
Prefer not to say	286	32.2

A crude average income band for each household is circa £23,000, this is lower than Scottish Median of circa £28,000 and UK of £31,400 (Office of National Statistics, 2022).

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Table 13 Numbers with access to a mobile phone by household income band

Income band (£)	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Up to 12500	144	2	90.7%	15
12501-20000	149	4	93.9%	10
20001-30000	112	2	98.3%	2
30001-40000	68	0	97.1%	2
40001+	90	0	100.0%	0
General Survey Population	836	13	95.7%	38

There is a clear pattern in the data which suggests that mobile phone access is linked to income.

Frequency

Table 14 Frequency of mobile phone usage by household income band in percentages

Income band (£)	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	don't know	Never
Up to 12500	54.8	27.4	15.8	0.0	0.6	0.7	0.5
12501-20000	54.1	27.4	10.8	1.6	4.1	0.0	0.8
20001-30000	60.0	23.5	10.4	3.1	0.8	0.0	1.2
30001-40000	82.4	8.8	4.4	1.6	2.9	0.0	0.0
40001+	83.3	11.1	3.3	1.1	1.1	0.0	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

What is also clear from the data is that frequency of mobile phone usage is linked to household income, with usage much more frequent within higher income households.

Voice Calls

Table 15 Frequency of use of mobile phone for voice calls by household income band in percentages

Income band (£)	Frequency of mobile phone use for voice calls in %			
	Daily	Weekly	Monthly	Never/Yearly
Up to 12500	74.1	20.4	3.4	2.0
12501-20000	73.9	16.6	5.7	3.8
20001-30000	74.6	20.2	4.4	0.9
30001-40000	77.6	16.4	3.0	3.0
40001+	85.6	12.2	1.1	1.1
General Survey Population	74.7	17.7	4.4	3.2

Except for the highest household income group voice call frequency is relatively similar across all other income groups.

Internet

Access

Internet access also appears to show signs of linkage with household income with 15% less access between the lowest and the highest income groups.

Only use internet on phone

Table 16 Non internet users by household income band

Income band (£)	Number of respondents with internet access	Number of respondents with access to internet through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
Up to 12500	128	10	85.2%	24
12501-20000	144	9	93.9%	10
20001-30000	104	6	94.8%	6
30001-40000	68	0	97.1%	2
40001+	88	2	100.0%	0
General Survey Population	771	59	93.6%	57

Frequency

Table 17 Frequency of internet use by household income band in percentages

Income band (£)	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Up to 12500	75.5	12.9	3.6	0.7	7.2
12501-20000	81.9	8.4	2.6	0.0	7.1
20001-30000	88.2	9.1	0.9	0.0	1.8
30001-40000	98.5	1.5	0.0	0.0	0.0
40001+	97.8	2.2	0.0	0.0	0.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

There is a marked difference between the highest two income groups and the lowest two income groups in frequency of internet usage. There are also circa 23 people in the lowest two income groups who do not use their internet access.

Devices in Household

The table below shows the number of devices per person in each household by income.

Table 18 Number of devices per head of household by household income band

Income band (£)	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Up to 12500	0.9	0.7	0.5	0.6	0.3	1.1
12501-20000	1.0	0.8	0.5	0.8	0.3	1.2
20001-30000	1.5	1.1	0.9	1.1	0.6	1.9
30001-40000	2.0	1.4	0.9	1.3	0.8	2.0
40001+	2.2	1.8	1.3	1.8	1.2	2.5
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

The lowest income group is 40% less likely than the highest income group to have another device, other than a mobile phone in the household. The highest income group is also likely to have two or more other devices in their household. This strongly suggests an affordability issue. Later in this report the qualitative data will also suggest lower income groups are more likely to have older and less reliable devices.
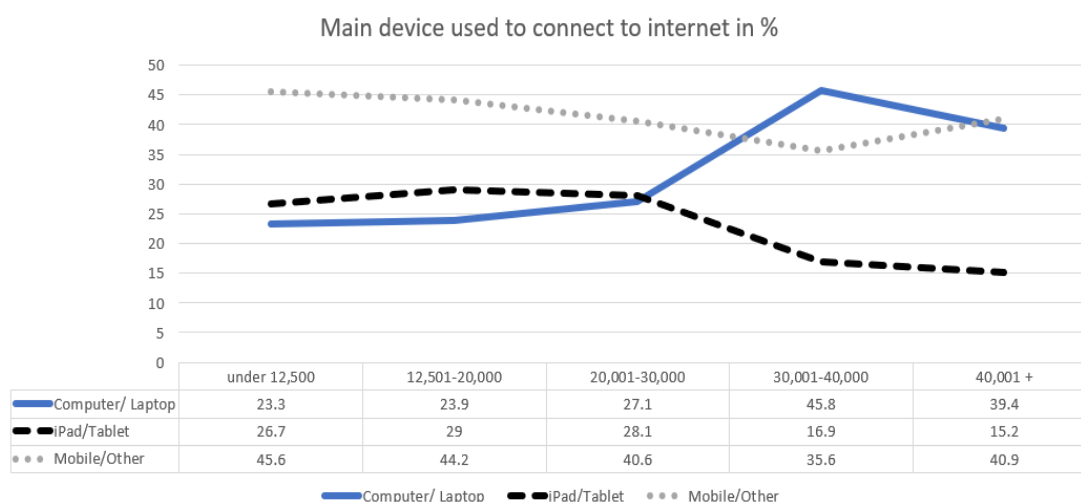
A simple multivariate cross check with household numbers shows:

- The highest income group has the largest household populations (this also accounts for more than one or two incomes in a household e.g., young people living with parents and earning an income or three generation households).

By adding this dimension, we can see

- the general pattern is still more devices per person the higher the household income
- devices per person are higher in the £30,001-£40,000 income group as households are smaller.
- Overall, this data seems to show that income is broadly the determinant of the number of devices in a household and per person in a household.
- Whilst these figures are averages it highlights the fact that households are *all* likely to share devices.

Main device used to connect to internet in %

	under 12,500	12,501-20,000	20,001-30,000	30,001-40,000	40,001 +
Computer/ Laptop	23.3	23.9	27.1	45.8	39.4
iPad/Tablet	26.7	29	28.1	16.9	15.2
Mobile/Other	45.6	44.2	40.6	35.6	40.9

Computer/ Laptop   iPad/Tablet   Mobile/Other

Higher income households are more likely to use a computer or laptop and less likely to use an iPad or Tablet to connect to the internet. Lower income households the opposite. However, lower income households are much more likely to use their mobile phone to connect to the internet than laptops, computers and tablets. Combined with the devices per household data above this is likely to be because lower income households are less likely to have such devices or have less of them available within the household.

Need a reliable connection and updated device

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 4 and 5 Preference and value placed on transactions and services

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
under 12500	23.3	6.3	4.9	56.2	9.3
12501-20000	26.6	4.3	4.5	58.7	5.9
20001-30000	15.4	5.5	4.4	70.2	4.4
30001-40000	12.9	5.3	4.3	74.9	2.5
40001+	10.2	3.9	4.1	80.3	1.5
General Survey Population	20.4	8.4	2.7	65.1	3.3

	No Value	Low Value	Value	High Value
under 12500	6.1	8.4	43.5	42.1
12501-20000	3.4	7.3	56.9	32.4
20001-30000	3.4	10.5	46.1	40
30001-40000	5.2	8.6	44	42.2
40001+	2.7	6.3	52.2	38.8
General Survey Population	4.9	8.6	48.7	37.8

The preference for online interaction is greater in higher income groups whereas lower income groups are more likely to prefer face-to-face interactions. How much interactions are valued is relatively similar in most income groups and suggests a strong motivation to keep things as they are.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 19 Average percentage of internet skills across 17 transactions and services

Skill level	Income band (£)					
	Up to 12,500	12501-20000	20001-30000	30001-40000	40001+	General Survey Population
Yes	63.9	70.6	82.8	93.5	91.5	74.2%
No but would like to learn how to	2.2	1.3	0.6	0.3	0.0	1.2%
Yes but no intentions of doing so	21.3	18.5	15.5	5.2	8.5	18.4%
No and no intentions of doing so	12.6	9.7	1.7	1.0	0.1	6.2%

Higher income households are more likely to be happy with their skill level to use the internet than lower income groups. However, the lower income groups are much more likely to know how to do things but not have the motivation to do them on the internet. Those who have said they want to learn how to conduct tasks and transactions are a relatively small number in every income group. Even in the lowest income groups the 2.2% equates to circa three or four people. Therefore, it is reasonable to conclude that all groups are relatively happy with their internet skill level, but lower income groups are less likely to be motivated to use them. Lower income groups are also more likely not to want to learn or use such skills.

E-Mail

Access

Table 20 E-mail access by household income band

Income band (£)	Number of respondents with no e-mail address	% non-users in their own income band	% non-users against total survey respondents
Up to 12500	44	27.0%	4.9%
12501-20000	35	21.4%	3.9%
20001-30000	13	11.2%	1.4%
30001-40000	5	7.1%	0.6%
40,001+	3	3.3%	0.3%
General Survey Population	145	-	16.1%

Lower income households are much less likely to have an e-mail address and even those that have an e-mail tend to use it less frequently.
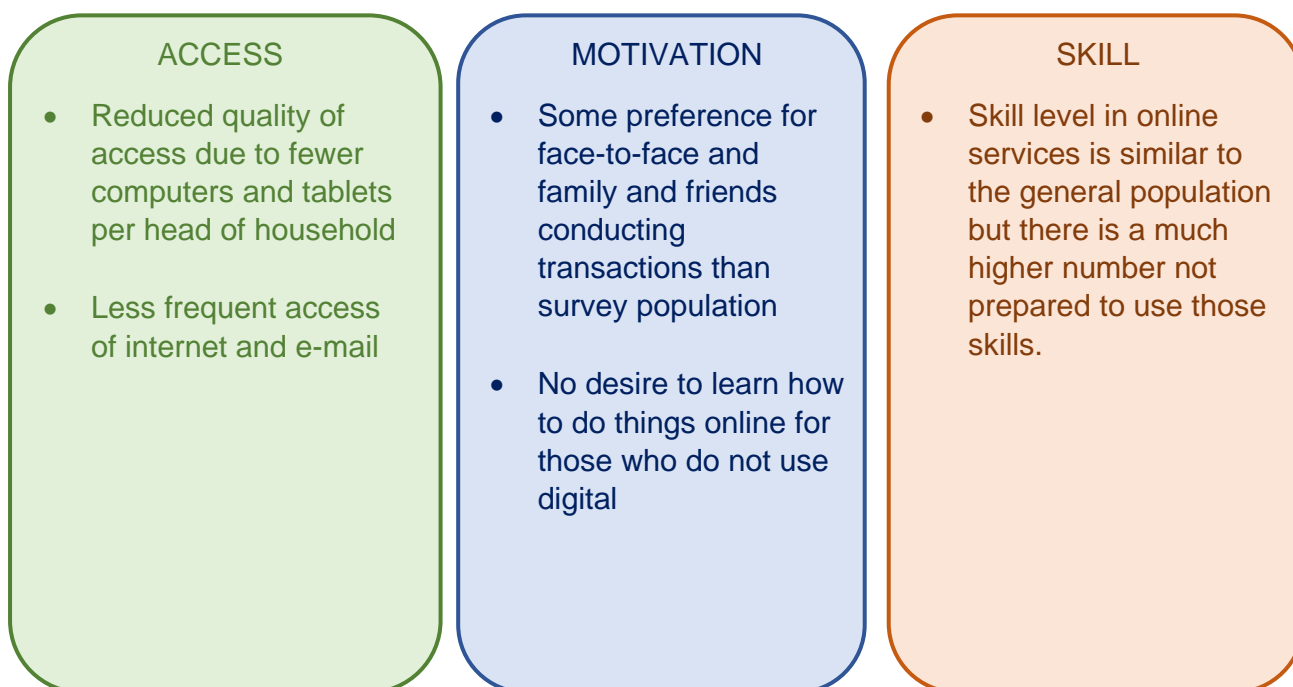
Frequency

Table 21 Frequency of use of e-mail by household income band in percentages

Income band (£)	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Prefer not to say	Never
Up to 12500	62.2	20.2	12.6	0.0	0.8	4.1
12501-20000	71.1	19.5	5.5	1.6	1.6	0.8
20001-30000	81.9	12.4	2.9	1.0	0.0	1.9
30001-40000	96.9	3.1	0.0	0.0	0.0	0.0
40001+	93.2	4.5	1.1	1.1	0.0	0.0
General Survey Population	71.8	17.0	6.2	0.7	1.8	2.6

Frequency of e-mail usage appears to link to household income with higher income groups using the internet around 30% more on a daily basis and up to 17% more on a combined daily and weekly basis.

There is additional data on household income in Appendix 5.

5.3 Registered Disabled

ACCESS	MOTIVATION	SKILL
• Reduced quality of access due to fewer computers and tablets per head of household • Less frequent access of internet and e-mail	• Some preference for face-to-face and family and friends conducting transactions than survey population • No desire to learn how to do things online for those who do not use digital	• Skill level in online services is similar to the general population but there is a much higher number not prepared to use those skills.

Introduction

The analysis in this section focuses on those who are registered disabled. They were asked the question - Do you have a registered disability? With responses yes, no and prefer not to say.

Demographic Data

It is possible by a quick bivariate check to determine some of those who responded "prefer not to say" are likely to be disabled. In the survey responses there are 10 respondents who prefer not to say who are in receipt of benefits associated with disability. However, they have not been included in the full analysis as they have chosen not to identify as registered disabled. The demographic data shows that some respondents prefer not to disclose a disability and we have chosen to respect that fact.

Table 22 Number of respondents by Registered Disabled response

Disability	Number of respondents	Percentage of respondents
Registered Disabled	242	27.3%
Possible Disabled (Prefer not to say BUT in receipt of a benefit associated with disability e.g PIP, ESA etc)	10	1.1%
Prefer not to say	14	1.6%
No	621	70.0%

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Table 23 Number with access to a mobile phone by registered disabled

Disability	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Registered Disabled	218	3	91.3%	21
General Survey Population	836	13	95.7%	38

Those with a registered disability are only slightly less likely to have access to a mobile phone than other respondents.

Frequency

Mobile phone frequency of usage is similar when comparing the registered disabled group with the general survey population. There is no discernible difference between the two populations.

Table 24 Frequency of mobile phone usage by registered disabled in percentages

Disability	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	Don't Know	Never
Registered Disabled	60.6	23.4	11.0	2.6	1.7	0.5	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

Using a mobile phone for voice calls shows a slightly more frequent use by the general population than the registered disabled group.

Table 25 Frequency of mobile phone usage for voice call in percentages

Disability	Frequency of mobile phone usage for voice calls in %			
	Daily	Weekly	Monthly	Yearly/Never
Registered Disabled	67.1	22.5	6.8	3.0
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

Table 26 Registered disabled non internet users

Disability	Number of respondents with internet access	Number of respondents with access to someone else's internet	Percentage of respondents with some form of access to the internet	No access to the internet
Registered Disabled	201	27	94.2	14
General Survey Population	771	59	93.6	57

There is little discernible difference between the disabled group and the general population on internet access.

My memory problems prevent this

Frequency

However, as with mobile phone usage for voice calls, those who are registered, disabled are slightly less likely to use the internet daily.

Table 27 Frequency of internet use in percentages for those registered disabled

	Frequency of internet use in %				
Disability	Daily	Weekly	Monthly	Yearly	Never
Registered Disabled	80.7	9.9	4.0	1.3	4.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

Registered disabled respondents in general have the same number of devices per person in their household than the general survey population. However, access quality may be slightly worse with less access to computers and laptops (and to a lesser extent tablets/iPads). This may affect the quality of access and also have a slight impact on frequency of internet access.
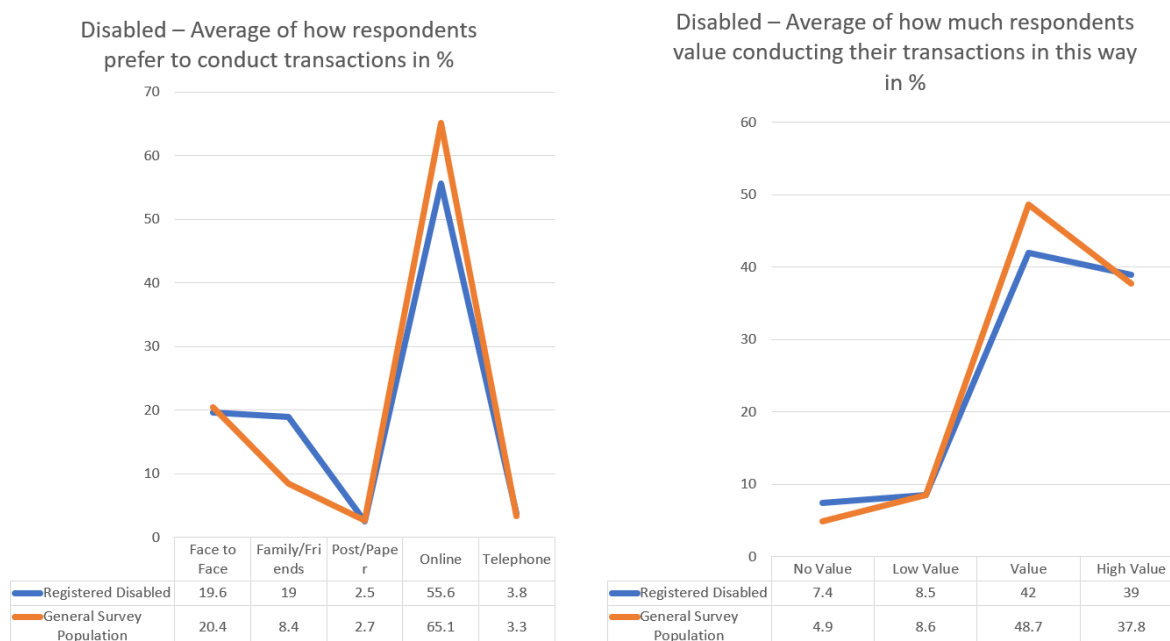
Table 28 Number of devices per head of household for those registered disabled

Disability	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Registered Disabled	1.1	1.0	0.7	1.0	0.5	1.6
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 6 and 7 Preference and value placed on transactions and services

Disabled – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Registered Disabled	19.6	19	2.5	55.6	3.8
General Survey Population	20.4	8.4	2.7	65.1	3.3

Disabled – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
Registered Disabled	7.4	8.5	42	39
General Survey Population	4.9	8.6	48.7	37.8

Both the general survey population and the registered disabled group have a strongly held value for their preferred ways of conducting transactions and consuming services. How the disabled group prefer to consume these services shows a slight decline in online preference in favour of seeking support from family and friends. This may be as a result of accessibility to those transactions and services.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skill, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 29 Average percentage of internet skills across 17 transactions and services

Skill level	Registered Disabled	General Survey Population
Yes	62.1	74.2
No but would like to learn how to	2.2	1.2
Yes but no intentions of doing so	22.1	18.4
No and no intentions of doing so	13.6	6.2

There is less desire to use online skills and significantly less motivation to acquire them and use them amongst those registered disabled. Whilst those indicating they would like to learn is 2.2% this equates to circa four people on average. The issue here would appear to be related to motivation. However, given the nature of challenges often faced by disabled people there may also be an underlying element of accessibility.

E-Mail

Access

Table 30 E-mail access amongst registered disabled respondents

Disability	Number of respondents with no e-mail address	% non-users in Disability population	% non-users against total survey respondents
Registered Disabled	47	19.4	5.2
General Survey Population	145	-	16.1

Whilst the number of those without an e-mail account is nearly one fifth of those registered disabled, this figure is 3.3% higher than that of the general survey population. 27% of respondents are registered disabled however 32.4% of those with no email are registered disabled. This is likely to reduce accessibility and inclusion in online transactions and services.

Frequency

Table 31 Frequency of e-mail use by those registered disabled respondents

Disability	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Never	Prefer not to say
Registered Disabled	62.2	22.8	10.4	0.5	4.1	0.0
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

Of those registered disabled who have an e-mail account there is considerably less frequent use of e-mail. This is consistent and forms a pattern with lower frequency of use for aspects of mobile phone and internet usage for the disabled group. This may suggest an issue of difficulty in accessing technology.

There is some additional data on the registered disabled in Appendix 5.

5.4 Literacy

ACCESS	MOTIVATION	SKILL
• Lower access to devices and e-mail • Some reduction in quality of access due to fewer computers and laptops per head of household	• Much less likely to have or use e-mail • Strong preference for face-to-face and family and friends conducting transactions than survey population • Strong level of lack of engaging with services and transactions	• Lack of willingness to learn and use the Internet is higher than the general survey population

Introduction

The analysis in this section focuses on those who feel that their literacy is a barrier to using online services and technology.

Respondents were asked how well they understand English with the following options:

- Very well it is my first language
- Very well it is my second language
- Well
- Not well
- Not at all and
- Prefer not to say

In addition, respondents were also asked "do you feel that you have literacy issues that might be a barrier to your use of technology?". The second question is predominantly analysed in the section on literacy. However, the 2 questions combined with some bivariate analysis of ethnicity allow us to isolate the language and literacy data sets.

Demographic Data

There were 100 respondents who said that literacy is a barrier to them using technology and using bivariate analysis, the table below highlights the split between language and literacy issues.

Table 32 Number of respondents who said that literacy is a barrier by ethnicity and English language

Ethnicity	Speak English well/very well/ first language	Not speak English well	Not speak English at all
ASIAN/BRITISH ASIAN (Indian, Pakistani, Bangladeshi & Any other Asian background.)	0	2	0
EUROPEAN [self identified]	1	2	1
CHINESE/BRITISH CHINESE (Chinese, Any other background)	1	1	
MIDDLE EAST AND ARABIC (Middle Eastern, including Arabic origin.)	0	1	0
MIXED (White & Black Caribbean, White & Black African, White & Asian, Any other mixed background)	2	1	3
WHITE (White British/Any other white background)	72	10	3
TOTAL	76	17	7

There were 76 people who speak English as a first language/very well or well and these have been analysed in the literacy category (76%).

A further 24 have been identified as the language category (24%) because they either do not speak English or do not think they speak it well.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

There is a lower proportion of respondents in the literacy group who have some form of access to a mobile phone than in the general survey population.

Access

Table 33 Number with access to a mobile phone by those who identified a literacy barrier

Literacy	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Literacy Group	65	2	89.3%	8
General Survey Population	836	13	95.7%	38

Frequency

Table 34 Frequency of mobile phone usage by those with with literacy barrier in percentages

Literacy	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	Don't Know	Never
Literacy Group	49.2	32.3	13.8	0.0	0.0	0.0	3.2
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Those with mobile phones or access to them in the literacy group tend to use those phones less frequently than the general survey population. There is also a slightly higher percentage of

Struggle with reading

This less frequent usage pattern is also evident in the use of the mobile phone for voice calls. Again, the literacy group is lower than the general survey population for frequency.

Voice Calls

Table 35 Frequency of mobile phone usage for voice call with literacy barrier in percentages

Literacy	Frequency of usage of mobile phone for voice calls in %			
	Daily	Weekly	Monthly	Never/Yearly
Literacy Group	69.7	18.2	7.6	2.5
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

Access to the internet is comparable for the literacy group with the general survey population.

Table 36 Internet access amongst those with literacy barrier

Literacy	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
Literacy Group	61	7	90.7%	7
General Survey Population	771	59	93.6%	57

Frequency

Table 37 Frequency of internet use for those with literacy barrier in percentages

Literacy	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Literacy Group	60.9	13.0	11.6	1.4	13.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

However, the frequency of internet usage is much lower for the literacy group compared to the general survey population which is a reflection back at the original survey question asking if respondents identified themselves as having issues with English understanding (literacy/comprehension) and technology. In summary – many in the literacy group have access to the internet but they do not use it as often as the general survey population.

This pattern is further supported below in answers to the questions around preference of how services are consumed, and the value placed upon them.

Devices in Household

The literacy group have fewer mobile phones per head of household and significantly less access to computers and laptops than the general survey population. However, access to tablets and iPads is comparable. This suggests slightly more sharing of devices in literacy group households. The access to a tablet suggests a reasonable level of quality of access.

Table 38 Number of devices per head of household

Literacy	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Literacy Group	0.8	1.1	0.3	0.8	0.4	1.2
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 8 and 9 Preference and value placed on transactions and services

Literacy – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Literacy	24.9	22.6	4.2	42.3	6
General Survey Population	20.4	8.4	2.7	65.1	3.3

Literacy – Average of how much respondents value conducting their transactions in this way in %

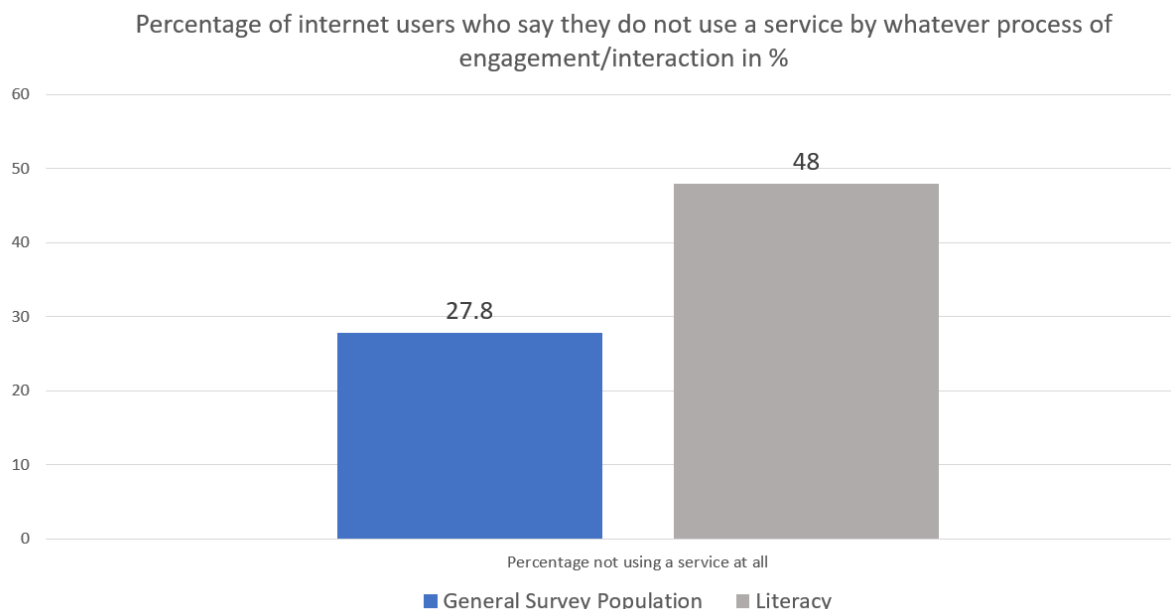|	No Value	Low Value	Value	High Value
Literacy	7.8	7.9	40.2	43.9
General Survey Population	4.9	8.6	48.7	37.8
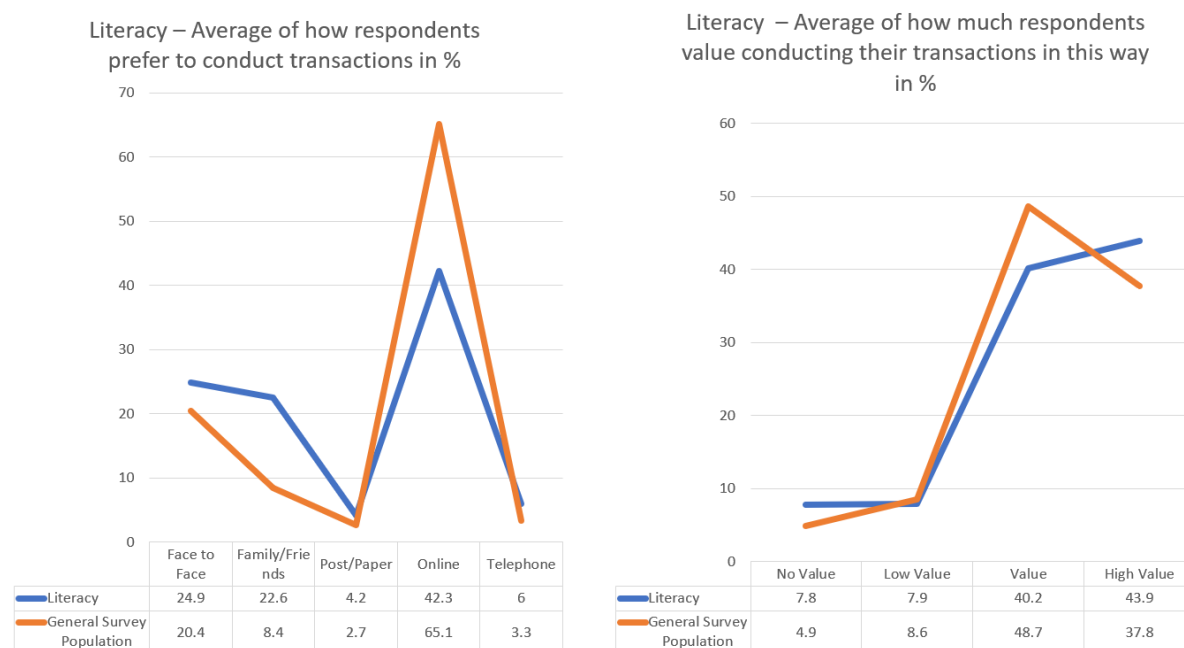
There is a major discrepancy between the general survey population and the literacy group. Given the group comprises of people who have said that literacy is a barrier to internet access and their frequency of use is lower, this is perhaps no surprise. However, it is clearly demonstrated in the preferences for face-to-face transactions and friends and family support. Moving more services online is likely to have a disproportionate impact on the literacy group. The literacy group appears to rely on others (family and friends) and less on the internet than the general survey population and they value their current method of conducting transactions more highly than the general population. This suggests that there is a strong barrier to moving to online transactions in the literacy group.

Very difficult understanding new technology

In the analysis of findings another issue was identified in relation to services and transactions for the literacy group. As well as the language group in the next section. Language and literacy groups are much less likely to engage with services and transactions **at all**, regardless of the medium through which they engage with that service. When they do engage it is quite often face-to-face or through family and friends.

The numbers of people who do not use services/transactions is higher in the literacy group versus the general survey population. This may also indicate that the literacy group may also avoid transactions and services if they involve doing so on the internet.

Graph 10 Non-users of services and transactions

Percentage of internet users who say they do not use a service by whatever process of engagement/interaction in %

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to

- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is clearly a self-assessment of skill, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 39 Average percentage of internet skills across transactions and services

Skill level	Literacy Group in %	General Survey Population
Yes	45.7	74.2
No but would like to learn how to	3.4	1.2
Yes but no intentions of doing so	20.3	18.4
No and no intentions of doing so	30.6	6.2

These figures show that circa 66% of the literacy group consider they have the skills needed to use the internet (although only 45.7% do or will use it). There is a slightly higher percentage of those willing to learn at 3.4% (but this equates to just three people). What is noticeably different in the literacy group is the percentage who do not know how to and have no intentions of learning how to. This replicates data elsewhere demonstrating a strong barrier to the use of technology.

E-Mail

Access

Table 40 E-mail access for literacy group

Literacy	Number of respondents with no e-mail address	% non-users	% non-users against total survey respondents
Literacy Group	29	38.7%	3.2%
General Survey Population	145	-	16.1%

Respondents reporting literacy issues are much less likely to have an e-mail account than the general survey population. One in five of those without an e-mail account in the general survey population are reporting literacy barriers.

Frequency

Table 41 Frequency of e-mail use in literacy group

	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Never	Prefer not to say
Literacy Group	43.8	22.9	25.0	0	6.3	0.0
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

Those who do have an e-mail account in the literacy group use that account far less frequently than the general survey population. Combined with the numbers in the group without an e-mail account this means they are less accessible to others who provide or use online services.

There is some additional data on literacy in Appendix 5.

5.5 Language

ACCESS	MOTIVATION	SKILL
• Fewer devices than survey population • Reduced quality of access due to fewer computers and tablets per head of household	• Much less likely to have or use e-mail • Strong preference for face-to-face and family and friends conducting transactions than survey population • Strong level of lack of engaging with services and transactions	• Lack of willingness to learn and use the Internet is higher than the general survey population

Introduction

The analysis in this section focuses on those who feel that their language understanding is a barrier to using online services and technology.

Respondents were asked how well they understand English with the following options:

- Very well it is my first language
- Very well it is my second language
- Well
- Not well
- Not at all and
- Prefer not to say

In addition, respondents were also asked "do you feel that you have literacy issues that might be a barrier to your use of technology?". The second question is predominantly analysed in the section on literacy. However, the two questions combined with some bivariate analysis of ethnicity allow us to isolate the language and literacy data sets.

Demographic Data

There were 100 respondents who said that literacy is a barrier to them using technology and using bivariate analysis. The table below highlights the split between language and literacy issues. 24 people were considered as having a language issue rather than a literacy barrier.

Table 42 Numbers of respondents by ethnicity and language

Ethnicity	Speak English well/very well/ first language	Not speak English well	Not speak English at all
ASIAN/BRITISH ASIAN (Indian, Pakistani, Bangladeshi & Any other Asian background.)	0	2	0
EUROPEAN [self-identified]	1	2	1
CHINESE/BRITISH CHINESE (Chinese, Any other background)	1	1	
MIDDLE EAST AND ARABIC (Middle Eastern, including Arabic origin.)	0	1	0
MIXED (White & Black Caribbean, White & Black African, White & Asian, Any other mixed background)	2	1	3
WHITE (White British/Any other white background)	72	10	3
TOTAL	76	17	7

There were 76 people who speak English as a first language/very well or well and these have been analysed in the literacy category (76%).

A further 24 have been identified as the language category (24%) because they either do not speak English or do not think they speak it well.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Table 43 Number with access to a mobile phone in language group

Language	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Language Group	24	1	100.0%	0
General Survey Population	836	13	95.7%	38

Frequency

Table 44 Frequency of mobile phone usage in language group in percentages

Language	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	Don't Know	Never
Language Group	68.9	28.0	0.0	3.1	0.0	0.0	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Learn English and integrate into the local community

Overall, there is no issue with frequency of usage of the mobile phone. Those who say that English is a barrier tend to use their mobile phones more frequently than the general survey population. This is reflected in both general usage and also in voice calls (see below) are conducted is discussed below but supports this suggestion.

Voice Calls

Table 45 Frequency of mobile phone usage for voice call in language group in percentages

Language	Frequency of usage of mobile phone for voice calls in %			
	Daily	Weekly	Monthly	Never/Yearly
Language Group	96.0	4.0	0	0
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

Internet access is similar the language group (i.e., those with low levels of English or none) to that of the general population.

Table 46 Internet access in language group

Language	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
Language Group	18	6	96.0%	1
General Survey Population	771	59	93.6%	57

Frequency

Table 47 Frequency of internet use by language group in percentages

Language	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Language Group	95.8	0.0	4.2	0.0	0.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

However, the frequency of internet usage is higher for the language group compared to the general survey population. This again may be due to using services and conducting transactions in first language or using online translation services.

Devices in Household

Table 48 Number of devices per head of household

Language	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Language Group	0.5	0.6	0.3	0.7	0.4	3.1
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Except for mobile phones, the language group have far less technology per head in their households than other groups. This is likely to affect availability of access and reduce the quality of access.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 11 and 12 Preference and value placed on transactions and services

Language – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Language	62.4	21.5	4.3	10.2	1.6
General Survey Population	20.4	8.4	2.7	65.1	3.3

Language – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
LGBTQ+	0.5	2.7	61.2	35.6
General Survey Population	4.9	8.6	48.7	37.8
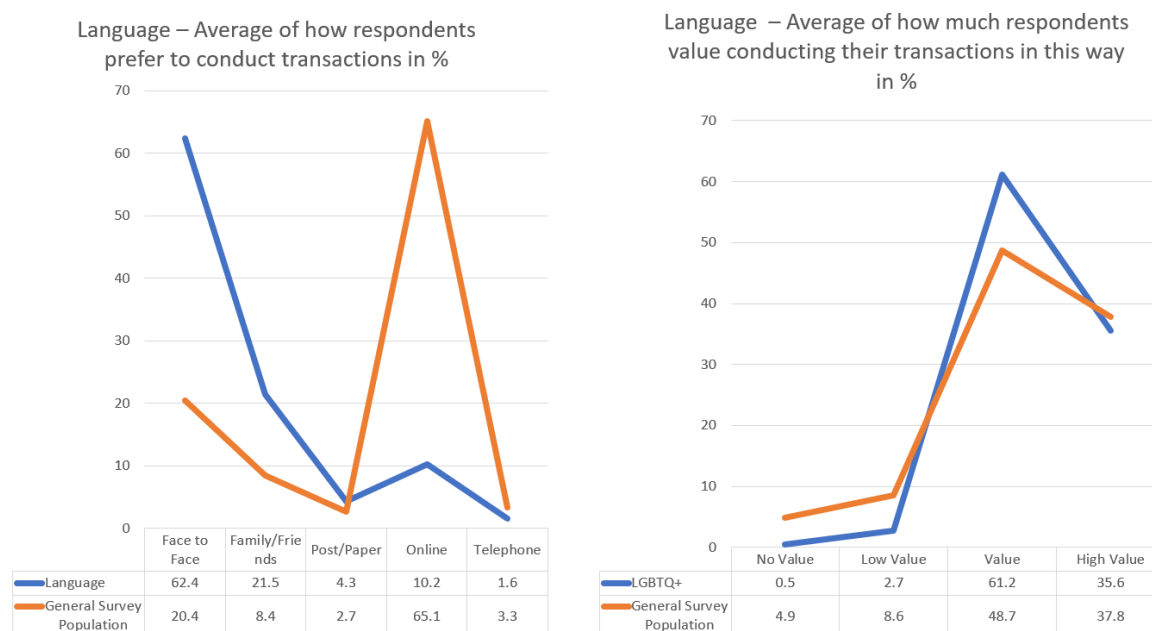
There is a major discrepancy between the general survey population and the language group. Given the group comprises of people who have said that English is a barrier to internet access this is perhaps no surprise. However, it is clearly demonstrated in the preferences for face-to-face transactions and friends and family support. Moving more services online is likely to have a disproportionate impact on the language group.

In the analysis of findings another issue was identified in relation to services and transactions for this group and the literacy group. Language and literacy groups are much less likely to engage with services and transactions at all, regardless of the medium through which they engage with that service. When they do engage it is quite often face-to-face or through family and friends. This perhaps tentatively suggests that language and confidence in using English is a bigger issue than just a barrier to technology.

The numbers of people who do not use services/transactions is higher in the language subgroup versus the general survey population. This may also indicate that the language group may also avoid transactions and services if they involve doing so on the internet.

Graph 13 Non-users of transactions and services
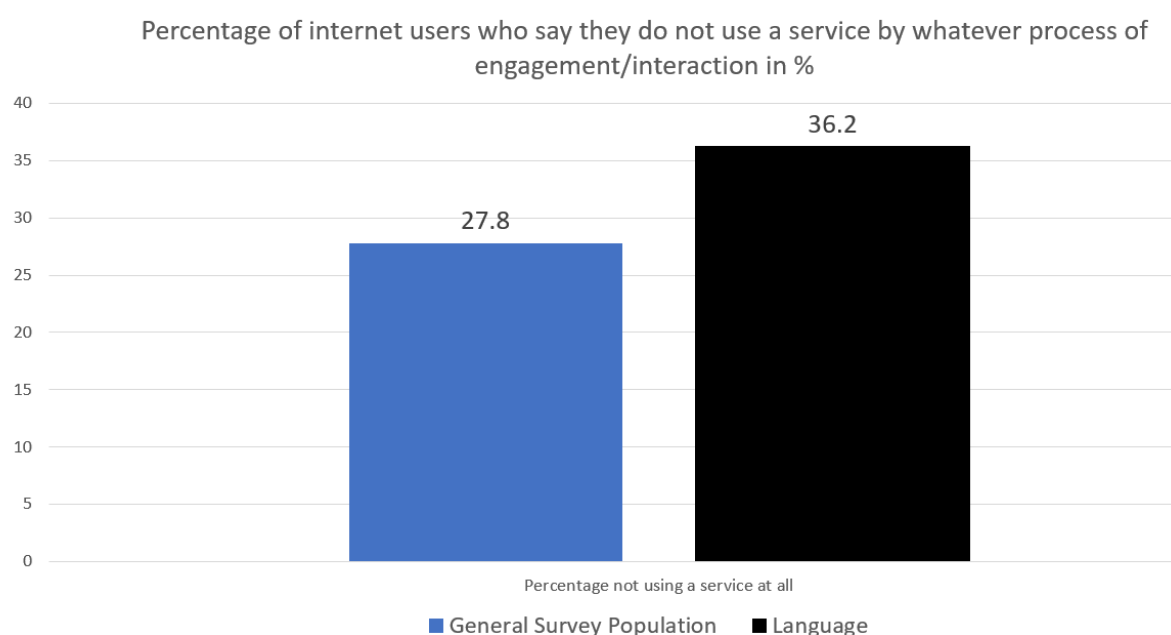
Percentage of internet users who say they do not use a service by whatever process of engagement/interaction in %

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 49 Average percentage of internet skills across transactions and services

Language	Language Group	General Survey Population
Yes	21.0%	74.2%
No but would like to learn how to	5.3%	1.2%
Yes but no intentions of doing so	59.0%	18.4%
No and no intentions of doing so	14.7%	6.2%

These figures suggest that many in the Language group may well have the skills but not the inclination or motivation to use the internet for a variety of tasks. In addition, where they don't have the skills there is a higher reluctance to want to learn how to in the language group than the general survey population. This suggests a strong barrier to change.

Better English and being taught how to use internet

E-Mail

Access

Table 50 E-mail access in language group

Language	Number of respondents with no e-mail address	% non-users	% non-users against total survey respondents
Language Group	9	37.5%	1.0%
General Survey Population	145	-	16.1%

Although the language group is relatively small in numbers there is a significant difference between the group and the general survey population in those having an e-mail account.

Frequency

Table 51 Frequency of e-mail usage by language group in percentages

Language	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Never	Prefer not to say
Language Group	0.0	60.0%	20.0%	10.0%	10.0%	0.0%
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

There is also a significantly lower frequency of e-mail usage by those who see language as a barrier to their use of the Internet. Even those with an e-mail account in this group use it much less than others.

There is some additional data on language in Appendix 5.

5.6 Accommodation Type (Social Housing)

ACCESS

- Many fewer devices than general survey population

- Reduced quality of access due to fewer computers and tablets per head of household

- Children have reduced device access if they have siblings

MOTIVATION

- Much less likely to have or use e-mail

- Strong preference for face-to-face in conducting transactions than survey population

- Low motivation to use internet skills or to learn them.

SKILL

- Lack of willingness to learn and use the Internet is higher than the general survey population

Introduction

The analysis in this section focuses on the question - what kind of accommodation do you live in at the moment?

As the numbers in most of the response categories are not statistically significant, it was decided that a subset of Social Housing would be explored to identify any possible policy implications.

In addition, a multivariate analysis of all households with children and by relationship status was conducted and this is detailed at the end of this section.

Demographic Data

Table 52 Number of respondents by accommodation type

Owned or mortgaged home	426	48.0%
Social housing	215	24.2%
Private rental	113	12.7%
Live at home with parent/guardian	77	8.7%
Prefer not to say	25	2.8%
Assisted living facility or care home	11	1.2%
Tied house	3	0.3%
Static caravan	2	0.2%
Temporary accommodation (e.g. friends etc)	2	0.2%

Sheltered housing (social landlord DGHP)	1	0.1%
Rented flat	1	0.1%
Estate house	1	0.1%
"Lifetime rental " under partner's will	1	0.1%
Sheltered accommodation	1	0.1%
HMO with support	1	0.1%
Housing association (DGHP)	1	0.1%
Live with son's family	1	0.1%
Live with son	1	0.1%
Tied cottage	1	0.1%
Live with family	1	0.1%
Rent free	1	0.1%
Rent free property	1	0.1%

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Table 53 Number with access to a mobile phone in social housing group

Accommodation Type	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Social housing	190	2	88.5%	25
General Survey Population	836	13	95.7%	38

Access to a mobile phone is slightly lower in the social housing population compared with the general survey population.

Frequency

Table 54 Frequency of mobile phone usage by social housing respondents in percentages

Accommodation Type	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	Don't Know	Never
Social housing	52.6	32.1	11.1	1.3	1.0	1.3	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

The frequency of mobile phone usage is slightly lower in the social housing respondent group but there is little discernible difference when combining usage 'several times a day' with 'daily' figures.

Voice Calls

Table 55 Frequency of mobile phone usage for voice call in social housing group in percentages

Accommodation Type	Frequency of mobile phone usage for voice calls in %			
	Daily	Weekly	Monthly	Yearly/ Never
Social housing	77.5	14.7	4.7	3.2
General Survey Population	74.7	17.7	4.4	3.2

Voice call activity shows similar patterns between both the social housing group and the general population group.

Internet

Access

Internet access for both the social housing population and the general survey population is similar and access does not appear to be a major issue.

Table 56 Internet usage in social housing

Accommodation Type	Number of respondents with internet access	Number of respondents with access to someone else's internet	Percentage of respondents with some form of access to the internet	No access to the internet
Social housing	187	9	92.0%	19
General Survey Population	771	59	93.6%	57

Frequency

My housing provider has installed wi-fi in my flat and throughout the communal areas of the building but I don't use it.

Whilst access is not an issue, the social housing respondents are much less likely to use the internet than the general survey population. There is a significant difference in daily (circa 19% variable) and weekly (circa 4% variable). This may impact transactions and services as the dissemination of information through online platforms may be slower or social housing groups may have to pick up information through other channels.

Table 57 Frequency of Internet usage in social housing in percentages

Accommodation Type	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Social housing	66.3	11.6	4.5	0.5	15.1
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

Devices per person in a household is considerably lower in social housing households. This indicates that sharing of devices is likely which will in turn limit quality and quantity (frequency) of access to the internet.

Table 58 Number of devices per head of household in social housing

Accommodation Type	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Social housing	0.6	0.6	0.4	0.5	0.2	0.9
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

This may also mean that internet engagement is not always by computer, laptop, tablet or iPad and this may impact quality of access and have implications for service/transaction web design.

> *Mi-fi device provided by housing provider via Connecting Scotland. I don't use it, but my family do if they visit.*

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 14 and 15 Preference and value placed on transactions and services

Social Housing – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Social Housing	27.5	10.2	3.4	53.3	5.6
General Survey Population	20.4	8.4	2.7	65.1	3.3

Social Housing – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
LGBTQ+	4.9	7.5	45.2	42.4
General Survey Population	4.9	8.6	48.7	37.8

There is a higher preference for face-to-face transactions to the detriment of online activity in the social housing group when compared to the general population. The value placed on the variance preferences is equally strong in both populations. This suggests that there is a high value placed on the way transactions are currently conducted and this may be hard to change.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is clearly a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 59 Average percentage of internet skills across transactions and services in social housing group in percentages

Skill level	Social Housing	General survey Population
Yes	65.3	74.2
No but would like to learn how to	2.1	1.2
Yes but no intentions of doing so	16.7	18.4
No and no intentions of doing so	16.0	6.2

The social housing group has circa 10% more respondents who do not know how to use the internet for various activities and nor do these respondents intend to learn or use online services. The skills level in social housing respondents is also 10% lower than in the wider population when we combine those who can use the internet to conduct their affairs and those who can but choose not to.

However, the issue appears to be driven by lack of motivation and desire rather than any skills gap with around a third of social housing respondents having no intention to use the internet for online activities and transactions.

E-Mail

Access

Access to a personal e-mail address is 50% less likely in the social housing group than the general survey population. Nearly half of the respondents who do not have an email address live in social housing, whereas only 24% of the general population survey live in social housing.

Table 60 Access to E-mail in Social Housing

Accommodation Type	Number of respondents with no e-mail address	% non-users in Social Housing population	% non-users against total survey respondents
Social housing	68	31.6%	7.6%
General Survey Population	145	-	16.1%

Frequency

Of those in social housing who do have an e-mail address, the frequency of use is lower than that in the wider survey population. On a daily basis the social housing group is circa 12% less likely to use e-mail. Even across a week the use of e-mail is circa 7% less likely.

Table 61 Frequency of use of e-mail in social housing in percentages

Accommodation Type	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Never	Prefer not to say
Social housing	59.5	22.3	11.5	0.7	6.1	0.0
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

This has implications for response times and communication with parts of the social housing group.

Household Multivariate Analysis

During the univariate analysis of housing it became clear that there were some underlying patterns that could be assessed by a short multivariate analysis. This multivariate analysis compared:

- household numbers - adults and children (under 16's)
- relationship status and
- number of devices per head of household.

Households with one child under 16 have around one device per householder and the number of devices per head falls with two and more children. This is regardless of relationship status or number of adults in a household.

There is also a slight reduction in devices per household in one adult/parent households. These patterns are, as we would expect, replicated in the household income data we discussed earlier in this report.

Table 62 Devices per head of household against relationship status and numbers of children in household. Data for all households in percentages.

Relationship Status	Household with 1 child	*Devices per head of household	Household with 2 children	*Devices per head of household	Household with more than 2 children	*Devices per head of household
Married/Civil Partnership/ Cohabitating	33	1.1	43	0.9	15	0.8
Single	27	0.9	10	0.6	8	0.6
Widowed	Did not analyse on the basis that this could be an identifiable person/persons					
Divorced/ Separated	7	0.9	2	0.7	1	Not analysed
Prefer not to say	6	Not analysed	1	Not analysed	1	Not analysed
*Devices in this case is laptop/computer/tablet/ipad not phone.						

There is additional data on social housing in Appendix 5.

5.7 Carers

ACCESS	MOTIVATION	SKILL
• Access is higher for carers than the general population on all measures • Device ownership is at similar levels to the general survey population of access	• More likely to use their e-mail • More preference for face-to-face transactions than general survey population and self-reliant. • Otherwise, similar levels of motivation to use.	• Slightly higher level of skill than the general survey population

Introduction

The analysis in this section focuses on those who care for someone. The respondents were asked "do you look after, or give any help or support to, anyone because they have long-term physical or mental health conditions or illnesses, an addiction, or problems related to old age?

Multivariate analysis might also look into comparator issues such as income, household type and benefit status.

Demographic Data

Table 63 Number of respondents

Carer	Number of respondents	Percentage of respondents
Yes	168	18.9%
No	671	75.6%
Prefer not to say	13	1.5%
Did not answer or did not know	35	3.9%

There are 168 respondents in the sample who identify as Carers. However, 'the prefer not to say' and did not answer numbers suggest that this figure is probably higher. However, it is not possible in a single variant analysis to explore that.

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Table 64 Number of carer respondents with access to a mobile phone

Carer	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Carer Group	161	3	97.6%	4
General Survey Population	836	13	95.7%	38

Everyone had one so I got one too.

Carers appear to have slightly better access than the general population to a mobile phone. This is not a significant difference but helps us to draw a conclusion that connectivity is not an issue for carers.

Frequency

Carers tend to use their mobile phones more frequently than the general population.

Table 65 frequency of mobile phone usage by carers in percentages

Carer	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	Don't Know	Never
Carer Group	67.9	21.8	5.5	2.4	1.2	0.6	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

The frequency of usage of mobile phones for voice calls is also slightly higher for Carers than it is in the general population. All these mobile phone indicators are favourable and demonstrate that carers appear to be quite well connected through their mobile phone usage.

Table 66 Frequency of voice calls made by mobile phone by Carers in percentages

Carer	Frequency of mobile phone usage for voice calls in %				
	Daily	Weekly	Monthly	Yearly	Never
Carer Group	79.8	15.3	4.9	0.0	0.0
General Survey Population	74.7	17.7	4.4	1.3	1.9

Internet

Access

Table 67 Numbers of Carers with access to the internet

Carer	Number of respondents with internet access	Number of respondents with access to someone else's internet	Percentage of respondents with some form of access to the internet	No access to the internet
Carer Group	152	10	96.4%	6
General Survey Population	771	59	93.6%	57

Internet access for Carers is on a par with that of the general population and shows no discernible difference.

> *My daughter wanted me to do it but I refused as too complicated*

Frequency

Table 68 Frequency of use of internet by Carers in percentages

Carer	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Carer Group	95.1	3.1	0.6	0.0	1.2
General Survey Population	85.5	7.1	1.9	0.7	4.9

Whilst access to the internet is comparable, the frequency of internet usage by Carers is considerably higher than the general survey population.

Devices in Household

Table 69 Number of devices per head of household for Carers

Carer	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Carer Group	1.5	0.9	0.8	1.0	0.6	1.9
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Access to devices amongst Carers shows a similar pattern to the general population.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 16 and 17 Preference and value placed on transactions and services

Carers – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Carers	25	3.2	2.8	65.7	3.3
General Survey Population	20.4	8.4	2.7	65.1	3.3

Carers – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
Carers	5.8	10.6	49.3	34.3
General Survey Population	4.9	8.6	48.7	37.8
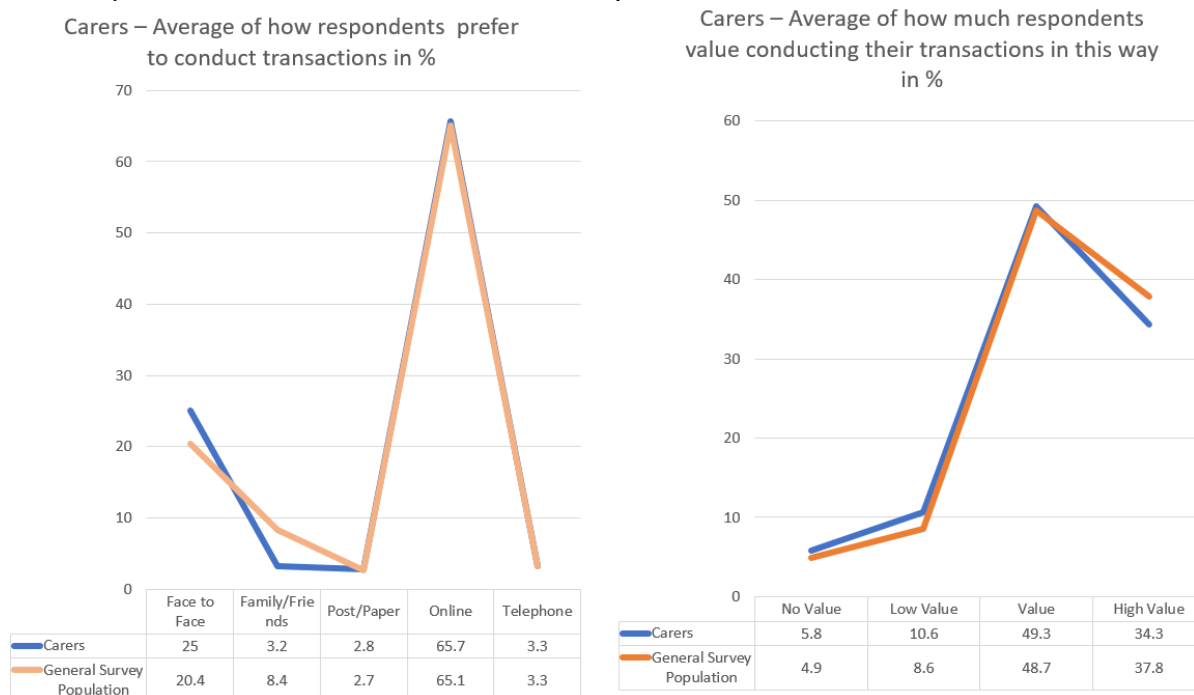
Those respondents who identified as Carers are more likely than the general population to conduct transactions and services face-to-face with 25% saying that is their preference across 17 transactions. However, unlike other groups analysed, the Carer group does not show a drop off in online consumption in favour of face-to-face activity. Instead, Carers appear to rely much less on family and friends for support and conduct activities themselves. Given they are caring for someone this is also likely to mean they conduct these transactions for the person being cared for.

The value of the preference is on a par with that of the general population and this means that the motivation to conduct business as they do currently is high to very high.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondent's level of satisfaction with their skill level and motivation to use it.

Table 70 Average percentage of internet skills amongst carers for different transactions and services in percentages

Skill level	Average percentage across 17 different transactions	General Survey Population
Yes	79.2%	74.2%
No but would like to learn how to	1.2%	1.2%
Yes but no intentions of doing so	16.4%	18.4%
No and no intentions of doing so	3.2%	6.2%

Carers demonstrated similar responses to the general survey population. Whilst the Carers have a slightly higher level of skills to conduct internet activities their willingness to learn or use those skills shows the same lack of motivation issues as in the general survey population.

E-Mail

Access

Table 71 Access to e-mail amongst carers

Carers	Number of respondents with no e-mail address	% non-users in carer population	% non-users against total survey respondents
Carer Group	18	10.7%	2.0%
General Survey Population	145	-	16.1%

Similar to mobile phone and internet access, Carers appear to have better access than the general population, suggesting greater levels of digital inclusion.

Frequency

Table 72 Frequency of use of e-mail by Carers in percentages

Carers	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Never	Prefer not to say
Carer Group	81.5	13.2	2.6	1.3	0.7	0.0
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

Carers also use their e-mail much more than the general survey population and the patterns in the mobile phone and internet data on access and frequency of use are repeated here.

There is some additional data on carers in Appendix 5.

5.8 Sex

ACCESS	MOTIVATION	SKILL
• Access to higher quality devices may be worse for females • Device ownership is at similar levels to the general survey population	• Preference for face-to-face transactions is around 20% for both sexes • Slightly more males are unwilling to use/learn to use the internet	• Neither females or males show a need for learning how to use the internet for activities (only 1.2%)
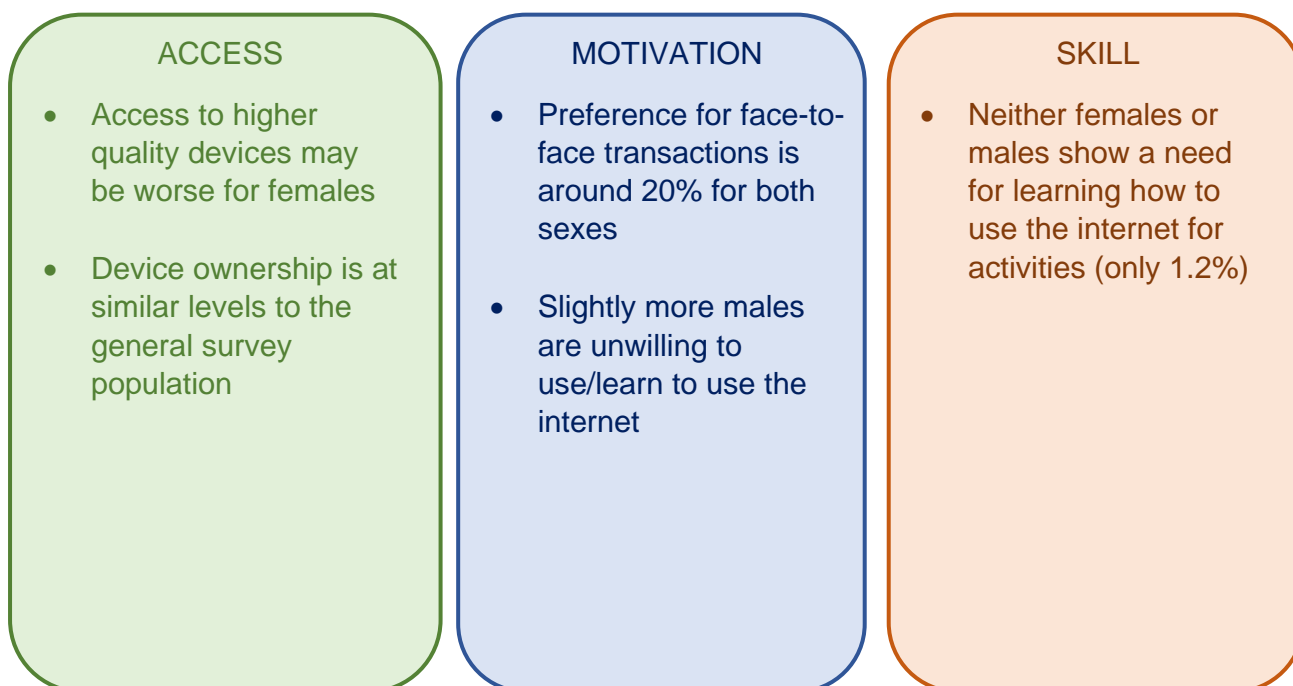
Introduction

The analysis in this section focuses on the sex of respondents. The number of respondents who have identified as 'other' or 'prefer not to say' are too few in numbers. As such, this data cannot be analysed as it lacks statistical significance and may lead to the identification of individuals.

Multivariate analysis might also consider comparator issues such as income, household type, relationship status and benefit status.

Demographic Data

Table 73 Number of respondents by Sex

Sex	Number	Percentage of survey sample
Female	524	59.1%
Male	343	38.7%
Prefer not to say/Other	20*	2.3%

The sample size is skewed slightly towards female respondents against the Dumfries and Galloway population statistics which show 51.3% female and 48.7% male (National Records for Scotland, 2021).

As female and male respondents account for 97.8% of the results analysed in this section, we would expect to see consistent patterning of results with the general survey population and where there are variations against the general population the divergence would be in both groups. For example, if more females have access to a mobile phone than the

general survey population we would expect a see-saw affect and male respondents would have lower access.

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Female respondents have slightly lower access to a mobile phone. This is replicated in the data on those who are digitally excluded in section 5.16. This is predominantly driven by a small number in the 80+ age group who are widowed and do not have access to a mobile phone.

Table 74 Numbers with access to a mobile phone by sex

Sex	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Female	485	7	92.3%	32
Male	323	5	97.6%	15
General Survey Population	836	13	95.7%	38

Frequency

However, female respondents who do have a mobile phone are slightly more likely to use it regularly than male respondents.

Table 75 Frequency of use of mobile phone by sex in percentages

Sex	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	don't know	Never
Female	62.9	23.1	8.9	1.6	2.2	0.6	0.6
Male	58.4	25.7	9.8	1.9	2.3	0.0	1.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

This frequency pattern is replicated in data on the usage of mobile phones for voice calls with female respondents slightly more likely to make voice calls daily than males.

Table 76 Frequency of use of mobile phone for voice calls by sex in percentages

Sex	Frequency of usage of mobile phone for voice calls			
	Daily	Weekly	Monthly	Never/Yearly
Female	74.3	17.8	4.6	3.4
Male	70.6	20.9	4.9	3.7
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

Access to the internet is slightly higher amongst female respondents than males but this is not replicated in frequency of use by those with access.

Table 77 Numbers with access to the internet by sex

Sex	Number of respondents with internet access	Number of respondents with access to internet through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
Female	456	38	94.3%	30
Male	301	17	90.1%	25
General Survey Population	771	59	93.6%	57

Frequency

Male respondents are slightly more likely to use the internet on a more frequent basis than females. Female respondent numbers with internet access may be higher but there are more females who do not use their internet access. There are circa 5.3% of female respondents who do not use the internet even though they have access compared with 4.0% of men.

Table 78 Frequency of internet use by sex in percentages

Sex	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Female	84.2	7.5	2.4	0.6	5.3
Male	87.3	7.5	1.2	0.0	4.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

Table 79 Number of devices per head of household by sex

Sex	computer/laptop	tablet	voice device	TV smart	fit bit/watch	other (usually mobile)
Female	1.1	1.1	0.7	1.0	0.6	1.7
Male	1.5	1.4	0.8	1.1	0.5	1.7
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Male respondents are more likely to have a computer, laptop, tablet and/or iPad in their household than female respondents. This suggests that the quality of access through screen size and the regularity of the availability of the device is more likely better for males. This is at best a tentative finding and would need to be explored with multivariate household number comparisons. At this stage the result could equally demonstrate that males are more likely than females to remember what technology is in their respective households and this counter assumption cannot be eliminated through univariate analysis.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Sex – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Female	21.7	7.7	3	63.3	4.3
Male	18.9	11.7	2.6	64.1	2.7
General Survey Population	20.4	8.4	2.7	65.1	3.3

Female — Male — General Survey Population

Sex – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
Female	5.2	10.3	57.9	26.6
Male	5.9	10.1	50.9	43.1
General Survey Population	4.9	8.6	48.7	37.8

Female — Male — General Survey Population
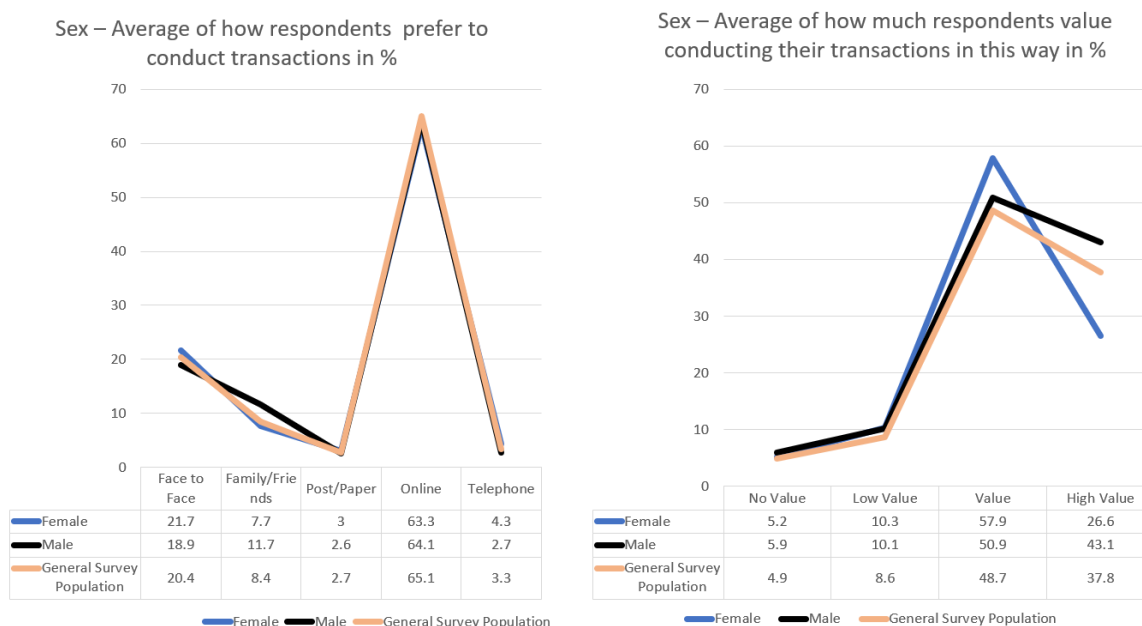
The graphs above clearly demonstrate the consistent patterning of results and the see-saw effect mentioned above. The graph on the left considers preference for how services are consumed, and transactions conducted and shows a clear and consistent patterning of results. Showing no discernible difference between female, male and general survey populations. Whereas the graph on the right, considering how highly these preferences are valued, demonstrates the see-saw effect between the two sexes.

The data itself tells us that the preference for online transactions and consumption is at circa two-thirds of all three groups (female, male and general). With around 20% of all three groups preferring face-to-face interactions to online. The data on the right shows that all three groups strongly value or value the way they conduct their transactions presently. This suggest that these preferences are likely to be difficult to change and perhaps even more so in male respondents.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 80 Average percentage of internet skills across different transactions and services by sex in percentages

Skill level	Female	Male	General Survey Population
Yes	75.4%	72.2%	74.2%
No but would like to learn how to	1.2%	1.3%	1.2%
Yes but no intentions of doing so	16.8%	20.5%	18.4%
No and no intentions of doing so	6.7%	5.9%	6.2%

There is clear and consistent patterning occurring in this data. The data shows that there are around 92% of all three groups (female, male and general survey population) say 'Yes' to having the skills needed for their activities on the internet. Although male respondents have slightly more reluctance to want to use them. There are circa 6% of all three populations who have no intention of learning how to and then using the internet and circa 1.2% interested in acquiring the skills to conduct transactions and activities (circa 6 female and 3 male respondents). The issue is therefore predominantly about motivation with around 25% of each group either not wanting to use and/or not wanting to learn to use the internet for activities.

E-Mail

Access

Table 81 Numbers with access to e-mail by sex

Sex	Number of respondents with no e-mail address	% non-users in their own sex group	% non-users against total survey respondents
Female	93	17.7% of females	10.4%
Male	58	16.9% of males	6.5%
General Survey Population	145	-	16.1%

There are similar percentages of female and male respondents who do not have access to an e-mail account with circa 17% of all three population groups having no e-mail account.

> *My Wife does any emailing to family and friends*

Frequency

Table 82 Frequency of use of e-mail by sex in percentages

Sex	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Never	Prefer not to say
Female	74.1%	16.3%	5.7%	0.2	2.8	0.9
Male	69.9%	17.8%	6.6%	1.4	2.4	1.7
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

Of respondents with an e-mail account, females are slightly more frequent users. There are circa 23 respondents who never use their e-mail account and when this is added to circa 145 respondents with no e-mail account equates to nearly 20% of the general survey population without an active e-mail account.

There is some additional data on the sex category in Appendix 5.

5.9 Sexual Orientation

ACCESS	MOTIVATION	SKILL
• Access is higher for LGBTQ+ than the general population • Device quality is likely to be higher • E-mail access is much higher than general survey population	• LGBTQ+ group more likely to use their mobile phone than others • More preference for online transactions than general survey population and self-reliant.	• Higher level of skill than the general survey population
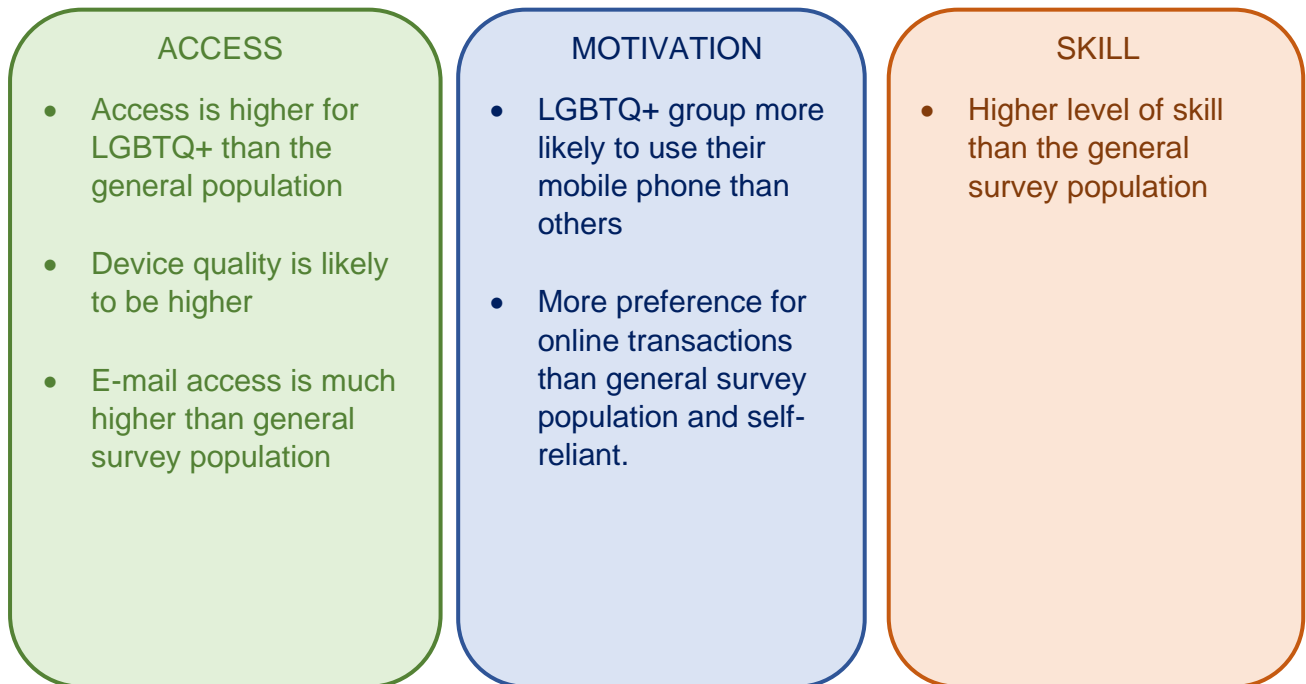
Introduction

The analysis in this section focuses on sexual orientation. The respondents were asked "Which of the following best describes your sexual orientation?"

Responses were:

- Bisexual
- Don't know
- Gay or Lesbian
- Other sexual orientation
- Prefer not to say
- Straight or Heterosexual

Demographic Data

Respondents with sexual orientation other than straight/heterosexual equate to 6.8% of the overall survey population. The sample sizes for each distinct group are not large enough to make significant statistical analysis possible. Samples are not representative of the general population of the region and small numbers of respondents may result in the possibility of individual identification. However, it is possible to group the LGBTQ+ survey population together into one category to create a more meaningful sample size and to consider statistical patterns. As the straight/heterosexual respondents are 84% of the total sample size we have used the general survey population data as our comparator in analysis.

Table 83 Number of respondents by sexual orientation

Sexual Orientation	Number of respondents	Percentage of respondents
Heterosexual	745	84.0%
Bisexual	26	2.9%
Gay/Lesbian	27	3.0%
Other Sexual Orientation	8	0.9%
Prefer not to say	71	8.0%
Don't Know	10	1.1%

The "Prefer not to say" respondents' figure of 8% is higher than for most other questions but it is not possible to differentiate whether that is an objection to the question, a reluctance to respond openly or both.

Therefore, moving forward with the analysis, the demographic data for LGBTQ+ respondents is 61 people at 6.8% of the survey population.

Those who respond **'prefer not to say'** are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Access to a mobile phone is slightly higher in the LGBTQ+ group than in the general survey population but this is not a significant difference.

Table 84 Numbers with access to a mobile phone by sexual orientation

Sexual Orientation	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
LGBTQ+	58	1	96.7%	2
General Survey Population	836	13	95.7%	38

Frequency

Frequency of use of a mobile phone is significantly higher in the LGBTQ+ respondent's group than the general survey population and this group would appear to have relatively high inclusivity/connectivity through mobile phones.

Table 85 Frequency of use of mobile phone by sexual orientation in percentages

Sexual Orientation	Frequency of mobile phone usage in %					
	Daily	Weekly	Monthly	Yearly	Don't Know	Never
LGBTQ+	72.9	22.0	5.1	0.0	0.0	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0

Voice Calls

> *For social reasons-keeping in touch with friends/family*

The pattern in mobile phone usage is not evident in voice calling from a mobile and therefore the high average of mobile phone usage is driven by internet usage. This suggest that the LGBTQ+ population use their mobile phones more than other groups for accessing the internet.

Table 86 Frequency of use of mobile phone for voice calls by sexual orientation in percentages

Sexual Orientation	Frequency of mobile phone usage for voice calls in %			
	Daily	Weekly	Monthly	Yearly
LGBTQ+	72.9	22.0	5.1	0.0
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

Internet access is similar between the LGBTQ+ respondent group and the general survey population and there is little discernible difference.

Table 87 Numbers with access to the internet by sexual orientation

Sexual Orientation	Number of respondents with internet access	Number of respondents with access to someone else's internet	Percentage of respondents with some form of access to the internet	No access to the internet
LGBTQ+	55	2	93.4%	4
General Survey Population	771	59	93.6%	57

Frequency

However, frequency of internet usage is significantly higher amongst the LGBTQ+ group than the general survey population and this finding supports our early assumption on mobile phones being used to access the internet.

Faster and more reliable connectivity

Table 88 Frequency of use of the internet by sexual orientation in percentages

Sexual Orientation	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
LGBTQ+	94.8	5.2	0.0	0.0	0.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

LGBTQ+ respondents also reported a slightly higher number of devices per head of household than the general survey population. In particular, access to computers and laptops is likely to demonstrate a higher quality of access. The numbers also suggest that there is less need for LGBTQ+ respondents to share devices than in other households.

Table 89 Number of devices per head of household by sexual orientation

Sexual Orientation	computer/laptop	tablet	voice device	TV smart	fit bit / watch	other (usually mobile)
LGBTQ+	1.6	1.0	0.7	1.1	0.6	2.0
General Survey Population	1.4	1.1	0.7	1.0	0.5	**1.7**

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 20 and 21 Preference and value placed on transactions and services

LGBTQ+ – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
LGBTQ+	15.4	6.1	3	78.4	1.1
General Survey Population	20.4	8.4	2.7	65.1	3.3

LGBTQ+ – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
LGBTQ+	6.6	8.1	50.5	34.8
General Survey Population	4.9	8.6	48.7	37.8
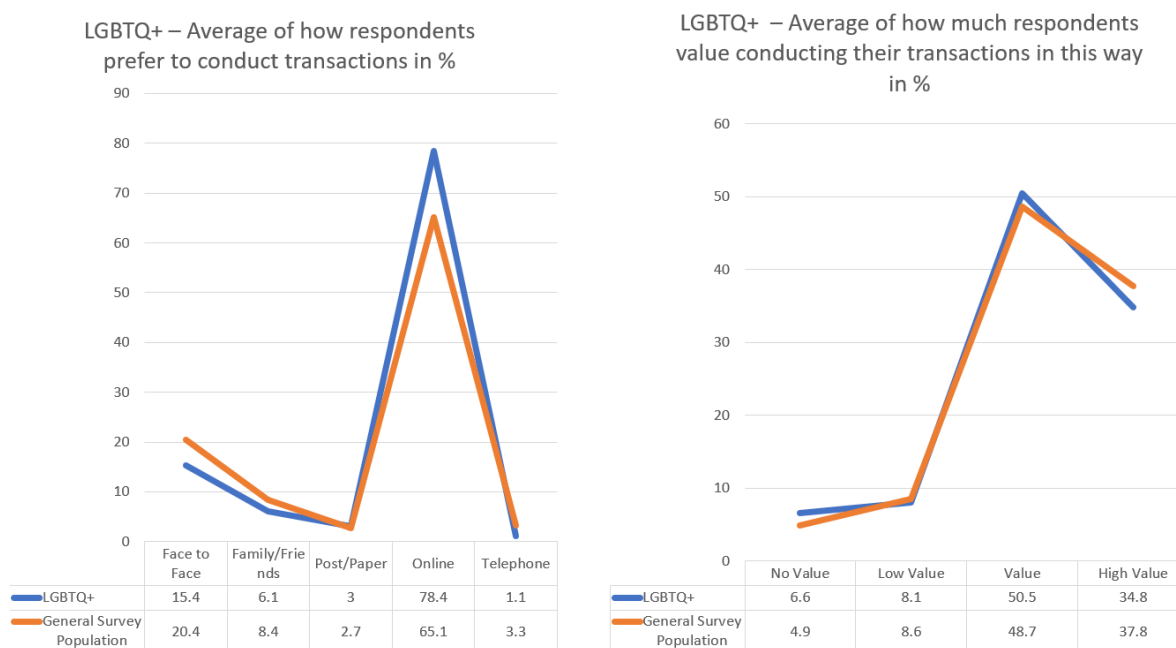
The preference for LGBTQ+ respondents is to access services online against the overall average for the general survey population and with slightly lower preference for face-to-face and dependence on family and friends. The data also suggests that the LGBTQ+ respondent group may be more "tech-savvy" than the general survey population.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 90 Average percentage of internet skills across different transactions and services by sexual orientation in percentages

Skill level	LGBTQ+	General Survey Population
Yes	81.5	74.2
No but would like to learn how to	2.1	1.2
Yes but no intentions of doing so	15.9	18.4
No and no intentions of doing so	0.5	6.2

Overall, the LGBTQ+ respondents to the survey are slightly more comfortable with their perceived skills at using the internet than the general survey population. This corresponds with a stronger preference to use the internet for transactions and services over the general survey population. Whilst there appears to be a slightly higher willingness to learn new skills, 2.1% only equates to one or two respondents on average. The good news from this data is that LGBTQ+ respondents appear to have already learned the skills they need for online activity and even the resistance to using those skills is lower.

E-Mail

Access

Access to an e-mail account is much higher in the LGBTQ+ respondent group. Compared to the general survey population.

Table 91 Numbers with access to e-mail by sexual orientation

Sexual Orientation	Number of respondents with no e-mail address	% non-users in LGBTQ+ population	% non-users against total survey respondents
LGBTQ+	4	6.6%	0.4%
General Survey Population	145	-	16.1%

Frequency

However, frequency of usage of e-mail by LGBTQ+ respondents is on a par with other respondents

Table 92 Frequency of use of e-mail by sexual orientation in percentages

	Frequency of e-mail use in %				
Sexual Orientation	Daily	Weekly	Monthly	Yearly	Never
LGBTQ+	70.2	21.1	8.8	0.0	0.0%
General Survey Population	71.8	17.0	6.2	0.7	2.6

There is some additional data on sexual orientation in Appendix 5.

5.10 Relationship Status

Introduction

Relationship status is a useful category at a multivariate level of analysis as it is often coupled with, or impacts upon, other factors such as age and income and children's access to technology. The relationship data has therefore been employed to provide further clarity of understanding in other categories.

- In the age category data, it was possible to analyse the numbers of widows and widowers who live alone and have limited or no access.
- In household category data it was possible to analyse variance between the access of children and the impact of single versus dual adult households.

Further levels of analysis have not been conducted here. See household income (section 5.2) and Accommodation Type (section 5.6) to show how income and occupancy numbers have a more critical impact.

In addition, the relationship status data is complex. For example, the term "single" may be used by respondents who live in a multiple occupancy context, with their parents or live alone. This makes it much harder to analyse the relationship data as a univariate category.

Demographic Data

Table 93 Numbers by relationship status

Relationship status	Number	Percentage of survey population
Married/Civil Partnership/Cohabiting	423	48.2%
Single	249	28.8%
Widowed	108	12.3%
Divorced/Separated	73	8.3%
Prefer not to say	34	3.9%

5.11 Benefits/ Working Status

ACCESS	MOTIVATION	SKILL
• Fewer devices than survey population • Similar levels of access	• Slightly less likely to use their e-mail • More preference for face-to-face transactions than survey population • Otherwise, similar levels of motivation to use.	• Similar levels of skill to general survey population
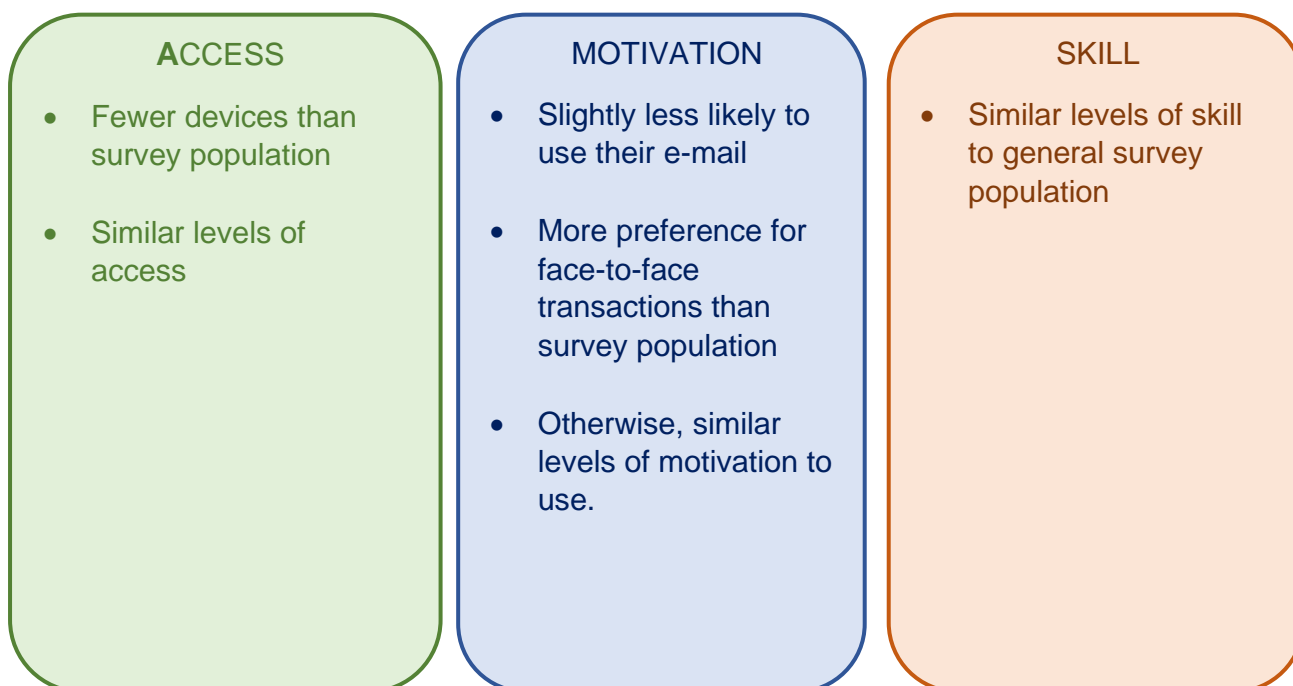
Introduction

The analysis in this section focuses on two groups:

1) The total population of everyone who is in receipt of a benefit or benefits.
2) A subset group of those respondents on ESA/JSA and UC who are "looking for work" (19) and those "not working" (115).

The data on benefits is highly complex due to the fact many people are in receipt of multiple benefits and this would require multivariate analysis. In addition, benefits is a secondary category to other factors such as age, disability and income. Analysis of age has already captured those receiving state pension benefits and many of these retired respondents are in receipt of attendance allowance. Analysis of disability has captured those who are in receipt of benefits such as PIP and DLA. Analysis of income also demonstrates cross over with the benefits group.

Demographic Data

Table 94 Numbers by benefit status

Benefits	Number	Percentage of survey sample
All Benefits	494[#]	56.3%
Not Working/ Looking for work	134[+]	15.3%
Not on any benefits	275	31.3%
Prefer not to say/Don't Know	118	13.4%

[#] "All benefits" includes any respondent on a benefit of any kind and includes those looking for work or not in work.

+ "Not working/Looking for work is a subset of "All Benefits" and is included in that figure.

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Table 95 Numbers with access to a mobile phone by benefit status

Benefits	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
All Benefits	460	7	94.5%	27
Not Working/ Looking for work	128	2	98.5%	2
General Survey Population	836	13	95.7%	38

> *Use mobile, I do not own any other devices and can't afford internet service at home*

Respondents on benefits with access to a mobile phone are on a level with the general survey population. Those respondents who are not in work/seeking work are slightly more likely to have access to a mobile phone.

Frequency

Table 96 Frequency of use of mobile phone by benefit status in percentages

Benefits	Frequency of mobile phone usage in %						
Benefits	Several times a day	Daily	Weekly	Monthly	Yearly	don't know	Never
All Benefits	53.6	27.9	12.1	1.9	2.6	1.3	0.0
Not Working/ Looking for work	66.9	22.3	6.9	0.0	1.5	1.5	0.5
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Those respondents who are not in work/seeking work use a mobile phone more frequently. However, in general the patterns between benefit groups and the general survey population are broadly similar.

Voice Calls

Table 97 Frequency of use of mobile phone for voice calls by benefit status in percentages

Benefits	Frequency of usage of mobile phone for voice calls			
Benefits	Daily	Weekly	Monthly	Never/Yearly
All Benefits	71.3	19.3	5.1	4.3
Not Working/ Looking for work	75.4	17.7	3.8	3.1
General Survey Population	74.7	17.7	4.4	3.2

Patterns of call frequency are again similar for benefits groups and the general survey population are similar.

Access

Table 98 Numbers with access to the internet by benefit status

Benefits	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
All Benefits	421	31	91.5%	42
Not Working/ Looking for work	118	12	97.0%	4
General Survey Population	782	59	93.7%	57

Access to the internet is slightly higher for those not in work or seeking work. Benefits groups in general are on a par with the general survey population.

Frequency

Table 99 Frequency of use of internet by benefit status in percentages

Benefits	**Frequency of internet use in %**				
	Daily	Weekly	Monthly	Yearly	Never
All Benefits	80.1	9.2	2.4	0.3	8.1
Not Working/ Looking for work	83.2	12.2	1.5	0.0	3.1
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

The table below shows the number of devices per person in each household.

Table 98 Number of devices per head of household by benefits band

Benefits	comp/laptop	tablet	voice device	TV smart	fit bit / watch	other (usually mobile)
All Benefits	0.9	1.0	0.6	0.9	0.4	1.1

Not Working/ Looking for work	1.0	0.9	0.7	0.8	0.3	1.4
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Those on benefits are less likely to have devices than the general population. This is consistent with some of the age and income data.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 22 and 23 Preference and value placed on transactions and services

Benefits – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
All Benefits	22.9	8.6	1.7	62.5	4.3
Looking for/Not in Work	26	6.7	1.3	61.5	4.4
General Survey Population	20.4	8.4	2.7	65.1	3.3

Benefits – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
All Benefits	5.414634146	8.243902439	47.3902439	38.95121951
Looking for/Not in Work	5	7.4	45	42.7
General Survey Population	4.9	8.6	48.7	37.8

Preferences for how services and transactions are consumed are consistent with the general population. However, both benefit groups are slightly more likely to prefer conducting their transactions face-to-face. The amount the respondents value consuming their services in this way is broadly consistent with the general population. The indication is that the method is highly valued or valued and suggests that there is a strong commitment to the preferences. This means more than 20% of the groups are keen to maintain face-to-face services and transactions.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is clearly a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 101 Average percentage of internet skills across different transactions and services by benefit status in percentages

Skill level	All Benefits	Not Working/ Looking for work	General Survey Population
Yes	71.5	78.7	74.2
No but would like to learn how to	1.1	1.2	1.2
Yes but no intentions of doing so	19.7	14.0	18.4
No and no intentions of doing so	7.7	6.1	6.2

The data for both benefit groups is like the general survey population.

More than 70% of respondents are happy with their ability to use the internet to conduct services and transactions. Which indicates they are happy with their level of capability.

There are around 1% of respondents who would like to learn and no more how to use the internet.

However, there are a further 6% or 7% who do not know how to conduct transactions online and have no motivation to learn how to.

Access

Table 102 Numbers with e-mail access by benefit status

Benefits	Number of respondents with no e-mail address	% non-users in their own benefit group	% non-users against total survey respondents
All Benefits	108	21.8%	12.0%
Not Working/ Looking for work	14	10.4%	1.6%
General Survey Population	145	-	16.1%

Those in receipt of benefits are slightly more likely to have an e-mail address than the general survey population and those not in work or seeking work are highly likely to have an e-mail address.

Frequency

Table 103 Frequency of use of e-mail by benefit status in percentages

Benefits	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	Prefer not to say	Never
All Benefits	69.9	19.2	5.7	0.3	0.6	4.4
Not Working/ Looking for work	65.0	23.1	7.7	0.0	0.9	3.4
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

Despite more people on benefits having an e-mail address, the frequency of usage of that e-mail address is lower than the general survey population. There is also more chance that those on benefits may never use that e-mail address suggesting a motivation issue rather than skills or access.

There is some additional data on the benefits group in Appendix 5.

5.12 Educational Level

ACCESS	MOTIVATION	SKILL
• Access decreases as education level gets lower • Device ownership decreases as education level gets lower • Quality of access may be lower due to availability of devices in lower education levels	• The higher educated are more frequent users of devices and internet • More preference for face-to-face transactions in the lowest education group • Lowest education group less likely to want to learn and use internet	• Internet usage skills rise in line with education level.

Introduction

The analysis in this section focuses on the highest level of education that respondents indicated they had achieved – primary, secondary, further education and higher education. Education may not be a key differentiator, but it may underpin household income in many cases. The results in this section may be as much related to income. Multivariate analysis may help clarify this point and might also look into other comparator issues such as age, household type and benefit status.

Demographic Data

Table 104 Numbers by education level

Education	Number	Percentage of survey sample
Primary	32	3.6%
Secondary	349	39.7%
Further Education	226	25.7%
Higher Education	226	25.7%
Prefer not to say	54	6.2%

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked

questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

I started using my phone first at school

Access to a mobile phone appears to follow the same pattern for most education groups. However, those who state that primary education is their highest level of education are much less likely to have access to a mobile phone. Those in the secondary education group form the largest part of the survey population and as a percentage of the general survey population they have the highest number of respondents with no access to a mobile phone.

Table 105 Numbers with access to a mobile phone by education

Education	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Primary	24	1	78.1%	7
Secondary	318	6	92.8%	25
Further Education	200	15	95.1%	11
Higher Education	221	5	100.0%	0
General Survey Population	836	13	95.7%	38

Frequency

The frequency of mobile phone usage appears to follow a pattern with usage increasing with education level. Higher Education respondents are 30% more likely to use their mobile phone several times a day or daily than those in the Primary education group. This pattern is also reflected in the numbers of those with access but who never use the mobile phone.

Table 106 Frequency of use of mobile phone by education level in percentages

Education	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	don't know	Never
Primary	26.9	26.9	34.6	3.8	0.0	3.8	3.8
Secondary	52.5	30.9	12.0	1.5	2.2	0.6	1.9
Further Education	63.2	22.3	6.4	2.7	0.0	2.7	2.7
Higher Education	76.5	15.0	4.4	1.8	2.2	0.0	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

For voice calls by mobile phone the Primary education group have much lower daily usage than other groups.

Table 107 Frequency of use of mobile phone for voice calls by education level in percentages

Education	Frequency of usage of mobile phone for voice calls			
	Daily	Weekly	Monthly	Never/Yearly
Primary	58.3	37.5	4.2	0.0
Secondary	86.7	4.3	5.7	3.2
Further Education	73.2	16.4	5.0	5.5
Higher Education	79.5	15.6	2.7	2.2
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

Started doing a Masters degree and needed internet for coursework.

Whilst internet access is similar across all education groups there is a slight variation by education level with primary having the lowest access and higher education highest.

Table 108 Numbers with internet access by education level

Education	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
Primary	22	5	84.4	5
Secondary	286	25	89.4	37
Further Education	200	15	95.1	11
Higher Education	221	5	100.0	0
General Survey Population	771	59	93.6	57

Frequency

The frequency of internet usage shows a similar pattern to that for mobile phone usage. There is a gap of 37% in daily usage between the higher education group and the primary education group. There are also a high number of those in the Primary education group who never use it even though they have access (22.2%).

Table 109 Frequency of use of internet by education level in percentages

Education	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Primary	59.2	3.7	1.1	3.7	22.2
Secondary	77.1	11.1	2.9	0.6	8.3
Further Education	89.8	6.0	1.4	0.5	2.3
Higher Education	96.5	3.5	0.0	0.0	0.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

The table below shows the number of devices per person in each household

Table 110 Number of devices per head of household by education level

Education	computer/laptop	tablet	voice device	TV smart	fit bit / watch	other (usually mobile)
Primary	0.8	0.7	0.3	0.6	0.3	1.4
Secondary	1.2	1.0	0.7	1.0	0.5	1.1
Further Education	1.5	1.3	0.9	1.1	0.6	1.9
Higher Education	1.8	1.3	0.8	1.1	0.7	1.8
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

The pattern of higher access and higher levels of education continues when we look at devices per head of household. The computer and laptop access and the wider choice of devices is much higher in the higher education group. This means that those with a higher level of education are much more likely to have regular access to a device and can choose to use a better-quality device.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Education - Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
General survey population	19.4	8.8	2.7	65.5	3.5
Primary	52	22	2.3	18.5	5.2
Secondary	24.7	15	2.4	52.3	5.6
Further Education	16.5	8.2	1.7	70.7	2.9
Higher Education	13.6	2.7	2	79	2.7
General Survey Population2	20.4	8.4	2.7	65.1	3.3

Legend: General survey population, Primary, Secondary, Further Education, Higher Education, General Survey Population2

Education – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
Primary	14.9	5.3	37.4	42.4
Secondary	5.2	10.4	46.7	37.7
Further Education	4.4	8.6	52.7	34.3
Higher Education	3.7	8.6	47.8	39.8
General Survey Population	4.9	8.6	48.7	37.8

Legend: Primary, Secondary, Further Education, Higher Education, General Survey Population
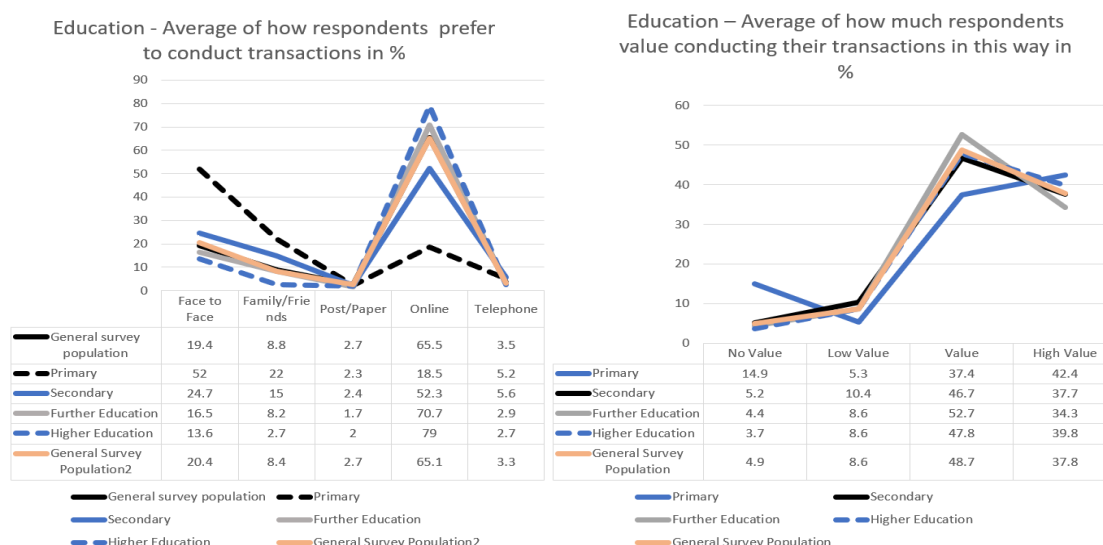
The general trends in the two graphs above follow similar paths with a few exceptions.

In preference for how transactions are conducted, and services are consumed, those with only a primary education are much more likely to prefer face-to-face interactions than other groups surveyed. There is also a link between level of education and preference to conduct services and transactions online. At the same time the primary education group appear to value that preference less than other groups and/or value the services themselves less.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 111 Average percentage of internet skills across different transactions and services by education level in percentages

Skill level	Primary	Secondary	Further Education	Higher Education	General Survey Population
Yes	41.4	66.9	77.3	88.9	74.2
No but would like to learn how to	3.7	1.5	1.2	0.3	1.2
Yes but no intentions of doing so	35.3	22.6	17.4	9.9	18.4
No and no intentions of doing so	19.6	9.0	4.6	0.8	6.2

Higher Education respondents are more likely to say yes to having the skills than those at lower levels of education. There is a more than 20% gap between higher education and primary education. The same pattern is visible in reverse order for those who have the skills but are not intending to use them. This applies more to the Primary education group and fits the pattern of a lack of internet usage. Of those with no intention to learn or use internet skills the lower education groups again tend to have the highest percentages.

E-Mail

Access

Access to e-mail demonstrates similar patterns to elsewhere in this data with education level linked to having an e- mail account. The higher the education level the higher the chance of having an e-mail account and of using it.

Table 112 Numbers with access to e-mail by education level

Education	Number of respondents with no e-mail address	% non-users in their own education band	% non-users against total survey respondents
Primary	18	56.2%	2.0%
Secondary	98	28.2%	10.9%
Further Education	18	8.0%	2.0%
Higher Education	1	0.6%	0.1%
General Survey Population	145	-	16.1%

Frequency

The frequency of use of e-mail accounts follows the same pattern as access to mobile phones and the internet with higher frequency of usage related directly to education level.

The Primary Education group are 56% less likely to use their e-mail daily than those with a higher education. There are also a larger number of respondents at lower education levels who never use their e-mail account.

Table 113 Frequency of use of e-mail by education level in percentages

	Frequency of e-mail use in %					
Education	Daily	Weekly	Monthly	Yearly	Prefer not to say	Never
Primary	35.7	14.3	28.6	0.0	14.3	7.2
Secondary	64.1	24.0	6.0	1.2	1.8	3.0
Further Education	73.9	17.8	3.9	0.6	2.2	1.7
Higher Education	92.0	6.2	1.3	0.0	0.0	0.4
General Survey Population	71.8	17.0	6.2	0.7	2.6	1.8

There is some additional data on education in Appendix 5.

5.13 Ethnicity

ACCESS	MOTIVATION	SKILL
• Mobile and internet usage is more frequent for BAME+ group • Voice calls are higher in the BAME+ group • Access to devices is similar between groups	• BAME+ group much more preference for face-to-face transactions and self-reliant. BAME+ show much less desire to use their internet skills	• BAME+ group has a slightly higher level of skill.
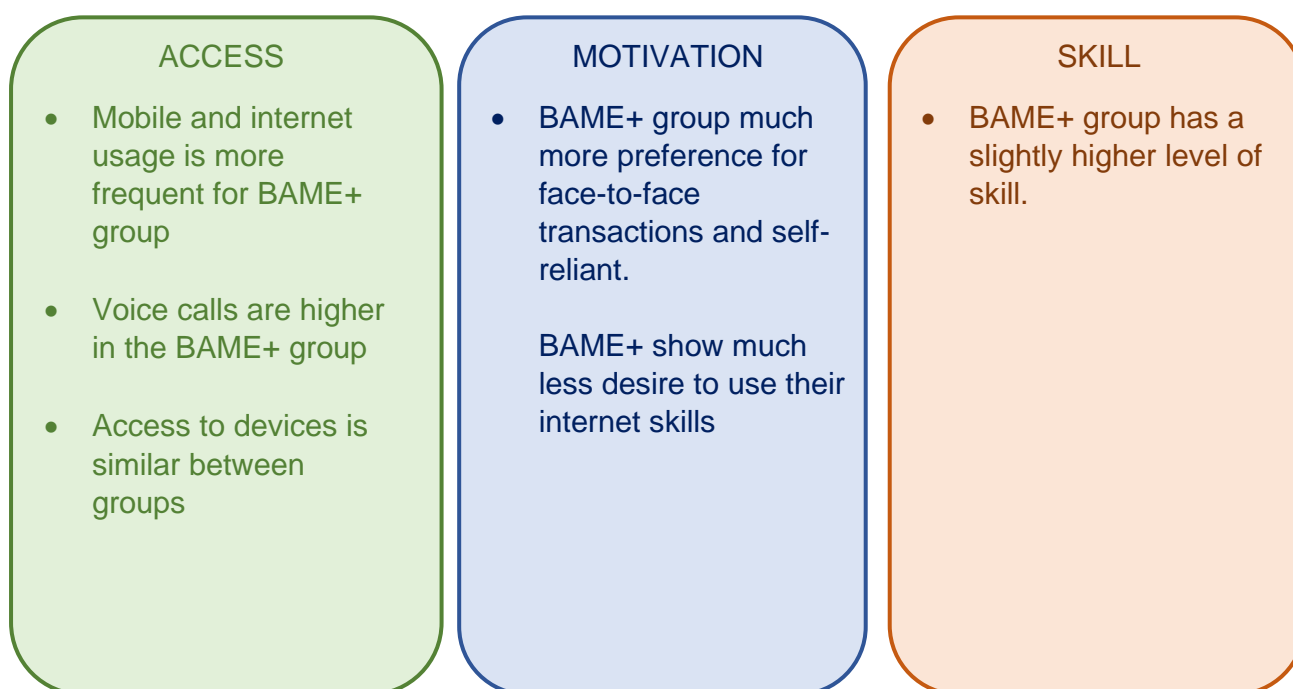
Introduction

The analysis in this section focuses on ethnicity. Respondents were asked "what is your ethnicity?"

Responses were:

- WHITE (White British/Any other white background)
- MIXED (White & Black Caribbean, White & Black African, White & Asian, Any other mixed background)
- EUROPEAN (self-declared)
- ASIAN/BRITISH ASIAN (Indian, Pakistani, Bangladeshi & Any other Asian background.)
- MIDDLE EAST AND ARABIC (Middle Eastern, including Arabic origin.)
- CHINESE/BRITISH CHINESE (Chinese, Any other background)
- BLACK/BLACK BRITISH (Caribbean, African, Any other black background)
- PREFER NOT TO SAY

Due to the small number of respondents in each category and therefore the lack of significance in the data sample, it was not possible to analyse all subsets in the ethnicity data as any inferences drawn would not be statistically sound or meaningful. The analysis has therefore focused on two groups:

- WHITE (White British/Any other white background)
- BAME+ (all other ethnicities).

Multivariate analysis might also look into comparator issues such as language, religion etc.

Demographic Data

Table 114 Numbers by ethnicity

Ethnicity	Number	% of survey population
WHITE (White British/Any other white)	840	95.7
MIXED (White & Black Caribbean, White & Black African, White & Asian, Any other mixed background)	13	1.5
EUROPEAN (self-declared)	5	0.6
ASIAN/BRITISH ASIAN (Indian, Pakistani, Bangladeshi & Any other Asian background.)	5	0.6
MIDDLE EAST AND ARABIC (Middle Eastern, including Arabic origin.)	5	0.6
CHINESE/BRITISH CHINESE (Chinese, Any other background)	3	0.3
BLACK/BLACK BRITISH (Caribbean, African, Any other black background)	2	0.2
PREFER NOT TO SAY	14	1.6

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Access patterns are slightly higher in the BAME+ group but not significantly so.

Table 115 Numbers with access to a mobile phone by ethnicity

Ethnicity	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
WHITE	781	13	94.5%	46
BAME+	30	0	96.8%	1
General Survey Population	836	13	95.7%	38

Frequency

However, of those with access to a mobile phone there is a significantly higher frequency amongst BAME+ respondents than the White group. This is consistent with data in the language section (Section 5.5) and there may be a correlation

Table 116 Frequency of use of mobile phone by ethnicity in percentages

Ethnicity	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	don't know	Never
WHITE	60.5	24,5	10.0	1.9	0.1	0.0	3.0
BAME+	71.0	29.0	0.0	0.0	0.0	0.0	0.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

This increased frequency of mobile usage is replicated in the data on voice call frequency, with the BAME+ group around 20% more likely to make voice calls daily.

Table 117 Frequency of use of mobile phone for voice calls by ethnicity in percentages

Ethnicity	Frequency of usage of mobile phone for voice calls in %			
	Daily	Weekly	Monthly	Never/Yearly
WHITE	74.0	18.3	4.4	3.3
BAME+	93.5	3.2	3.2	0.0
General Survey Population	74.7	17.7	4.4	3.2

Access

> *I forget how to get to the right place it's too complicated*

Internet access is slightly higher in the BAME+ group, although attempting to extrapolate to the wider BAME+ community in the region would not be helpful given the small sample size.

Table 118 Numbers with access to the internet by ethnicity

Ethnicity	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
WHITE	783	57	93.3%	56
BAME+	30	1	100.0%	0
General Survey Population	771	59	93.6%	57

Frequency

The data on frequency of use of the internet shows similar patterns to the use of mobile phones with the BAME+ respondents much more likely to use the internet daily than the white group of respondents. Again, this may well corelate with data in section 5.5 on language and multivariate analysis may be useful here.

Table 119 Frequency of use of internet by ethnicity in percentages

Ethnicity	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
WHITE	83.4	7.5	1.9	0.1	4.6
BAME+	100.0	0.0	0.0	0.0	0.0
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

Table 120 Number of devices per head of household by ethnicity

Ethnicity	computer/laptop	tablet	voice device	TV smart	fit bit / watch	other (usually mobile)
WHITE	1.4	1.1	0.7	1.0	0.5	1.7
BAME+	1.4	0.6	0.3	0.8	0.5	2.8
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Patterns in this data are broadly similar with the exceptions of access to tablets and mobile phones. There is greater access to mobile phones in the BAME+ group and a much lower level of access to tablets. Thus, quality of access is slightly worse. However, the computer/laptop data is comparable and may offset this issue.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 26 and 27 Preference and value placed on transactions and services

Ethnicity – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
WHITE	19	8.9	2.6	66	3.5
BAME+	32.4	9.6	2.7	51.9	3.3
General Survey Population	20.4	8.4	2.7	65.1	3.3

Ethnicity – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
WHITE	5	9.2	48.5	37.2
BAME+	0.3	10.9	49	39.9
General Survey Population	4.9	8.6	48.7	37.8
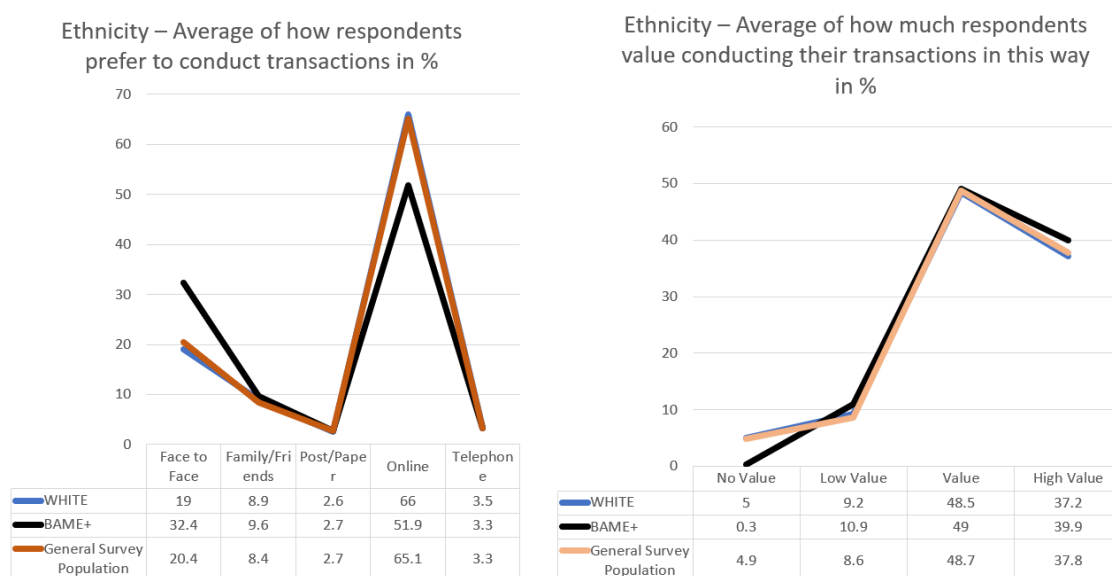
The general survey population and white respondents overlap on the graph on preference (left). However, the graph shows that BAME+ respondents are more likely to prefer face-to-face transactions than the other groups. With more than 32% preferring face-to-face methods of conducting transactions and consuming services. This pattern is also clear in the language data in section 5.5 and reinforces the view that there may be a correlation between the two groups and results. All groups (White, BAME+ and General) show a strong desire and value is placed upon the chosen preference for conducting activities.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 121 Average percentage of internet skills across different transactions and services by ethnicity in percentages

Skill level	WHITE	BAME+	General Survey Population
Yes	74.9	60.1	74.2
No but would like to learn how to	1.1	3.0	1.2
Yes but no intentions of doing so	17.8	28.7	18.4
No and no intentions of doing so	6.2	8.3	6.2

Whilst around 88% of BAME+ respondents say "yes" they can use the internet to conduct activities, there is a much higher number of people within that group who are not prepared to use those skills (28.7). This is consistent with the preference data above. The figure for BAME+ respondents of 3% needs to be put into context as this equates to circa one or two people per activity. The issue would still appear to be motivation for all 3 groups (White, BAME+ and General population) with 24% of White respondents and 37% in the BAME+ group who have no intention to use or learn to use online services/transactions.

E-Mail

Access

There is little to differentiate between White, BAME+ and General Survey population respondents on access to an e-mail account.

Getting too many junk mails

Table 122 Numbers with access to e-mail by ethnicity

Ethnicity	Number of respondents with no e-mail address	% non-users in their own age band	% non-users against total survey respondents
WHITE	144	17.1%	16.0%
BAME+	5	16.1%	0.6%
General Survey Population	145	-	16.1%

Frequency

Of those with an e-mail address the BAME+ group may be less likely to use their e-mail account than the White group. Otherwise, frequency of usage shows similar patterns.

Table 123 Frequency of use of internet by ethnicity in percentages

Ethnicity	Frequency of e-mail use in %				
	Daily	Weekly	Monthly	Yearly	Never
WHITE	72.5	17.0	6.0	0.7	3.9
BAME+	67.9	17.9	7.1	0.0	7.1
General Survey Population	71.8	17.0	6.2	0.7	2.6

There is some additional data on ethnicity in Appendix 5.

5.14 Religion

ACCESS	MOTIVATION	SKILL
• Access to a mobile phone and frequency of its use is higher amongst Muslim respondents • Devices such as laptops and tablets are much less likely in Muslim households	• Muslim respondents less likely to use their e-mail account • Muslim respondents much higher preference for face-to-face transactions • Motivation to use the internet is an issue for all groups.	• Perceived skill levels high and little interest in learning how to use the internet for activities.

Introduction

The analysis in this section focuses on religion. The respondents were asked "what is your religion (if any)?"

Multivariate analysis might also look into comparator issues such as ethnicity, language, income, household type.

Due to the lack of significance in the data sample it was not possible to analyse all subsets in the religion data set as any inferences drawn would not be statistically sound or meaningful. The analysis has therefore focused on 4 groups.

- **Christian** (Church of Scotland, Roman Catholic, Other Protestant and all other Christian denominations)
- **No religion/atheist/agnostic**
- **Muslim**
- **Other** (this includes all other denominations)

Demographic Data

Table 124 Numbers by religion

Religion	Number	Percentage of survey sample
Christian (Church of Scotland, Roman Catholic, Other Protestant and all other Christian denominations)	455	51.8%
No religion/atheist/agnostic	293	33.3%
Muslim	27	3.1%
Buddhist	15	1.7%
Pagan	6	0.7%
Spiritualist	6	0.7%
Baha'i	2	0.2%
Humanist	2	0.2%
Celtic - earth/air/nature	1	0.1%
Hindu	1	0.1%
Shinto	1	0.1%
LaVeyan Satanism	1	0.1%
Prefer not to say	77	8.8%

Those who respond *'prefer not to say'* are shown in the demographic data in the table above but are not included in any of the subsequent analysis.

Those with no access to a mobile and/or internet and/or e-mail were asked the reason why they don't have access. These responses are covered in the qualitative analysis data (see section 5.17). Given these respondents do not have access, they were not asked questions about their usage of devices and/or online services. As 6% of the general survey population are without internet access this means they are not included in the numbers below. We need to consider this when discussing consumption and frequency of online services and transactions. As a result, figures for offline interactions and/or actions conducted by friends and family are likely to be higher. The specific data concerning this group of respondents is shown in section 5.16 "Digitally Excluded".

Those with access were then asked all subsequent questions beyond the demographic ones. The percentages in the following tables are for those with access who responded to the question.

Mobile

Access

Access to a mobile phone is broadly similar across all religious groups and there are no significant variations in the data.

Table 125 Numbers with access to a mobile phone by religion

Religion	Number of respondents with a mobile phone	Number of respondents with access to someone else's mobile phone	Percentage of respondents with some form of access to a mobile phone	No access to a mobile phone
Christian	411	9	92.3%	35
No religion/ atheist/agnostic	286	2	97.6%	7
Muslim	27	0	100.0%	0
Other	33	0	94.3%	2
General Survey Population	836	13	95.7%	38

Frequency

However, frequency of use of mobile phones is much higher in those with no religion/ atheist/agnostic and slightly higher in the Muslim respondents.

Table 126 Frequency of use of mobile phone by religion in percentages

Religion	Frequency of mobile phone usage in %						
	Several times a day	Daily	Weekly	Monthly	Yearly	don't know	Never
Christian	55.3	26.1	10.9	2.6	0.2	0.0	4.8
No religion/ atheist/agnostic	71.4	17.8	7.3	1.4	0.0	0.0	2.1
Muslim	66.7	33.3	0.0	0.0	0.0	0.0	0.0
Other	54.5	39.4	3.0	0.0	0.0	0.0	3.0
General Survey Population	60.9	23.9	9.3	1.8	2.1	1.0	1.1

Voice Calls

Frequency of voice calls is much higher in the Muslim respondent's group and this is comparable with data found in both the language and ethnicity data and there may be a link or correlation between the univariate data sets.

Table 127 Frequency of use of mobile phone for voice calls by religion in percentages

Religion	Frequency of usage of mobile phone for voice calls			
	Daily	Weekly	Monthly	Never/Yearly
Christian	71.9	18.3	6.2	3.6
No religion/ atheist/agnostic	77.3	17.8	2.8	2.1
Muslim	100.0	0.0	0.0	0.0
Other	79.4	11.8	5.9	2.9
General Survey Population	74.7	17.7	4.4	3.2

Internet

Access

need a laptop

Internet access is slightly lower in the Christian respondents group compared to the other groups, but this does appear to be a significant shift.

Table 128 Numbers with internet access by religion

Religion	Number of respondents with internet access	Number of respondents with internet access through someone else	Percentage of respondents with some form of access to the internet	No access to the internet
Christian	383	30	91.0%	41
No religion/ atheist/agnostic	271	13	96.9%	9
Muslim	21	5	96.3%	1
Other	32	2	94.4%	2
General Survey Population	771	59	93.6%	57

Frequency

Again, frequency of usage is much higher in the Muslim respondents group. Even though this group is a small sample size the data is probably significant.

Table 129 Frequency of internet access by religion in percentages

Religion	Frequency of internet use in %				
	Daily	Weekly	Monthly	Yearly	Never
Christian	82.0	7.2	3.1	0.5	7.0
No religion/ atheist/agnostic	89.2	7.3	0.7	0.3	2.4
Muslim	100.0	0.0	0.0	0.0	0.0
Other	91.4	2.9	0.0	0.0	5.7
General Survey Population	85.5	7.1	1.9	0.7	4.9

Devices in Household

The table below shows the number of devices per person in each household

Table 130 Number of devices per head of household by religion

Religion	computer/laptop	tablet	voice device	TV smart	fit bit / watch	other (usually mobile)
Christian	1.5	1.3	0.8	1.1	0.6	2.0
No religion/ atheist/agnostic	1.5	1.1	0.8	1.0	0.6	1.8
Muslim	0.5	0.4	0.1	0.4	0	2.8
Other	1.4	0.8	0.4	0.5	0.2	1.5
General Survey Population	1.4	1.1	0.7	1.0	0.5	1.7

Muslim respondents reported much lower numbers of devices available in their household than other groups. The remaining groups are all similar in pattern to the general population. A lack of devices limits access time and the lack of higher end devices such as computers and laptops could affect quality of access.

Preference and Value

Respondents were asked how they **preferred** to conduct a variety of transactions and services and then asked to rate how much they **valued** conducting the transaction or service in that way. This ranged from getting information, buying and selling, paying people, engaging in political activity and using banking services. The strength of value is an indication of how much resistance there may be to changing the preferred way of conducting the transaction.

Graphs 28 and 29 Preference and value placed on transactions and services

Religion – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
CHRISTIAN	20.4	10	3.7	63.9	1.9
NO RELIGION	17.1	6.7	1.9	71.9	2.4
MUSLIM	62.3	5.2	3.2	27.4	2
OTHER	13.9	8.6	0.7	72.9	3.9
General Survey Population	20.4	8.4	2.7	65.1	3.3

Religion – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
CHRISTIAN	5.2	9.8	48.9	36.1
NO RELIGION	4.9	8.1	49.7	37.2
MUSLIM	1.6	6.1	73	19.3
OTHER	1.6	8.1	37.3	53
General Survey Population	4.9	8.6	48.7	37.8

Muslim respondents are much more likely than any other group in the survey population to prefer face-to-face transactions. At more than 60% of respondents this represents a significant variance, and similar (if not as stark) patterns can be seen in the language data in section 5.5. As a consequence, the Muslim group is much less likely than other groups to prefer to undertake transactions and consume services online. The preference for face-to-face transactions is already high in the general survey population and other groups at circa 18-20% when considering a move towards a more digital world. The amount that the Muslim respondent group values their preference is lower than that of other groups and may hint at the possibility of changing this preference, but the preferences are still valued quite strongly.

Skills

Respondents were asked about their ability to conduct activities online. They were able to choose between four options:

- Yes – they know how to conduct the activity online
- No – but they would like to learn how to
- Yes – but they did not intend to do it online
- No – and they did not intend to do it online

Whilst this is a self-assessment of skills, it clearly demonstrates a respondents' level of satisfaction with their skill level and motivation to use it.

Table 131 Average percentage of internet skills across different transactions and services by religion in percentages

Skill level	Christian	No religion / atheist / agnostic	Muslim	Other	General Survey Population
Yes	74.1	80.2	34.2	80.6	74.2
No but would like to learn how to	0.8	1.1	4.1	2.5	1.2
Yes but no intentions of doing so	17.0	15.1	60.3	12.7	18.4
No and no intentions of doing so	8.2	3.6	1.4	4.2	6.2

We noted above, the Muslim respondent group may be slightly less likely to stick to their preferred method of transactions than other groups. However, this seems to be contradicted by the results on skills questions. A higher number of the Muslim group (60.3%) say the know how to but have no intention of using the internet for transactions. This is much higher than any other group in our survey. Whilst there is a figure of 4.1% who are wanting to learn, this only equates to an average of circa one person per activity. Combining the results from yes and yes but no intentions of doing so we see that there are broadly similar skill patterns across all populations. The key issue appears to be motivation to use and lack of desire or intention to learn to use.

E-Mail

Access

Table 132 Numbers with access to e-mail by religion

Religion	Number of respondents with no e-mail address	% non-users in their own religion band	% non-users against total survey respondents
Christian	106	23.3	11.8
No religion/ atheist/agnostic	23	7.8	2.6
Muslim	10	37.7	1.1
Other	1	2.9	0.1
General Survey Population	145	-	16.1

Those reporting as Christian are the least likely to have an e-mail account. With bivariate analysis this variable may be accounted for in the higher age bands of the population. There is a general trend for younger people to declare as having no religion than older people (Pew, 2018). This is not a spurious correlation but requires the isolation of the religious variable as it is likely to be age related rather than religion related. Therefore, this variation may be a symptom of a different cause.

God doesn't have an email account!!!!

Frequency

Table 133 Frequency of e-mail access by religion in percentages

Religion	Frequency of e-mail use in %					
	Daily	Weekly	Monthly	Yearly	don't know	Never
Christian	74.3	14.6	6.9	0.3	0.0	4.0
No religion/ atheist/agnostic	74.3	19.8	4.9	1.1	0.0	1.1
Muslim	27.8	22.2	22.2	5.6	0.0	22.2
Other	70.6	20.6	2.9	0.0	0.0	5.9
General Survey Population	71.8	17.0	6.2	0.7	0.0	2.6

The frequency of e-mail usage is much lower in the Muslim respondent's group than all other groups. Many more in the Muslim group are less likely to ever use their e-mail address. The other groups are broadly similar and show little discernible variation.

There is some additional data on religion in Appendix 5.

5.15 Postcode

Introduction

As the research used an opportunity sample the research data is not representative of the whole population or indeed of a postcode district. The first part of each respondent's postcode was requested to assist with any additional general inference that might be drawn from the data. Postcode in this sense is possibly more useful for multivariate analysis. Here some bivariate analysis has been conducted around other key variables related to **literacy** and **connectivity**. The quantitative data on literacy and the qualitative data on connectivity are two of the most important findings in this report and postcode is useful as it allows us to identify where these issues may be more prevalent.

Demographic Data

Respondents were asked to give the first part of their postcode

Table 134 Number of respondents by postcode

Postcode	Area	Number in sample
DG1	Dumfries East	142
DG2	Dumfries West	71
DG3	DG Digital	17
DG4	Sanquhar and District	67
DG5	Dalbeattie and District	31
DG6	Kirkcudbright and District	43
DG7	Castle Douglas and District	136
DG8	Newton Stewart and District	49
DG9	Stranraer and District	146
DG10	Moffat and District	16
DG11	Lockerbie and District	73
DG12	Annan & District	49
DG13	Langholm and District	30
DG14	Canonbie and District	1
DG16	Gretna and District	2
Prefer not to say/other	-	14*

* These have not been analysed.

Literacy

Bivariate analysis was applied to compare the literacy group data to postcode district. Those respondents stating that they had literacy barriers to technology were grouped by postcode district and the data highlights literacy issues are focused in DG1, DG2 and DG9 and with a likelihood of literacy issues in DG12 (though the sample is smaller than for the other postcodes).

It is not statistically reliable to extrapolate these findings to the wider population for each postcode district as this is not a representative sample. However, the data allows us to confidently highlight these postcode districts as having a potential literacy issue.

The data cannot tell us whether there is a literacy issue in other postcode areas as the report is not based on a representative sample of postcode areas.

Table 135 Postcode compared with literacy data in bivariate analysis

Postcode		Literacy barrier	Don't know/Prefer not to say	Percentage of sample from that postcode with a literacy barrier.
DG1	Dumfries East	40	7	36.4%
DG2	Dumfries West	19	7	41.9%
DG3	DG Digital	0	0	#
DG4	Sanquhar and District	1	1	3.1%
DG5	Dalbeattie and District	2	0	6.5%
DG6	Kirkcudbright and District	1	2	8.8%
DG7	Castle Douglas and District	7	6	11.5%
DG8	Newton Stewart and District	4	1	11.6%
DG9	Stranraer and District	11	12	21.5%
DG10	Moffat and District	0	2	#
DG11	Lockerbie and District	1	2	4.1%
DG12	Annan & District	11	0	23.2%
DG13	Langholm and District	2	0	4.0%
DG14	Canonbie and District	0	0	#
DG16	Gretna and District	0	0	#

This issue of literacy as a barrier is highly likely to extend beyond a barrier to the use of technology as the literacy data in section 5.4 above clearly demonstrates.

Connectivity

The second issue we have considered with bivariate analysis against Postcode district is connectivity. Respondents were specifically asked about the speed and reliability of their internet connection. This is based on respondents' self-perception and understanding of internet quality rather than a technical or scientific appraisal. This has then been mapped against postcode district.

Better WiFi and broadband speed

The section on qualitative data findings below also shows that connectivity is the biggest issue of access raised in responses to the question of what would help respondents to use the internet.

> *Reliable, affordable, speed*

Graph 30 Perception/experience of speed and reliability of internet connection

Average rating of SPEED and RELIABILITY of connectivity by Postcode area
(4=excellent/ 1 =poor)

	Total Sample	DG1	DG2	DG4	DG5	DG6	DG7	DG8	DG9	DG11	DG12
SPEED	2.5	2.5	2.5	2.4	2.7	2.2	2.5	2.7	2.9	2.4	2.6
RELIABILITY	2.5	2.4	2.5	2.5	2.8	2.4	2.5	2.5	2.8	2.5	2.5
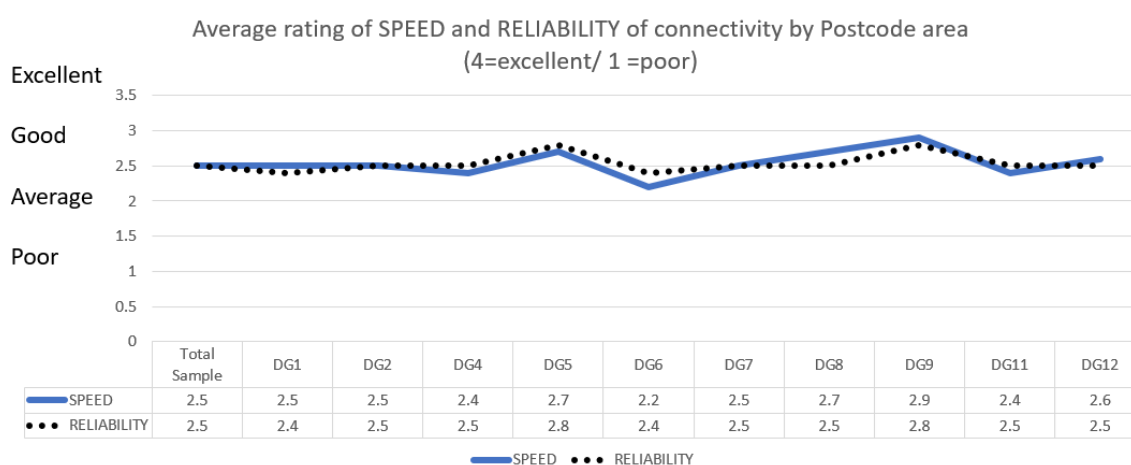
Respondents with access to the internet have given similar responses on speed and reliability. In general, the pattern suggests a good to average level of connectivity. However, around 16% to 18% believe their speed and reliability is poor and around 25% think connectivity is average.

Graph 31 Whole survey internet users view of speed and reliability.

Whole sample - Connectivity – Speed and Reliability in %

	Poor	Average	Good	Excellent
SPEED	18	23.7	46.3	12
RELIABILITY	16	26.2	46.3	11.5

5.16 Digitally Excluded

ACCESS	MOTIVATION	SKILL
• Small number of 16–17-year-old respondents "not allowed" a phone	• Majority don't want or need it or use landline. • circa 17% of respondents do not have an email account	• Skill does not appear to be the issue.
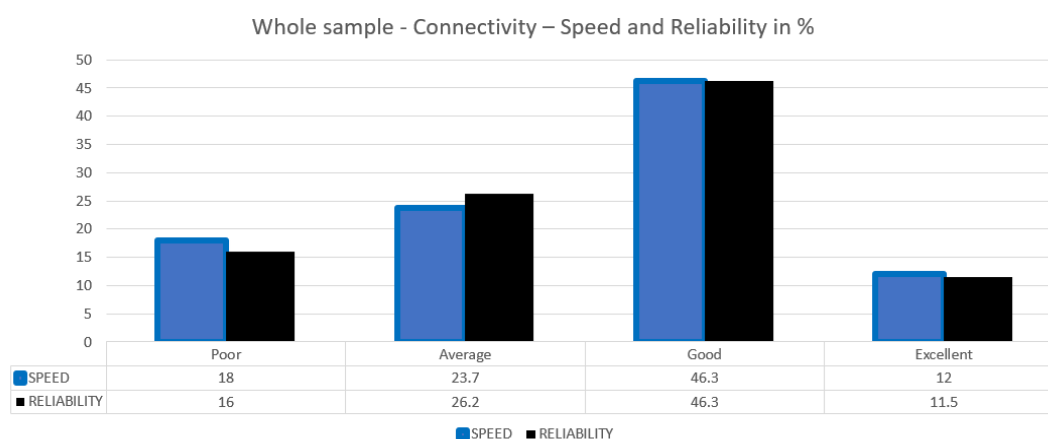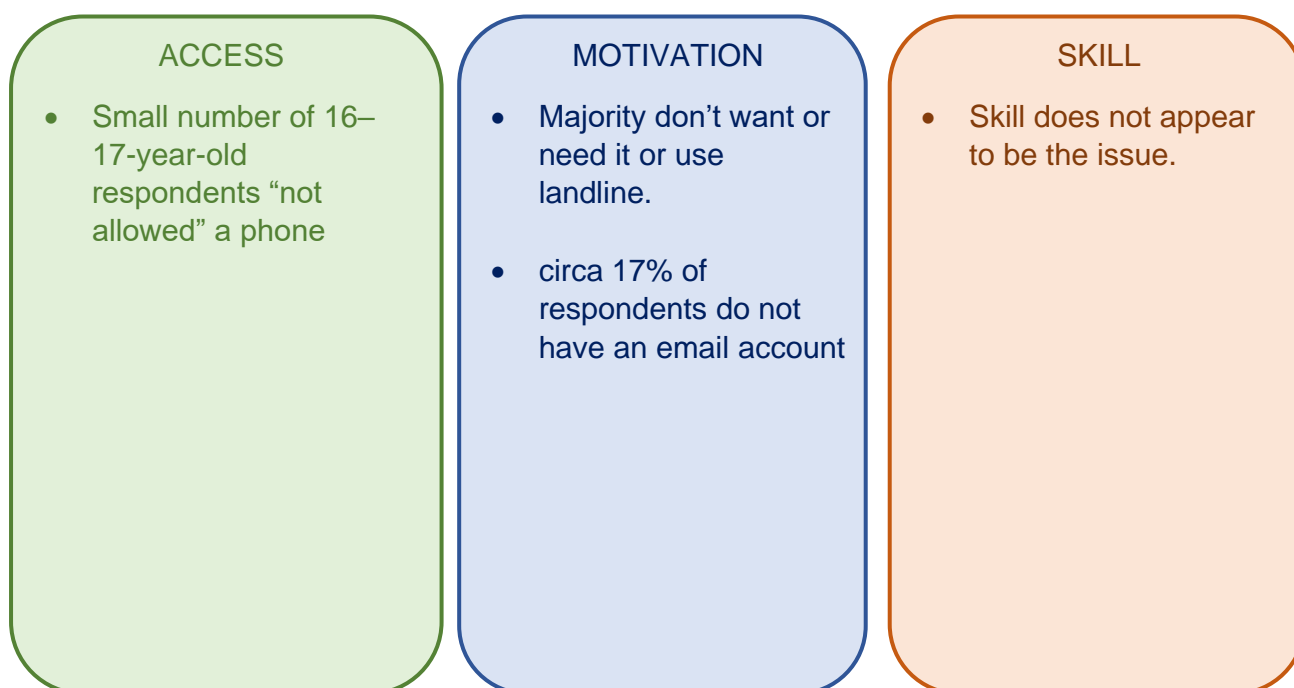
Introduction

The analysis in this section focuses on those who do not have devices, internet access and/or e-mail accounts. Compared with TSDG's 2020 study and previous studies digital exclusion has changed. This may be partly due to the 'lockdown' during the COVID-19 pandemic. The group of people who are completely digital excluded is much smaller than we anticipated. Whilst this is an opportunity sample, and we cannot extrapolate this data to the wider population there are some inferences we can draw. The data in the previous sections and the qualitative data section and discussion of our findings will explore how the scene has changed and what digital exclusion looks like in 2022. However, the focus of this section is on the small population of people with no access or limited access to online activities. As the numbers are small for the population who are digitally excluded, we have also looked at their specific answers to qualitative questions as they shed as much light on this group as the statistics.

Demographic Data

There are 48 people who do not have a mobile phone of these, 19 have no internet access and the same 19 people do not have an e-mail address. This means there are 19 people who are completely excluded with no mobile phone, no internet access and no e-mail address.

There are 38 people who have a mobile phone but no internet access or e-mail address.

There are a further 94 people who use a mobile and the internet but have no e-mail address.

The total without internet access is 57 people and without an e-mail address is 151 people.

Table 136 Device access map

No Mobile	48	Of whom no internet	19	Of whom no e-mail	19
Have mobile	38	But no internet	38	Of whom no e-mail	38
Have mobile	94	Have Internet	94	Of whom no e-mail	94
TOTAL NO MOBILE	48	TOTAL NO INTERNET	57	TOTAL NO E-MAIL	151

Why not?

> *I've managed without one so far.*

This section considers the overarching reasons given by the 19 respondents who have no access (i.e., are "digitally excluded") as to why they do not want or have access to devices and online facilities. Below is a summation of the qualitative responses given.

Table 137 Reasons for not having access

SKILLS	8	Some have stated age and not believing they have the capability
MOTIVATION	19	Most are happy with just a landline/telephone and others don't see a need for a device or online access.
AFFORDABILITY/ACCESS	3	Access – all 3 of these respondents are in the 16-17 and 18-24 age ranges and say they are "not allowed" a phone
OTHER	6	Other responses are predominantly due to disability (blind, learning difficulties, dexterity issues).

What would help?

Most of the respondents have said they do not want access but in terms of what would help the four that may be persuaded:

- 3 people said it was the cost of the network connection
- 1 person said they would need help from a carer due to their disability.

However, of these 19 most comment that they are *happy as they are*, *use the landline telephone* or *family & friends do things for them*.

Of these 19 digitally excluded respondents 11 (of those prepared to say) are below average income and 4 of these are also registered disabled (the other 15 are not disabled).

Mobile

Access

Here we consider those respondents without a mobile phone.

Table 138 Respondents without a mobile phone

Digitally Excluded	Number of respondents without a mobile phone	Number of these respondents with access to someone else's mobile phone	No access to a mobile phone	Percentage of total respondent population without a mobile phone
No Mobile	61	13	48	5.5%

Internet

Access

Here we consider those respondents without access to the internet.

Table 139 Respondents with no internet access

Digitally Excluded	Number of respondents without access to the internet	Percentage of total respondent population without access to the internet
No Internet	57	6.3%

Of those who do not use the internet but do have an e-mail account, the reasons given for not using the internet are shown below.

Table 140 Respondents with no internet but do have an e-mail address

Reason	Number
Never needed or don't want (motivation)	26
Don't know how to use (Skills)	5
Have a landline so why do I need internet (motivation)	4
Not got computer/tablet and/or internet access (affordability)	3
Disability	1

Preference and Value

In all the previous sections we have considered how transactions are carried out and how much the respondents value that form of conducting such transactions. The digitally excluded group were not asked these questions but we already know that they do not have access to conduct their transactions online. When we talk about those conducting transactions offline (i.e. Face-to-face; through others or post/telephone) there are another 19 people or 2.1% to add to our calculations. Given our qualitative data responses (see

below) there is little motivation amongst this group of people to acquire online access and skills, therefore we can also assume that this offline behaviour is a highly valued preference.

E-Mail

Access

The largest digital exclusion in our general survey population is those without an e-mail account and the reasons why they do not have e-mail are detailed in the next section on qualitative data. This is because the varied nature of the group of non-e-mail account holders cuts across our early univariate categories and we would be double (or multiple) counting responses.

You cannot light the fire with an e mail when you have finished with it

Table 141 Respondents with no e-mail address

Digitally Excluded	Number of respondents without an e-mail address	Percentage of total respondent population without a mobile phone
No E-Mail	151	16.8%

5.17 Qualitative data

Introduction

One of the key issues identified in the desk-based research (TSDG, 2020) report was a duplication of the data analysis. This had the effect of making it difficult to isolate variables such as age, disability, income and so on. The quantitative analysis outlined in the previous sections started from a univariate analysis for this very reason. The qualitative data is no different. However, duplication in the qualitative data would be caused by attributing a single quote or phrase multiple times to several categories. For example, one person could be:

- White,
- Female,
- in the 80+ age category,
- in the income group £12,501-£20,000,
- in receipt of several benefits
- Disabled

This respondent would have made a single comment in the qualitative data and yet it might be commented on seven times.

This means the qualitative data has been viewed holistically to avoid this duplication of the use of the data.

The qualitative findings are used to draw out the key issues raised by respondents in relation to

- Why they have no access to a mobile phone, and/or internet and/or e-mail and
- What would help improve the use of technologies and devices for those using them or not.
- Any points salient to specific categories. For example, "I cannot use a mobile phone because I am blind" can be appropriately categorised.

All qualitative responses were initially analysed through software (Text Analyzer) which enabled frequency of words and expressions to be assessed and formulate initial patterns and clusters. The data was then also clustered in another software application (QDA Miner) to allow further analysis. Some of the quotes from the survey are used in speech bubbles throughout the quantitative sections of the report.

From earlier research we have adopted the digital exclusion principles of **Access-Motivation – Skills** as part of our analysis.

Why do respondents not have access to a mobile phone?

There were 32 responses to this question as it is limited to respondents who do not have a mobile phone.

Motivation was the most frequently cited category with 42 expressions, words or phrases associated with a lack of desire to use a mobile phone.

The responses are driven largely by older respondents who have not seen a need or use their home telephone instead.

Reasons other than motivational responses were much fewer with five responses related equally to Skills and Other Reasons.

Skills was about barriers to learning such as 'difficult', 'struggle' 'technical'

Other reasons were dominated by disability issues such as 'hearing' 'eyesight' 'disability prevents me'

Access issues were the least frequent responses with two young respondents who are 'not allowed' to have a mobile phone.

What prompted respondents to have a mobile phone?

This question was asked of those who have a mobile phone and there were 851 responses. As these are not people who are digitally excluded the reasons tend to be positive or caused by circumstance/situational context.

There were four key clusters that emerged from this data.

- Social purpose/keeping in touch
- Specific purpose
- Emergency/Safety
- Access to services/functions

All reasons are about having access as well as a key motivator for having that access.

The most common reason for having a mobile phone is for a social purpose and staying in touch (803 such instances). The reasons in this cluster included keeping in touch with various family members, friends and others as well as communicating in general.

Specific purpose reasons included for work or job, education and travelling (69 responses).

Emergency/safety reasons included nighttime safety, emergencies, security, rural (220 instances).

Access to services or functions included responses such as 'gaming', 'internet access', services, 'watching' things, as an electronic 'ticket' and 'listening to' things (55 responses).

The key motivation for having a mobile therefore seems to be about being accessible and having access to others that matter i.e., family friends, colleagues and activities.

Why do respondents not use the internet?

There were 52 responses to this question as it is limited to respondents who do not.

Motivation was the most frequently cited category with 60 expressions, words or phrases associated with a lack of desire to use the internet.
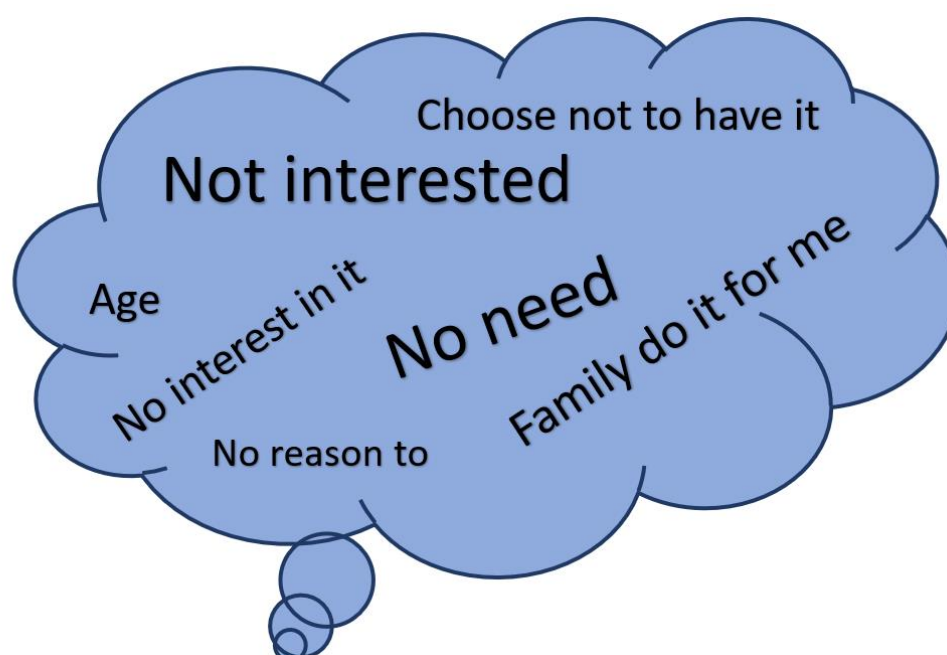
Skills was the next most likely response with 15 expressions, words or phrases associated with learning. Barriers to learning include 'technology difficult', 'hard to understand', 'help how to use it' and 'difficult to use/wouldn't know how to use'

Access reasons were cited by just 6 respondents, and these were related to not having a device (5) and affordability (1).

There was one other reason which was a disability issue.

What prompted respondents to get access to the internet?

This question was asked of those who have access to the internet and there were 837 responses. Again, as these are not people who are digitally excluded the reasons tend to be positive or caused by circumstance/situational context.

There were four key clusters that emerged from this data.

- Specific purpose (350 responses)
- Access to services/functions (343 responses)
- Social purpose/keeping in touch (325)
- Lockdown (10 responses)

With the exception of being forced to by the events of lockdown there were mostly positive motivational reasons for having access to the internet. There is often a specific purpose such as work or education or a need to access a particular service or function e.g., 'news', 'Zoom/Teams', 'YouTube', 'watching' and 'listening' to things 'banking, gaming' and 'Google'. Keeping in touch with family, friends and communicating in general are also very important factors but not nearly as strong as they are as a reason for having access to a mobile phone.

Why do respondents not have e-mail access?

There were 146 responses to this question. Whilst the question is limited to those who do not have an e-mail account, there is a much bigger respondent population that have internet and mobile phone access but do not have an e-mail address.

Motivation was the most frequently cited category with 217 expressions, words or phrases associated with a lack of desire to have an e-mail account. The reasons are predominantly related to no desire to have an account, not seeing a need for one and using family, friend and landline instead. These responses are like the reasons for not having a mobile phone or internet access.

The second most frequent response was access issues. There were 23 expressions, words or phrases associated with a lack of desire to have an e-mail account.
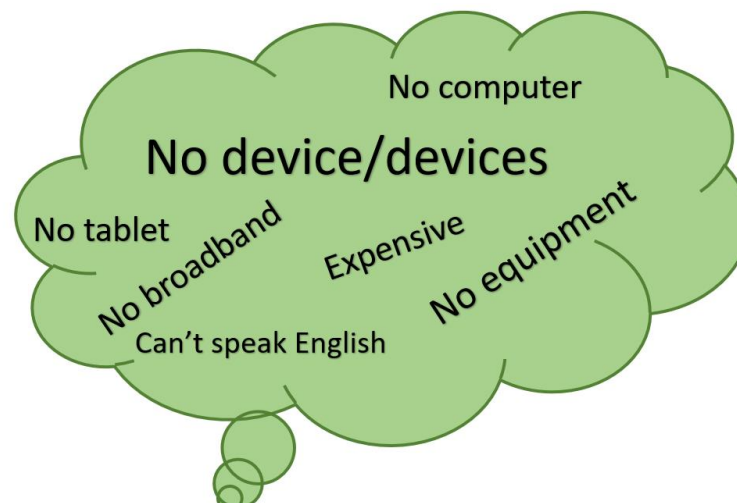
The most common reason in this category was the lack of a device, computer, laptop, tablet etc. with 17 of the responses relating to this. The issue of affordability (4) and the fact respondents could not speak English (3) were the other reasons.

There were 13 responses related to skills issues such as 'don't understand', 'struggle to use' 'too complicated' and 'technology difficult'.

There were also 10 other responses which were mostly related to issues such as 'spam', 'junk', 'rubbish', 'safety', 'security', 'nuisance, and 'bombardment'.

What prompted respondents to get an e-mail account?

This question was asked of those who have an e-mail account and there were 743 responses. These are people who are not digitally excluded. There were two people that said that they got an e-mail address because of lockdown but otherwise the other reasons for having an e-mail address are largely positive.

There were three key clusters that emerged from this data. Specific purpose (350 responses)

- Social purpose/keeping in touch (510)
- Specific purpose (229 responses)
- Access to services/functions (150 responses)

The reasons were mostly positive motivational reasons for having an email account. As with the mobile phone, the main reason was keeping in touch with family, friends and communicating in general.

There is often a specific purpose such as 'job', 'work' or education or a need to access a particular service or function e.g., 'Amazon', 'shopping', 'government', 'banking' and 'benefits'.

What would help them to continue to use e-mail?

Whilst this question was asked of e-mail account holders about continued use of e-mail many of the respondents chose to answer the question more broadly and included the internet. There were 743 responses in total.

Again, as these are not people who are digitally excluded, many of the responses appear in the negative as they are suggestions on how to make e-mail and, more broadly, the internet better. As such the responses do not fall into the motivation category as these are already engaged users. Despite the fact these respondents have access the issue of accessibility is the most frequent response in terms of improving the internet.

There were four key clusters that emerged from this data.

- Accessibility improvements (126 responses)
- Skills (53 responses)
- E-mail specific improvements (65 responses)
- Other reasons/issues (18 responses)

Responses in accessibility were predominantly about the speed, quality, and reliability of connectivity with a few comments about devices and affordability. But overwhelmingly improved speed and reliability of connection is the biggest improvement users have identified.

Responses in relation to skills were focused on improving know how, having support than can be accessed, developing more confidence and specific issues around understanding English and writing/literacy.

The comments can be seen in the two-word clouds below

Accessibility and Skills word clouds
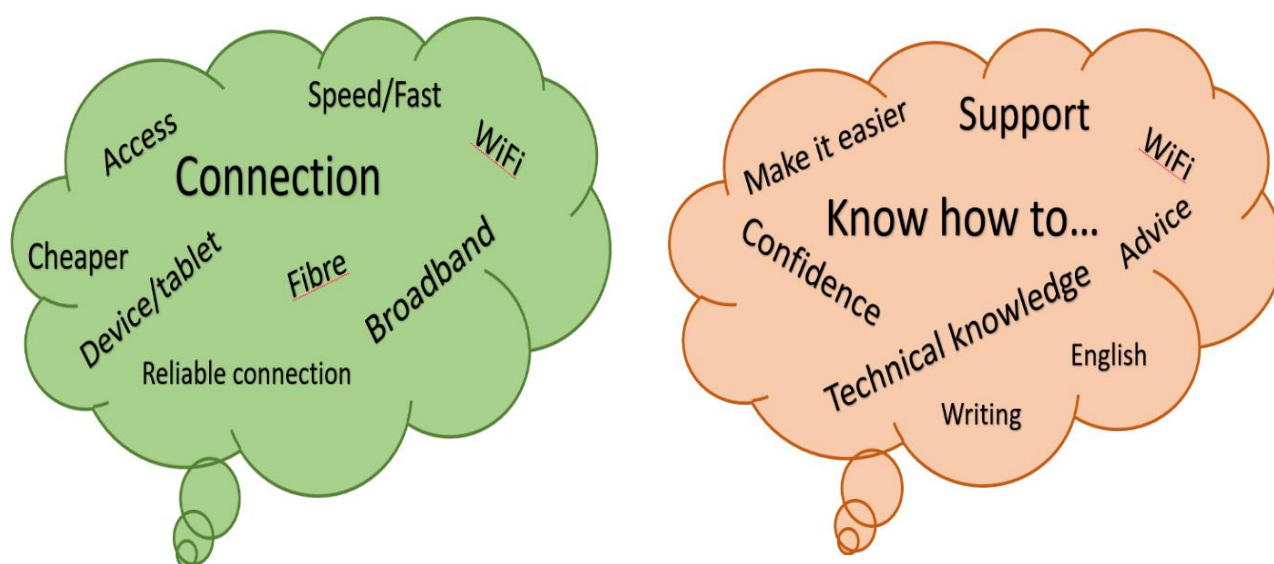
Category specific issues

Qualitative data is useful in assessing frequency, as above, where we look for patterns and trends and identify what seems to be important to the many. However, qualitative data also has advantages in identifying issues raised that are equally important, but more specific or localised. For example, disabled people may make up a small part of the population but their needs and issues are equally important.

There were five specific categories that clearly stand out in qualitative terms from the others.

Age

We have seen in the quantitative analysis of age that there is a very strong motivational issue in the 80+ population with desire to continue face-to-face interactions and not to use

online services and technological devices. There is much lower take-up of mobile phones and other devices.

There are no comments related to access as an issue. In fact, some respondents have access provided but choose not to use it. For example:

> *"I don't use the internet but the housing provider who's flat I rent installed wi-fi throughout my flat and the communal areas of the building".*

Motivation is the main reason given by respondents in the 80+ category. They state they have *"Never needed one", "I don't want one",* or they *"prefer their [my] landline".* There are several respondents who say they are *"too old to use mobile phone"* or they rely on help from others e.g., *"never seen the need, daughter sends emails for me on my behalf".*

The general sentiment of this group is summed up by this quote:

> *"I don't have any computer equipment or broadband so don't have an email and have no interest in having one".*

Skills responses are much less common and suggest some people could learn to use the technology with patience and support. For example, *"I don't know how to work it"* and *"I'm not sure how they work".* But without a motivational reason there is probably little that will convince this group to learn to adopt the technology.

Literacy

The issue of low levels of literacy is already addressed well in quantitative terms and it is clearly a problem in the consumption of services and undertaking of transactions in any form – be it online or not. This appears to be an issue much bigger than digital inclusion or exclusion.

For some access has been made possible through Government schemes e.g.

"I was awarded an iPad through Connectivity Scotland Scheme".

There are some who say they will not use the internet e.g. *"This is not something that I would use.* However, there are many examples of positive motivational reasons for starting to use technology and the internet. These examples may be used to encourage others in all groups. Examples include:

> *"Family social media groups"*
>
> *"Meet friends"*
>
> *"Accessing music listening – audible"*
>
> *"Keeping up with my family on things like Messenger and Facebook".*
>
> *"I use the internet to look up sports news".*

These and other activities may be used as significant hooks to encourage others to be motivated to learn. However, there are examples of others who have been forced by circumstance or events to take up the technology.

> *"I had to maintain universal credit journal and show I was*
>
> *searching for work online"* and
>
> *"Being able to use video calls during lockdown".*

There are also signs that people have or may like to acquire new skills. For example, *"I went on a course at local community centre and provided with a tablet. Ongoing support to use tablet at home".* and

"I would like to join in more meetings using the internet".

Household Income

It is perhaps obvious to suggest household income is likely to have an impact on devices per person per household, quality of devices and frequency of usage.

Many of the motivations to use a mobile phone in the lower income categories are also related to age (see section above) as there is a correlation between the 80+ age group and lower income bands, so the quotes are not duplicated here.

Access is more an issue for others in lower income groups. Issues of affordability are more common e.g., *"cannot afford* it*", "cost"* and *"too expensive"*. There are less lower income respondents who say it is a *"lack of a device"* that is preventing access. Except for the older age band, lower income respondents do not tend to raise issues of skill as a barrier to the internet.

Access is also the most likely reason for not using the internet. Lack of a device - *"I don't have any equipment to access the internet* and also the quality of access appears to be an issue e.g. *"just use phone as have no laptop or PC".*

For lower income respondents who use technology and the internet the issue of access is still the most important area where they would like to see improvement to help them. The key access issues are:

- Older or poor-quality device e.g., *"upgrade laptop",* "*Something larger than a phone", "Filling out forms is just not possible", "up to date equipment"* and *"A bigger tablet or laptop".*
- No device e.g., *"have my own digital device, as my school laptop will be returned to school soon as after all the exams finished"* and *"having a device".*
- Affordability the cost of internet access e.g. *"too expensive"*
- Sharing devices e.g., *"my boyfriend has one. I am using the same one", "my husband has one, we use the same one".* and *"having my own phone".*
- Security, Spam and Junk e.g. *"more security and less scamming".*
- Connectivity issues e.g., *"improve speed of internet", "Better internet speed"* and *"access to internet at home".*

This paints a picture of less devices per household resulting in sharing of devices thus reducing accessibility. Some would appear to be struggling with affordability of maintaining access. However, the biggest accessibility issue appears to be the device itself. This

includes the quality of device, the age of the device and the functionality of mobile phones to carry out tasks that require bigger screens or software improvements to increase usability.

There is some mention of skills issues, but these are a small minority of responses. The responses are about making learning *"easier"* or *"simpler" and improving "confidence".* There were a few respondents in lower income groups asking for training e.g., *"need help with training and improve skills", "ICT classes"* and *"a basic course and training face-to-face".* There were also a few requests for ongoing support services e.g., *"help from someone who is better at the technology when things go wrong"* and *"being taught how to use it."*

What motivated lower income respondents to use the technology and the internet is the same as the wider population patterns outlined above, namely:

- Specific purpose (e.g., work, education)
- Access to services/functions (e.g., banking, gaming, music)
- Social purpose/keeping in touch (i.e., family, friends, social groups)

Disability

The quantitative disability data paints a positive picture of accessibility but qualitative data and feedback from the design stages of our research process highlight some hidden issues.

As expected, there are numerous examples of accessibility issues although, with the exception of disability issues, these responses fit the general survey population pattern of issues raised.

- Disability specific issues e.g., "I am blind", I have learning difficulties" and *"being able to print [so I can] refer back to information as I have cognitive difficulties it makes printed information valuable."* etc.

Other accessibility issues raised included:

- Older or poor-quality device e.g., "updated device", *"can't use mobile as finger problems need an iPad"* "and *"a bigger screen" laptop".*
- Security, Spam and Junk e.g., *"too much junk mail clogging the files"*
- Connectivity issues e.g., *"reliable connection",* and *"good speeds of internet"*

Participant observation (Alvesson, 2009) research data was also identified in the questionnaire design phase for this survey. It became apparent that involving disability services providers at the outset enabled the research team to draw upon vast experience of people who interact with service users. Many software design processes miss this stage out and design services and systems and then test them with the service users and adapt them. The questionnaire involved this expertise from the outset and drawing on experience that cannot be replicated is a valuable lesson learned.

Adapting systems is the more common approach and the questionnaire was also adapted in this process. One Third Sector organisation (TSO) used their own technological know-

how to help the research team to adapt the questionnaire for a screen reader for their service users. Another TSO chose to use the telephone to interview a particular category of disabled service users, and another asked for paper versions of the questionnaire. However, what these highlight, is the people who know best how to adapt are service users and TSOs, not software or questionnaire designers. In fact, some of the technologies used by one TSO may help other TSOs to identify new methods of adaptation. For example, screen readers help the blind but also those who have difficulty reading.

6. Analysis, Discussion and Implications

Introduction

In this section the key findings are pulled together and discussed within the categories of **access**, **motivation,** and **skills.** The findings are then explored within the specific univariate categories used in the findings section and the implications are outlined for each.

6.1 Access, Motivation and Skills

The TSDG report in 2020 found that the main reasons for lack of digital inclusion were:
- Access (infrastructure, affordability, and design),
- Skills and
- Motivation.

The research data indicates this is still true but there has been a shift in how access might be defined and there is a clearer understanding of motivational and skills issues than was available from previous research data.

Access

The key findings in the 2020 report (TSDG, 2020) suggested that there were a significant number of people digitally excluded. These are listed in the table below and compared with the research findings from our study.

2020 Study Results	2022 Data	Conclusion
56% of those who are Registered Disabled were digitally excluded	Of those registered disabled 91.3% have a mobile phone, 94.2% have internet access and 80.6% have e-mail	The original finding is not supported by our data. There are comments about technology being difficult to use due to disability, but it is presenting problems not causing exclusion.
Those aged over 65 made up the largest proportion of non-internet users.	75% of non-internet users are over 65	The original finding still holds true
Over half of all non-internet users were aged of 75.	42% of non-internet users are aged over 80	The original finding is likely to hold true
For non-internet users, 10% reported having no connection	The reasons for having no access were largely due to a choice not to have access.	This is not proven but is no longer an issue of accessibility and more one of motivation

14% had no connection or computer where they lived	Access to a device of some kind and internet connectivity is circa 94%.	The original finding is not supported by our data. However, the type of device is an issue. Average households are 1.5 times more likely to have a mobile phone than a computer/ laptop.
16% said it was too expensive.	5% of non-internet users mentioned price (3 people) Of those who use the internet 11% mentioned affordability as an issue (96 people).	This original finding is not supported by our data. However, in the current cost of living crisis this could become more of an issue.

The data from the questionnaire clearly shows a shift in issues in relation to access. We are not focused so much on digital exclusion as there are only small numbers who are excluded but most of them choose or prefer to conduct their lives in that way. For example, **"never seen the need", "don't want it"**. For those making this choice this is more an issue of motivation than it is access and also presents a difficulty for policies and strategies that are targeted at moving more services and transactions online. This group accounts for 6.3% of the sample without internet access.

Instead, the focus on the issue of access is now on the quality of access. In particular:
- connectivity (speed and reliability),
- quality of device (type and age) and
- the move towards online access (reduced face-to-face transactions, design of web services)

Motivation

The key findings in the 2020 report (TSDG, 2020) suggested that there were a significant number of people digitally excluded. These are listed in the table below and compared with the research findings from our study.

2020 Study Results	2022 Data	Conclusion
18% preferred to do things in person or by telephone,	Of internet users 26.4% prefer to do things in person, by post or on the telephone. This figure is higher if we add non internet users. Possibly circa 30%	The original finding holds true and is in fact worse than reported in 2020.
Circa 13%, or 1 in 8, adults did not use the internet at all	Circa 11%, or 1 in 10 adults do not use the internet at all.	The original finding probably holds true. Our data includes non-internet users and those with access who never use it.

The questionnaire findings clearly demonstrate that motivation is the biggest issue in relation to digital exclusion. As we mentioned above in the access section, there is a group of 6.3% of the survey population who do not want or see the need to use mobile phones, internet and e-mail. However, there are two other groups of people who do use one or all of these. The first group is of those who know how to use online services and transactions but choose not to. This group equates to 18.4% of those who use the internet. The second group is those who don't know how to and never intend to learn or use such online services or transactions. This group is 6.2% of those who use the internet. The three groups combined account for circa 29% of the total survey population (about 260 people).

There are still a large number of online service users who prefer to conduct their transactions face-to-face (circa 20%) and a slightly smaller group who prefer family and friends, paper and post and telephone (circa 15%) of online service users. These preferences for offline activity and reliance on others are highly valued or valued by respondents and this will be difficult to change. Presumably the 6.3% of non-internet users in the general survey population also prefer and use offline services or rely on others. There are also several people who do not use services regardless of whether they are on or offline. Some of this population may be discounted as non-users but as the literacy data shows there may be other barriers preventing service use. It is difficult to calculate a total figure for this population, but it could be circa 40-50% who do not or prefer not to use online transactions.

Looking at the reasons why respondents decided to start using the internet may be a key factor in identifying the hooks that may be useful to persuade others to adopt online activities. These include things that matter to people.

- Social purpose/staying in touch - family, friends and others
- Access to services or functions included responses such as 'gaming', 'internet access', services, 'watching' things, as an electronic 'ticket' and 'listening to' things.

Many have been drawn into the online world through work, education or even being forced to be circumstances e.g., COVID-19 lockdown, keeping a log to maintain benefit payments or emergency and safety reasons. Whilst a handful of people said they got internet access so they could keep connected to services and make transactions, it is highly unlikely that most people adopt internet usage just to pay the bills or search for local or national government information.

Skills

The key findings in the 2020 report (TSDG, 2020) suggested that there were a significant number of people digitally excluded. These are listed in the table below and compared with the research findings from our study.

2020 Study Results	2022 Data	Conclusion
One third of people had difficulty using a computer	Our data suggest 68% of all respondents use the internet for tasks and activities and a further 14% know how to but don't intend to use it	The original finding is probably not supported by our data.

16% of people could not use a computer at all	Circa 11% do not use the internet at all. Of those that do 1.1% would like to learn how to do some tasks.	Our data does not conclusively answer this question. However, qualitative data confirms the non-internet users predominantly choose not to use online facilities.

There are very few respondents across the whole survey population who have said that they want to learn how to conduct various transactions or use services. On average it is around 9 or 10 people for each of the transactions the respondents were asked about (i.e., circa 1%). TSO's may be able to address this issue directly with respondents. However, this is not a major intervention or issue. As was pointed out in the section above, motivation is the biggest issue of concern in relation to digital exclusion.

Instead of training courses, a person-centred approach is highlighted by respondents who want support when they hit a roadblock and want someone to help them become more confident to use technology, devices, applications and so on. They are asking to be helped on a one-to-one basis. This would take incredible time, patience, and investment to achieve.

A key finding in the questionnaire results was about literacy. There is a substantial literacy barrier and a smaller English language issue which affect more than just digital inclusivity. This is addressed in more detail in section 6.5 below. However, this is a major issue that needs to be addressed.

Training and development may also have two other helpful interventions to make. First, through education, people can be introduced to new technology on courses and programmes in indirect ways. For example, an assignment might call for the use of a vlog as the mechanism for assessment rather than an essay. This achieves the same outcome but a biproduct is the use of a new technology and the development of a skill.

Second, in addressing the motivational issues above there is a role for skill developers in convincing people that there are benefits to them to learn to use the internet. These benefits may be unique to an individual's interests e.g., listening to music, sport, talking to family on Zoom/Teams, watching You Tube clips on their hobbies and interests, reading aloud to them, finding things they cannot remember etc. This too is likely to take time, patience, and investment.

Access, Motivation and Skills

Whilst the key issue appears to be motivation, the tools to unlock the motivational impasse lie in a combination of all three factors. First the motivational hook to encourage use and then the means of access and skill can be addressed. However, this involves a targeted person-centred approach with ongoing support. The other alternative is to continue to provide offline services as well as online ones.

6.2 Age

Internet and mobile phone access are much lower in the 80+ population than in other groups. However, those aged 65 to 79 still have high levels of access (circa 92%) although the frequency of mobile phone and internet usage declines with age.

Even those respondents in the 80+ age group with access are much more likely to consume services face-to-face than other age groups. This figure is likely to be higher given this group also has the highest number of non-internet users.

Generally, this is a motivational issue rather than a skill or access issue as older people do not see the need and do not want devices or access. It does not appear to be driven by fears over security, scams, spam and junk. It is based on a complete lack of interest and desire in using the internet.

Implications

In policy and strategy terms this has implications for wellbeing and health care such as isolation and access to support services (See for example Integrated Joint Health Care, 2018). The issues highlighted in 2020 of older people being digitally excluded remain (TSDG, 2020), but our study is much clearer that this is a motivation issue rather than skills related. This population see no need or benefit to them in changing their preference for face-to-face and offline activity. This is supported by other research in the UK (ONS, 2019a). Although device ownership is low in the 80+ group the solution is not to give them a device in the hope they will use it. They will need a reason to use the device that matters to them (motivation) and ongoing support and encouragement (skills). Alternatively, they will need face-to-face services and support to continue.

6.3 Household Income

There is a link between household income and access. The lowest income group is 40% less likely than the highest income group to have another device other than a mobile phone in the household. The highest income group is also likely to have two or more other devices in their household.

The lowest income group is 20% less likely to have internet access and 25% less likely to have an e-mail address than the highest income group. This does strongly suggest an affordability issue. The graph indicates that access is highly likely to increase in line with household income. This is combined with the number of devices in a household and fits with qualitative data on unprompted negative comments about the age of the device at lower income levels.

Simple bivariate analysis shows the highest income band has the largest household populations, but these households still have more devices per person the higher the household income. Overall, this data demonstrates that income is the likely determinant of number of devices per person in a household.

There is also qualitative data from the survey that suggests lower income households have older devices. Many lower income respondents have made comments such as *"my computer/laptop is too old/out of date".* This suggests either they have not been able to update/replace the device, or they have hand-me-down devices from relatives. So, access to the internet is more about quality of device, availability of the device within the

household due to sharing. It is unclear if sharing access in a household, affordability or both are the reason lower income groups use the internet less frequently. Household device data shows it is less likely that those on lower incomes have a computer, laptop, or tablet/iPad. This means they are more likely to access the internet and services by mobile phone (Deloitte, 2018).

Affordability is an issue but in a very different way to that original intended in digital exclusion research. Affordability is not necessarily denying access, but it does appear to have an impact on frequency of use as well as device quality and quantity. The issue of cost was the main issue raised in the lower income groups, followed by device. This fits with other research data suggesting lower income groups have less devices in a household and commonly use their mobile as the main device or an out-of-date laptop or tablet.

E-mail usage is also less frequently used and lower income groups are more likely not to have an e-mail account at all. There are also signs that lower income groups may be less skilled at using the internet. These findings are consistent with other research data in the UK (ONS, 2019a; ONS, 2019b).

Some of those in the lower income group are also the 80+ group mentioned in 6.2 but our focus in analysing the lower income groups has been predominantly on those with access.

Implications

In policy terms there are implications for the design of online services and ensuring they are compatible with mobile phones as well as other platforms. As one of our respondents noted "it takes ages to fill in the form on my phone". However, in the current economic climate issues of affordability are also likely to become even more difficult. The policy question we may need to ask may be about having a basic right of access to a device and the internet.

6.4   Registered Disabled

The data on the registered disabled respondents is positive and encouraging in that many more registered disabled people have access than was expected based on the 2020 research findings. However, accessibility issues, resulting from specific disabilities, still remain. These issues involve difficulties in using devices, small screens/keypads, using applications as well as mental health concerns. However, accessing the internet does not appear to be a concern.

Our research also highlighted the benefits of working with TSOs for the disabled in design and administration of systems rather than post design adaptation. The wealth of knowledge that TSOs and their service users have of living with their specific disability and the advances in technological support need to be harnessed much more than it is currently. The TSOs can also share this knowledge with each other as adaptive technologies may server other purposes than those they may have originally been intended for.

Implications

In policy and strategy development it is clear that involvement of TSOs and their service users at the outset is preferable to assuming we know what a disabled person needs or adapting post-design or in hindsight.

6.5   Literacy

Literacy issues often go unnoticed. In part they may be hidden, or people develop ways to cope with most everyday activities. In Scotland, estimates are that 26.7% of the population *'face occasional challenges and [are] constrained by'* literacy difficulties but *'cope with their day-to-day lives'*. (Scottish Government, 2020).

Our research highlights 76 respondents (8%, or 1 in 12 of the total survey population) who have self-identified as having literacy barriers in using technology. There are however 90% of this group who use online activities. The key issue our research identified in the literacy data was how many respondents seem not to use services. When asked their preference for how they conduct activities many of those with a literacy barrier said that they did not conduct these activities at all. Whilst this occurred in all categories of our analysis, it was substantially higher in those with literacy issues. This suggests that exclusion is not just an online issue but also an offline one.

Our bivariate analysis of postcode and literacy issues showed that the key geographic areas of concentration with literacy issues are in postcodes DG1 (Dumfries East), DG2 (Dumfries West) and DG9 (Stranraer and District) with likelihood in (DG12 Annan and District). Given the projected figure of 30,000 with literacy issues it is likely to be an issue across all postcodes.

Implications

It is not possible to use our research data to extrapolate to the wider population of Dumfries and Galloway. However, by extrapolating Scottish Government data those with a literacy issue affecting their day-to-day lives could be circa 30,000 people.

This has far reaching policy implications and is beyond the immediate scope of our research work on digital exclusion. However, the issue needs to be addressed for social economic and health purposes.

6.6   Language

Like the literacy issue in the section above, the issue of English language capability is largely hidden. This is an issue that crosses over in our data on ethnicity and religion. This group of respondents have access, but they rely on family and friends to conduct transactions much more than other groups. Many in this population have the internet skills but not the inclination or perhaps confidence to use them.

Implications

Whilst this is only a group of 26 respondents for these people it is an issue that can be addressed with targeted development and the use of online translation services. The data was provided for this group from a small number of TSOs so the solution may involve working closely with those organisations.

6.7   Accommodation Type (Social Housing)

Although accommodation type was seen as a predominantly secondary issue in our research which required multivariate analysis, we chose to analyse social housing respondents due to possible policy implications. We also conducted a simple multivariate analysis of household numbers (adults and children) and device access.

Social housing data shows that those in social housing tend to have fewer devices, lower quality of devices (i.e., mobiles rather than computers), less use or access to e-mail and showing a strong preference for face-to-face transactions. There are circa 33% who don't intend to use their internet capability or don't want to learn it for variety of transactions.

The data on household numbers showed that households with more than one child were likely to have fewer devices per head. This will probably mean there is more sharing of devices between adults and children in the household thus reducing frequency of access. The number of devices per head falls further in households with a child (or children) and a single adult. Again, these increase sharing and reduce frequency of access.

Implications

For social housing the implications include that there are high numbers of respondents who may not engage with online services and are less likely to use their e-mail frequently. There is a group who prefer face-to-face transactions and may not use online services. This means that services may need to be provided offline as well as online.

For households with children there is an accessibility and frequency issue that is not directly linked to income. More children in a household means less access and less frequency of access. This undoubtedly has immediate knock-on effects for education and schooling. There are also potentially longer-term economic effects in relation to work skills.

6.8   Carers

The data on those who care for others is positive. The Carer respondents' group is a relatively large sample (168 respondents) and shows higher than average usage of mobile phones and internet. However, there is a higher dependency on face-to-face processes for transactions and services than the general population and a lower level of engaging family and friends in conducting transactions. The latter is probably a contextual issue in that carers may well be the 'family' that other categories of respondents are relying upon to conduct their transactions.

Implications

There are two key implications for policy makers in relation to carers. First is motivational as the Carer population prefer face-to-face transactions and highly value these. This has implications for a move to online services. The second issue is based on a tentative finding that carers may well need more support to carry out transactions as it is likely they have to undertake those of the person(s) they care for and appear not to have family or friends they use to help them.

6.9   Sex

The data on sex provides limited insight in univariate analysis, as there are several other factors that may be at play in the data set. Multivariate analyse would allow for comparator issues such as household income, household type, relationship status and benefit status to be considered alongside sex.

The data we have analysed suggests tentatively that females may have slightly less access to higher quality devices such as laptops, computers, tablets and iPads. The data also indicates males may have a slightly higher willingness to learn how to use and conduct transactions on the internet than females. There is very little discernible difference between female and male respondents otherwise and even the differences mentioned here would need further analysis.

Implications

Few implications can be drawn from this data set. The only obvious issue at this stage would be to conduct further multivariate analysis to determine if there are other differences between males and females. In policy terms this may be useful in understanding motivational and skills issues that may be addressed differently between the sexes.

6.10 Sexual Orientation

Overall, the LGBTQ+ respondents to the survey appear to be more technologically focused than the general population ("tech-savvy" as we call it). This corresponds with a stronger preference to use the internet for transactions and services over the general survey population.

In addition, the LGBTQ+ respondents are slightly more comfortable with their perceived skills at using the internet than the general survey population. The use of mobile phones is also higher than the general population.

Implications

Based on our data set there appear to be no issues in general for the LGBTQ+ population in accessing the internet, using devices and conducting transactions online. However, this is a small sample of respondents (61) and further specific research might need to be done to highlight other issues and concerns with this group.

6.11 Relationship Status

Relationship status is predominantly an issue for multivariate analysis rather than univariate analysis.

Implications
Few implications can be drawn from this data set. The next step would be to conduct further multivariate analysis to determine if there are other differences between different types of relationship status. In policy terms this may be useful in understanding access issues for specific groups.

6.12 Benefits/ Working Status

Our study focused on those receiving benefits and not in work or looking for work, and the total benefits group. We found those on benefits tend to have fewer devices but similar access. This group use their e-mail less and prefer face-to-face services much more than the general survey population.

Accessibility appears not to be an issue for those on benefits although this may shift in the changing economic situation. However, the quality of devices and access to them is lower in this group.

Implications
The key implications for the benefits group are related to device quality and access. This group may be one of the few groups that would benefit from being provided with newer and better devices.

6.13 Educational Level

Education level is not a primary factor in digital exclusion, but it contributes to other categories e.g., household income and some additional multivariate analysis might be conducted here.

However, univariate analysis of education level has provided us with some of the most extreme patterns. Those with lower levels of education (Primary and Secondary) have lower access, lower device ownership, lower quality of devices (e.g., computers/laptops/tablets), lower frequency of usage and they are less likely to want to learn or use their internet skills. The lower education groups also consume more services face-to-face than other groups.

Implications

The data on education has given us some stark contrasts in digital usage. Bivariate analysis between income and education may shed further light on the issues raised here. In policy terms it is hard to draw out specific education related implications as they are highly likely to be connected with other categories.

6.14 Ethnicity

Findings in the ethnicity data are linked closely to those in the language and religion data. The most common theme being the understanding of English (see 6.6 above).

Implications

Few implications can be drawn from this data set. The next step may be to conduct further multivariate analysis. Other implications are addressed in section 6.6 above.

6.15 Religion

Findings in the religion data are linked closely to those in the language and ethnicity data. The most common theme being the understanding of English (see 6.6 above).

Implications

Few implications can be drawn from this data set. The next step may be to conduct further multivariate analysis. Other implications are addressed in section 6.6 above.

6.16 Postcode

The research is based on an opportunity sample and as such cannot be extrapolated to postcode districts. However, we have used postcode in relation to literacy (see 6.5 above) and connectivity (speed and reliability).

Independent data for internet connectivity for Dumfries and Galloway as a whole shows in 2022 (Labs.thinkbroadband.com) that the region fairs worse than the UK and Scotland:

National Superfast Picture

Superfast 30 Mbps and faster

Generated: 07-08-2022

UK	England	Northern Ireland	Scotland	Wales
97.2%	97.7%	92.8%	95.1%	96.7%

Full Fibre - Fibre to the Premises

Generated: 07-08-2022

UK	England	Northern Ireland	Scotland	Wales
38.8%	37.7%	85.5%	35.2%	36.5%

There is also data to show specific download speeds in Dumfries and Galloway.

Superfast (>24 Mbps):	91.35%	Below 2 Mbps down:	2.09%
Superfast (>=30 Mbps):	90.66%	Below 10 Mbps down: (Legal USO)	5.25%
Gigabit (DOCSIS 3.1 or FTTP):	23.14%	Below 10 Mbps, 1.2 Mbps up:	6.02%
Full Fibre (FTTP or FTTH):	23.14%	Below 15 Mbps: (High Speed Broadband)	6.83%
Alt Net FTTP: FTTP excluding Openreach, KCOM and Virgin Media RFOG	0.00%	Ultrafast (>100 Mbps):	23.14%
Openreach FTTP:	23.14%	Virgin Media Cable:	0.00%
'Fibre' partial/full at any speed: (FTTC/VDSL/G.fast/Cable/FTTP)	97.74%	Openreach (>30 Mbps):	90.66%
		Openreach G.fast:	0.00%

Comparing the two sets of data in the tables above we can see that Dumfries and Galloway lags behind other areas in connectivity and this supports the perception of survey respondents who see their connectivity as average to good.

	Dumfries & Galloway	Scotland	UK
Superfast 30Mbps and faster	90.7%	95.1%	97.2%
Full fibre to the premises (FTTP)	23.1%	35.2%	38.8%

To put this into perspective the average download speed for a movie of two hours duration is (https://www.broadbandspeedtest.org.uk/ August 2022)

Download speed	Time to download	Dumfries & Galloway population with access to this rate of download
12Mbps	51 min 21 seconds	6%
25Mbps	24 mins 34 seconds	67%
50Mbps	12 mins 17 seconds	
100Mbps	6 mins 8 seconds	23%

Our data of respondent's perceptions on speed and reliability across all postcodes shows people see their speed and reliability as average to good. The qualitative data also suggest that connectivity is one of the biggest access issues for those who use the internet.

Implications

The implications for connectivity in rural and remote areas have long been under discussion by policy makers. There are steps being made in the right direction for example, introductions of cable and trials of 5G satellite technology. However, connectivity remains an issue. Many of our respondents also link connectivity to cost or affordability. The suggesting being improved connectivity should not be more expensive.

6.17 Digitally Excluded

There are very few respondents who are completely digitally excluded. For most of those who are, it is a motivational issue and often a choice. They do not see the need for access and find other ways such as landline and postage. Alternatively, those who choose to be excluded ask their family and friends to conduct online activity for them. All this data is consistent with national research data (ONS 2019a, ONS, 2019b). Giving this group of people broadband access and a device will be highly unlikely to get them to use it. Instead, people need to have a reason to use it and that reason needs to be something that matters to them.

Many respondents also choose not to have an e-mail account with circa 17% without an e-mail account.

Implications

Policy makers need to consider whether they can completely remove offline services given this group might not move online. As many of this group are over 80 years of age there is a need for health care, housing and council services to remain accessible to them and not to move solely to online platforms. Those in the age band 65 to 79 do use the internet and online services much more and this reflects the first generation of computer users. In the longer term more of the older generation will have used computers in their workplace and education and this will eventually become less of an issue. However, we cannot assume in the current economic situation that affordability may not become a much bigger issue.

7. Conclusions

This report and research process aimed to address two themes:

- To develop a more in-depth understanding of digital exclusion in Dumfries and Galloway, particularly focused on third sector service users.

- To test the data from the original 2020 report.

The original report in 2020 identified the definition of access – motivation – skills and we have adopted this in our report. However, we have highlighted a shift in digital inclusion/exclusion since the 2020 data.

Access - The large majority of those surveyed have some form of online access and they are now concerned with issues such as the speed and reliability of their connections, the age and quality of the devices they use, the cost of broadband and their right to choose whether they consume services and transactions online or otherwise.

Motivation – is the biggest barrier to an online world. There are many with the skills who prefer not to use them, and nearly as many people who do not want to learn how to conduct transactions and services or use them. Changing these views will be difficult due to the fact they are strongly held and valued.

Skills – is now about a much more person centred approach to educating users. People want one-to-one support and advice. They also need convincing as to how online access may help them with something that matters to them such as family, hobbies, music etc. There are also issues of literacy and English language understanding that need to be addressed.

By developing a more in-depth understanding of the issues we do not seek to extrapolate to the wider population but instead, to inform the debates on digital services and transactions. In turn this hopefully will inform policy makers, those designing online services and lead to a more inclusive relationship with service users much earlier in the decision making and design processes.

8. Appendices

Appendix 1. Project Steering Group

Appendix 2. Summary of Findings

Appendix 3. Participating Organisations

Appendix 4. Questionnaire

Appendix 5. Additional data by category

Project Steering Group membership organisations:

Alzheimer Scotland
Better Lives Partnership
Dumfries and Galloway Citizens Advice Service
Dumfries and Galloway Day Centre Network
Dumfries and Galloway Hard of Hearing Group
Dumfries and Galloway Multicultural Association
DG Voice
Independent Living Support
Loreburn Housing Association
Quarriers – Dumfries and Galloway
Riverside Club – Newton Stewart
Scottish Council for Voluntary Organisations
Support in Mind Scotland
Third Sector Dumfries and Galloway
Visibility Scotland

We would like to thank these organisations for the invaluable expertise and guidance given to the Project Reference Group.

Appendix 2. Participating Organisations

Organisation
Alzheimer Scotland
Balmaclellan Community Trust
Better Lives partnership (Castle Douglas)
Better Lives Partnership (Dumfries)
Better Lives Partnership - Stranraer
Borgue Community Council
Castle Douglas ARC
Castle Douglas Community IT Centre
Dalbeattie Foodbank - Dalbeattie Initiative
Department for Work and Pensions
DGMEFN
DG Voice
Dumfries and Galloway Citizens Advice Service
Dumfries and Galloway LGBT Plus
Dumfries and Galloway Multicultural Association
Dumfries ARC
Galloway Talking Newspaper Association for the Blind
Independent Living Support Dumfries
Kirkcudbright Fairtrade Group
LGBT Youth Scotland
Lockerbie Ice Rink
Loreburn Housing Association Ltd
Palnackie Village Shop
Portpatrick Community Development Trust
Powerful Voices Together Group
Quarriers – Dumfries and Galloway

Riverside Club - Newton Stewart Day Centre
RSPB Galloway
South of Scotland Community Housing
Stranraer Development Trust
Support in Mind Scotland
The Devil's Porridge Museum
The Furniture Project (Stranraer) Ltd
The Langholm Initiative
The Rhins Men's Shed
Turkish Culture and Heritage
Upper Eskdale Development Group
Upper Nithsdale Arts & Crafts Community Initiative Limited

We would like to thank these organisations for helping us to design and / or administer the questionnaire.

ACCESS	
5.1	AGE
A5.1.1	Access is lower for the 80+ group
A5.1.2	Device ownership is low for the 80+ group
5.2	HOUSEHOLD INCOME
A5.2.1	Fewer devices in lower income groups.
A5.2.2	Lower income groups are more likely to access the internet by mobile phone thus reducing access quality
A5.2.3	Lower income groups less likely to use e-mail and internet
5.3	REGISTERED DISABLED
A5.3.1	Reduced quality of access due to fewer computers and tablets per head of household
A5.3.2	Less frequent access of internet and e-mail
5.4	LITERACY
A5.4.1	Lower access to devices and e-mail
A5.4.2	Some reduction in quality of access due to fewer computers and laptops per head of household
5.5	LANGUAGE
A5.5.1	Fewer devices than survey population
A5.5.2	Reduced quality of access due to fewer computers and tablets per head of household
5.6	ACCOMMODATION TYPE – SOCIAL HOUSING
A5.6.1	Many fewer devices than general survey population
A5.6.2	Reduced quality of access due to fewer computers and tablets per head of household
A5.6.3	Children have reduced device access if they have siblings
5.7	CARERS
A5.7.1	Access is higher for carers than the general population on all measures
A5.7.2	Device ownership is at similar levels to the general survey population of access
5.8	SEX
A5.8.1	Access to higher quality devices may be worse for females
A5.8.2	Device ownership is at similar levels to the general survey population
5.9	SEXUAL ORIENTATION
A5.9.1	Access is higher for LGBTQ+ than the general population
A5.9.2	Device quality is likely to be higher
A5.9.3	E-mail access is much higher than general survey population
5.11	BENEFITS / WORKING STATUS
A5.11.1	Fewer devices than survey population
A5.11.2	Similar levels of access

5.12	EDUCATIONAL LEVEL
A5.12.1	Access decreases as education level gets lower
A5.12.2	Device ownership decreases as education level gets lower
A5.12.3	Quality of access may be lower due to availability of devices in lower education levels
5.13	ETHNICITY
A5.13.1	Mobile and internet usage is more frequent for BAME+ group
A5.13.2	Voice calls are higher in the BAME+ group
A5.13.3	Access to devices is similar between groups
5.14	RELIGION
A5.14.1	Access to a mobile phone and frequency of its use is much higher amongst Muslim respondents
A5.14.2	Devices such as laptops and tablets are much less likely in Muslim households
5.16	DIGITALLY EXCLUDED
A5.16.1	Small number of 16–17-year-old respondents "not allowed" a phone

MOTIVATION	
5.1	AGE
M5.1.1	Frequency of mobile and internet usage declines with age
M5.1.2	More preference for face-to-face transactions for those aged 80+
M5.1.3	Issues with motivation to use digital across most age ranges
5.2	HOUSEHOLD INCOME
M5.2.1	Lower income groups are less likely to have e-mail
M5.2.2	More preference for face-to-face transactions in lower income groups
M5.2.3	Less desire to use internet skills or to want to in lower income groups
5.3	REGISTERED DISABLED
M5.3.1	Some preference for face-to-face and family and friends conducting transactions than survey population
M5.3.2	No desire to learn how to do things online for those who do not use digital
5.4	LITERACY
M5.4.1	Much less likely to have or use e-mail
M5.4.2	Strong preference for face-to-face and family and friends conducting transactions than survey population
M5.4.3	Strong level of lack of engaging with services and transactions
5.5	LANGUAGE
M5.5.1	Much less likely to have or use e-mail
M5.5.2	Strong preference for face-to-face and family and friends conducting transactions than survey population
M5.5.3	Strong level of lack of engaging with services and transactions
5.6	ACCOMMODATION TYPE (SOCIAL HOUSING)
M5.6.1	Much less likely to have or use e-mail
M5.6.2	Strong preference for face-to-face in conducting transactions than survey population
M5.6.3	Low motivation to use internet skills or to learn them.
5.7	CARERS
M5.7.1	More likely to use their e-mail
M5.7.2	More preference for face-to-face transactions than general survey population and self-reliant.
M5.7.3	Otherwise, similar levels of motivation to use.
5.8	SEX
M5.8.1	Preference for face-to-face transactions is around 20% for both sexes
M5.8.2	Slightly more males are unwilling to use/learn to use the internet
5.9	SEXUAL ORIENTATION
M5.9.1	LGBTQ+ group more likely to use their mobile phone than others
M5.9.2	More preference for online transactions than general survey population and self-reliant.
5.11	BENEFITS / WORKING STATUS

M5.11.1	Slightly less likely to use their e-mail
M5.11.2	More preference for face-to-face transactions than survey population
M5.11.3	Otherwise, similar levels of motivation to use.
5.12	EDUCATIONAL LEVEL
M5.12.1	The higher educated are more frequent users of devices and the internet
M5.12.2	More preference for face-to-face transactions in the lowest education group
M5.12.3	Lowest education group less likely to want to learn and use internet
5.13	ETHNICITY
M5.13.1	BAME+ group much more preference for face-to-face transactions and self-reliant.
	BAME+ show much less desire to use their internet skills
5.14	RELIGION
M5.14.1	Muslim respondents less likely to use their e-mail account
M5.14.2	Muslim respondents much higher preference for face-to-face transactions
M5.14.3	Motivation to use the internet is an issue for all groups.
5.16	DIGITALLY EXCLUDED
M5.16.1	Majority don't want or need it or use landline.
M5.16.2	Circa 17% of respondents do not have an email account

SKILLS	
5.1	AGE
S5.1.1	Slightly higher level of wanting to learn how to use internet for tasks in younger groups (age 16-24)
5.2	HOUSEHOLD INCOME
S5.2.1	Lower income groups may have less skills than other groups
S5.2.2	Similar low levels of wanting to learn across all income groups
5.3	REGISTERED DISABLED
S5.3.1	Skills level in online services is similar to the general population but there is a much higher number not prepared to use those skills.
5.4	LITERACY
S5.4.1	Lack of willingness to learn and use the Internet is higher than the general survey population
5.5	LANGUAGE
S5.5.1	Lack of willingness to learn and use the Internet is higher than the general survey population
5.6	ACCOMMODATION TYPE (SOCIAL HOUSING)
S5.6.1	Lack of willingness to learn and use the Internet is higher than the general survey population
5.7	CARERS
S5.7.1	Slightly higher level of skills than the general survey population
5.8	SEX
S5.8.1	Neither females or males show a need for learning how to use the internet for activities (only 1.2%)
5.9	SEXUAL ORIENTATION
S5.9.1	Higher level of skills than the general survey population
5.11	BENEFITS / WORKING STATUS
S5.11.1	Similar levels of skills to general survey population
5.12	EDUCATIONAL LEVEL
S5.12.1	Internet usage skills rise in line with education level.
5.13	ETHNICITY
S5.13.1	BAME+ group has a slightly higher level of skills.
5.14	RELIGION
S5.14.1	Perceived skills levels high and little interest in learning how to use the internet for activities.
5.16	DIGITALLY EXCLUDED
S5.16.1	Skills do not appear to be the issue.

Digital Inclusion - Research Questionnaire ⅄

This is a questionnaire for Third Sector Dumfries & Galloway to assess digital inclusion across the Dumfries and Galloway region.

Some questions we ask may seem like they are not directly relevant to Digital Inclusion, however these actually help us form a wider digital picture.

Your response is completely anonymous and cannot be traced back to you.

DATA, CONFIDENTIALITY & PRIVACY POLICY
Any data or information obtained from this project research will be gathered by an independent data gathering platform (in the form of Microsoft services). This data will then be transferred and stored securely on Third Sector Dumfries and Galloway's (TSDG) database with the original copies destroyed. The data supplied to TSDG will be anonymized, so the participant's name is not included. The data will remain on TSDG's database for the duration of the project (a maximum of two years), after which this data will also be destroyed. Questionnaire participants have the right to request what data is held by TSDG or request their data be destroyed at any point. This can be actioned by contacting the original participating organisation, which will then pass on the request to TSDG. Questionnaire participants should be aware before beginning the interview that special data category information (race/ethnic origin; religion; health; Sexual orientation) may be gathered through this research. All data stored and managed by the participating Organisations or groups will be done so in accordance with their own data management policies. Any confidential data obtained whether business or personal, which would reasonably be considered private/ proprietary to the project participants or the Organisation, will not be; disclosed, divulged, revealed, reported or used for any purpose by the parties - except as authorised by the research agreement, participant or as required by law. All information is gathered in accordance with the Data Protection Act of 2018. If you would like more information on how Microsoft collects and uses data, please go to the following link -**https://www.microsoft.com/en-us/servicesagreement**

Data Usage

Here are a few quick responses that you MUST confirm before we can continue. Each statement is designed to protect how we use your data and to protect your anonymity.
Please DO NOT include any identifiable information, such as names in your answer

1

Please check all boxes before you can continue with the rest of the questionnaire

GUIDELINES: It is not possible to continue to answer the questionnaire unless the participant agrees to accept all these statements. If the participant does not accept all the below statements, you will need to terminate the questionnaire by closing it and no data will be recorded. *

		ACCEPT
	I accept how my data will be collected and stored	○
	I accept that special category data, as stated, may be obtained in this research	○
	I accept the level of confidentiality offered by the project terms	○
	I confirm I am 16 years of age or older	○
	I am happy to proceed with the questionnaire knowing or having read the above	○

DEMOGRAPHIC QUESTIONS

A few questions about you, your background, and circumstances.
If you prefer not to answer them, you have that option But don't forget, **your responses are completely anonymous and cannot be traced back to you.**
Please DO NOT include any identifiable information, such as names in your answer

2

CODE OF PARTICIPANT Please fill in with Organisation code & number of participant *

Enter your answer

3

Have you completed this TSDG Digital questionnaire on digital inclusion before? *

○ Yes

○ No

○ Don't know/remember

4

What data gathering method is being used to complete this questionnaire?
NOTE How is the questionnaire being completed/administered? *

○ Independent questionnaire completion by the participant online

○ Telephone interview with participant

○ Video call interview with participant (e.g. Zoom)

○ In-person individual questionnaire completion

○ In-person group questionnaire completion

○ Completed paper copy manually inputted online

○ Don't know

○ Prefer not to say

○ Other

5

What age range are you? *

○ 16 to 17

○ 18-24

○ 25-40

○ 40-54

○ 55-64

○ 65-79

○ 80+

○ Prefer not to say

6

What sex are you? *

○ Female

○ Male

○ Other

○ Prefer not to say

7

Which of the following best describes your sexual orientation? *

○ Straight or Heterosexual

○ Gay or Lesbian

○ Bisexual

○ Other sexual orientation

○ Prefer not to say

○ Don't know

8

What is your relationship status? *

○ Single

○ Married/Civil Partnership/Cohabiting

○ Divorced or Separated

○ Widowed

○ Prefer not to say

9

How many people of the following ages live in your household (please include yourself)?
If none please select 0.

	0	1	2	3	4	5	More
Under 16	○	○	○	○	○	○	○
16-17	○	○	○	○	○	○	○
18-24	○	○	○	○	○	○	○
25-40	○	○	○	○	○	○	○
41-54	○	○	○	○	○	○	○
55-64	○	○	○	○	○	○	○
65-79	○	○	○	○	○	○	○
80+	○	○	○	○	○	○	○
Prefer not to say (click 1)	○	○	○	○	○	○	○
Don't know (click 1)	○	○	○	○	○	○	○

10

Do you have a registered disability? *

○ Yes

○ No

○ Prefer not to say

11

Do you look after, or give any help or support to, anyone because they have long-term physical or mental health conditions or illnesses, an addiction, or problems related to old age?

PROMPT: A carer is anyone, including children and adults who look after a family member, partner, neighbour, or friend who needs help because of their illness, frailty, disability, mental health problem or addiction and cannot cope without their support. The care they give is unpaid and isn't part of paid employment. *

○ Yes

○ No

○ Don't Know

○ Prefer not to say

12

What is your approximate total household income? *

○ Up to £12,500

○ Between £12,501 & £20,000

○ Between £20,001 & £30,000

○ Between £30,001 & £40,000

○ £40,001+

○ Prefer not to say

○ Don't know

13

What is your working status? *

- [ ] Work full-time (30 hours or more a week)
- [ ] Work part-time (less than 30 hours a week)
- [ ] Looking for work
- [ ] In full-time education (school, college, university)
- [ ] In part-time education (school, college, university)
- [ ] Unpaid Carer
- [ ] Retired
- [ ] Not working
- [ ] Prefer not to say

14

Which (if any) of the following benefits do you receive? *

- [ ] None
- [ ] Prefer not to say
- [ ] Universal Credit
- [ ] Attendance Allowance
- [ ] Carers Allowance
- [ ] Cold Weather Payments and Winter Fuel Payments
- [ ] Disability Living Allowance (DLA)
- [ ] Discretionary Housing Payments
- [ ] Employment and support allowance (ESA)
- [ ] Industrial Injuries Disablement Benefit
- [ ] Job seekers allowance (JSA)
- [ ] Personal Independence Payment (PIP)
- [ ] Severe Disablement Allowance (SDA)
- [ ] State Pension (sometimes called Old age pension)
- [ ] Don't know

15

What is your highest educational level? *

○ Primary school or equivalent

○ Secondary school or equivalent

○ Sixth form college or equivalent

○ Technical college or equivalent

○ Further education college

○ Adult community college

○ University

○ Prefer not to say

16

What is your ethnicity? *

○ WHITE (White British/Any other white background)

○ MIXED (White & Black Caribbean, White & Black African, White & Asian, Any other mixed background)

○ ASIAN/BRITISH ASIAN (Indian, Pakistani, Bangladeshi & Any other Asian background.)

○ BLACK/BLACK BRITISH[(Caribbean, African, Any other black background)

○ MIDDLE EAST AND ARABIC (Middle Eastern, including Arabic origin.)

○ CHINESE/BRITISH CHINESE (Chinese, Any other background)

○ Prefer not to say

○ Other

17

How well do you understand English? *

○ Very well, it is my first language

○ Very well, it is a second language

○ Well

○ Not well

○ Not at all

○ Prefer not to say

18

Do you feel that you have literacy issues that might be a barrier to your use of technology? *

○ No

○ Yes

○ Don't know

○ Prefer not to say

19

What is the first part of your postcode (e.g. DG3, DG11 etc?) *

○ DG1

○ DG2

○ DG3

○ DG4

○ DG5

○ DG6

○ DG7

○ DG8

○ DG9

○ DG10

○ DG11

○ DG12

○ DG13

○ DG14

○ DG16

○ Prefer not to say

○ Other

20

What kind of accommodation do you live in at the moment? *

○ Private rental

○ Social housing

○ Live at home with parent/guardian

○ Owned or mortgaged home

○ Temporary accommodation (e.g. friends etc)

○ Assisted living facility or care home

○ Prefer not to say

○ Other

21

What is your religion (if any)? *

○ Christian (Church of Scotland, Roman Catholic, Other Protestant and all other Christian denominations)

○ Buddhist

○ Hindu

○ Jewish

○ Muslim

○ Sikh

○ No religion/aethiest

○ Prefer not to say

○ Other

MOBILE PHONE QUESTIONS

Next we have a few questions about mobile phones...
Again, all **your responses to questions are completely anonymous.**
Please DO NOT include any identifiable information, such as names in your answer

---

22

Do you **own** a mobile phone? *

○ No

○ Yes

23

Do you have **access** to a mobile phone? *

○ No

○ Yes

24

Have you ever owned or had access to a mobile phone *

○ No

○ Yes

25

Please can you expand upon why you have never owned or had access to a mobile phone?
(Please DO NOT include any identifiable information, such as names in your answer). *

Enter your answer

26

Do you own or have access to any other devices? (e.g. tablet/laptop/voice activated device such as Alexa). **Please can you tell me what they are?**
(Please DO NOT include any identifiable information, such as names in your answer).
*

Enter your answer

27

Please can you expand upon why you no longer have a mobile phone or access to one?
(Please DO NOT include any identifiable information, such as names in your answer). *

Enter your answer

28

Is the mobile phone you own/have access to or used to own/have access to, a SMART phone or not?
Prompts: Did it have the ability to access the internet? Is your phone only capable of making phone calls and sending texts or, if you wanted to, could your phone be used for other things as well? (This might include such things as connecting to the internet, playing music, playing games, as a camera, watching TV or video, reading articles and making video calls). *

○ No

○ Yes

○ Don't Know

29

Do you own or have access to any other devices? (e.g. tablet/laptop/voice activated device such as Alexa .Please can you tell me what they are?
(Please DO NOT include any identifiable information, such as names in your answer).
*

Enter your answer

30

What prompted you to start using a mobile phone? **AND** When was this/how long have you been using it for?
Prompts: emergency purposes/job requirement/for education/present/covid/safety/communications with others/access services/family social media groups/games & entertainment/news & info/watching TV &   downloads/music/search for employment/prefer not to say. *

Enter your answer

31

How frequently (often) do, or did, you use the mobile phone? *

○ Several times a day

○ Daily

○ Weekly

○ Monthly

○ Less than once a month

○ Never

○ Don't know

○ Prefer not to say

○ Other

32

What do, or did, you use your mobile phone for... **and** how often?

	Daily	Weekly	Monthly	Yearly	Never
Make or receive calls and texts	○	○	○	○	○
Do instant messaging (Messenger, Instgram, What's App.,Snap Chat)	○	○	○	○	○
Send or receive emails	○	○	○	○	○
Make or receive phone calls over the internet like Skype/Zoom etc	○	○	○	○	○

What do, or did, you use your mobile phone for... **and** how often?

Listen to or download music online	○	○	○	○	○
Watch online/download TV programmes/ films (e.g. BBC/ITV Player, You Tube, Sky G0) etc.	○	○	○	○	○
Games/gaming	○	○	○	○	○
Read blog/watch a vlog	○	○	○	○	○
Create your own content such as writing or making a blog/vlog/Yo u Tube	○	○	○	○	○
Maintain website	○	○	○	○	○
Post messages on discussion/m essage boards	○	○	○	○	○
Look at/update a social network site e.g. You Tube, Facebook,Tu mblr Instagram, LinkedIn.	○	○	○	○	○
For work, looking for work or for education	○	○	○	○	○
Read/listen to news, newspapers or books, magazines etc	○	○	○	○	○

What do, or did, you use your mobile phone for... **and** how often?

Choose cheaper services e.g. gas or electric, insurance, comparison sites	○	○	○	○	○
Grocery shopping	○	○	○	○	○
Other shopping	○	○	○	○	○
Medical Appointments/Services (e.g. prescription).	○	○	○	○	○
Emergency contact/purpose	○	○	○	○	○
Online service e.g. banking, council services, paying bills	○	○	○	○	○

INTERNET QUESTIONS

And now we have a series of questions about the internet and the web...
Just like in all the other sections of the questionnaire, **your response cannot be traced back to you and is completely anonymous.**
Please DO NOT include any identifiable information, such as names in your answer

33

Do you feel pressurised to use new technology and the internet? *

- ○ No, not at all
- ○ Sometimes, yes
- ○ Often
- ○ Prefer not to say

34

How do you rate the **SPEED** of the Internet connectivity where you live? *

- ○ Excellent
- ○ Good
- ○ Average
- ○ Poor
- ○ Don't know (or not applicable)

35

How do you rate the **RELIABILITY** of the Internet connectivity where you live? *

○ Excellent

○ Good

○ Average

○ Poor

○ Don't know (or not applicable)

36

Do you have access to the internet *

○ No

○ Yes through someone else

○ Yes

37

You said you accessed the internet through someone else - who is that? *

○ Family

○ Friend

○ Through an organisation (e.g. a support group, charity etc)

○ Prefer not to say

○ Other

38

Have you ever had access to the internet? *

○ No

○ Yes

39

Please can you explain why you do not have access to the internet now?
(Please DO NOT include any identifiable information, such as names in your answer).
*

Enter your answer

40

Please can you explain why you do not have access to the internet?
(Please DO NOT include any identifiable information, such as names in your answer). *

Enter your answer

41

What is/or was the main device you use/used to use to connect to the internet? **AND** why?
(Please DO NOT include any identifiable information, such as names in your answer). *

Enter your answer

42

How many of the following devices are there in your household?

	0	1	2	3	4+
Computer or Laptop	○	○	○	○	○
Tablet	○	○	○	○	○
Smart Phone	○	○	○	○	○
Voice activated device (e.g. Alexa,Google Nest, Amazon Echo),	○	○	○	○	○
SmartTV, NowTV, Amazon Firestick,	○	○	○	○	○
FitBit, Smartwatch,	○	○	○	○	○
Other	○	○	○	○	○

43

If you answered 'OTHER' above please can you tell us what devices these are?

Enter your answer

44

What prompted you to start using the internet AND when was that?
PROMPTS: job requirement/for education/present/covid/safety/comms with others/access services/family social media groups/games & entertainment/news & info/watching TV & downloads/music/search for employment/prefer not to say
(Please DO NOT include any identifiable information, such as names in your answer).
*

Enter your answer

45

How often do you use the internet? *

◯ Daily

◯ Weekly

◯ Monthly

◯ Yearly

◯ Never

◯   Other

46

What do or did you use the internet for **and** how often?

	Daily	Weekly	Monthly	Yearly	Never
Send or receive emails	○	○	○	○	○
Do instant messaging (Messenger, Instgram, What's App.)	○	○	○	○	○
Read/listen to news, newspapers or books, magazines, books etc	○	○	○	○	○
Make or receive phone calls over the internet like Skype or Zoom	○	○	○	○	○
Listen to or download music online	○	○	○	○	○
Watch online/download TV programmes/films (e.g. BBC/ITV Player, You Tube Sky Go)	○	○	○	○	○
Games/gaming	○	○	○	○	○
Read blog/watch a vlog	○	○	○	○	○
Create your own content such as writing or making a blog/vlog? YouTube	○	○	○	○	○

46

What do or did you use the internet for **and** how often?

Maintain website	○	○	○	○	○
Post messages on discussion/message boards	○	○	○	○	○
Look at/update a social network site e.g. You Tube, Facebook,Tumblr Instagram, LinkedIn.	○	○	○	○	○
For work or education	○	○	○	○	○
Online service e.g. banking, council services, paying bills	○	○	○	○	○
Choose cheaper services e.g. gas or electric, insurance, comparison sites	○	○	○	○	○
Shopping e.g products, grocery, clothing	○	○	○	○	○
Medical Appointments/Services (e.g. prescription)	○	○	○	○	○
Emergency contact/purpose	○	○	○	○	○

This question has two parts - first we want to know

1) How do you mostly carry out each of the following tasks or get the following services...?

(Choose the one you do most frequently)

Then we will ask you how highly you value doing that task or getting that service in that way *

	Face to Face	Telephone	On paper (e.g by post)	Online	Don't do this	Family or friend do this for me	Not applicable
Buy a product	○	○	○	○	○	○	○
Make travel reservations/ bookings	○	○	○	○	○	○	○
Pay bills	○	○	○	○	○	○	○
Use your bank's services	○	○	○	○	○	○	○
Compare products and services	○	○	○	○	○	○	○
Buy groceries/food	○	○	○	○	○	○	○
Sell things	○	○	○	○	○	○	○
Find the location of a house, office, store or restaurant	○	○	○	○	○	○	○
Get information about local council services	○	○	○	○	○	○	○
Pay for a local council tax, fine (such as parking fines), rent or services	○	○	○	○	○	○	○

This question has two parts - first we want to know
1) How do you mostly carry out each of the following tasks or get the following services....?
(Choose the one you do most frequently)
Then we will ask you how highly you value doing that task or getting that service in that way *

Get information about central government services, such as benefits, taxes, a driving licence or passport	○	○	○	○	○	○	○
Pay for a central government tax (such as income tax, TV licence fee, car disc)	○	○	○	○	○	○	○
Get information about schools or education	○	○	○	○	○	○	○
Contact an MP or local councillor	○	○	○	○	○	○	○
Participate in political activism such as signed a petition, shared a political story, supported a campaign	○	○	○	○	○	○	○
Find out about news/events in the local community	○	○	○	○	○	○	○

48

Second part of the question is how much you VALUE doing the task or getting the service in the way you said above.

How much do you value the service (be it face to face/telephone/by post or internet)?

Prompt: Highly valued could not do without this...

	Not valued	Low value	Valued	Highly valued	Not applicable
Buy a product	○	○	○	○	○
Make travel reservations/ bookings	○	○	○	○	○
Pay bills	○	○	○	○	○
Use your bank's services	○	○	○	○	○
Compare products and services	○	○	○	○	○
Buy groceries/food	○	○	○	○	○
Sell things	○	○	○	○	○
Find the location of a house, office, store or restaurant	○	○	○	○	○
Get information about local council services	○	○	○	○	○
Pay for a local council tax, fine (such as parking fines), rent or services	○	○	○	○	○

Second part of the question is how much you VALUE doing the task or getting the service in the way you said above.

How much do you value the service (be it face to face/telephone/by post or internet)?

Prompt: Highly valued could not do without this....

Get information about central government services, such as benefits, taxes, a driving licence or passport	○	○	○	○	○
Pay for a central government tax (such as income tax, TV licence fee, road tax)	○	○	○	○	○
For school or education	○	○	○	○	○
Contact an MP or local councillor	○	○	○	○	○
Participate in political activism such as signed a petition, shared a political story, supported a campaign	○	○	○	○	○
Find out about news/events in the local community	○	○	○	○	○

Before today did you know you could do this on the internet?

	No	No but I would like to know more	Yes but I am not interested in doing it	Yes
Buy a product online	○	○	○	○
Make travel reservations/ bookings	○	○	○	○
Pay bills	○	○	○	○
Use your bank's online services	○	○	○	○
Compare products and services	○	○	○	○
Buy groceries or food online	○	○	○	○
Sell things online	○	○	○	○
Find the location of a house, office, store or restaurant	○	○	○	○
Get information about local council services	○	○	○	○
Pay for a local council tax, fine (such as parking fines), rent or services	○	○	○	○

Before today did you know you could do this on the internet?

Get information about central government services, such as benefits, taxes, a driving licence or passport	○	○	○	○
Pay for a central government tax (such as income tax, TV licence fee, road tax)	○	○	○	○
For school or education	○	○	○	○
Contact an MP or local councillor	○	○	○	○
Participate in online political activism such as signed a petition, shared a political story, supported a campaign	○	○	○	○
Find out about news/events in the local community	○	○	○	○
Search for jobs/employment	○	○	○	○

What would help you to use the internet and to keep using it?
(Please DO NOT include any identifiable information, such as names in your answer).
*

Enter your answer

E-MAIL QUESTIONS

Final section - here we have some questions about e-mail. Again they are anonymous so you cannot be identified by your answers.
Please DO NOT include any identifiable information, such as names in your answer

51

Do you have an e-mail account? *

○ No

○ Yes

○ Used to have one/not now

52

Please can you explain why you have never had an e-mail account?

Prompts: No need/ use a landline/no mobile signal/too expensive/something to lose/theft/don't want one (reason)/don't want to be contacted/no one to call/nuisance & scam calls/fear of technology too complicated/had one but got rid of it. *

Enter your answer

:::

53

Please can you explain why you no longer have an e-mail account?

Prompts: No need/ use a landline/no mobile signal/too expensive/something to lose/theft/don't want one (reason)/don't want to be contacted/no one to call/nuisance & scam calls/fear of technology too complicated/had one but got rid of it. *

Enter your answer

54

How do or did you access your e-mail account (Please tick all that apply)? *

☐ At home

☐ Through a family member

☐ Through a friend or neighbour

☐ At another location e.g. library/work/school/college

☐ Other

55

What prompted you to have an e-mail account AND when was that?
(Please DO NOT include any identifiable information, such as names in your answer).

Prompts: job requirement/for education/present/covid/safety/communications with others/access services/family social media groups/games & entertainment/news & info/watching TV & downloads/music/search for employment/prefer not to say *

Enter your answer

56

What do or did you use your e-mail account for? *

☐ Check your email

☐ Send or receive emails from friends or family

☐ Send attachments with your email

☐ Send or receive work/school/college/university emails

☐ Apply for jobs

☐ General administrative purposes (e.g. electricity, insurance, bills)

☐ For when you need to create user/login accounts online

☐ To join/create or get tickets to online events

☐ Prefer not to say

☐ Other

57

How often do you use your e-mail? *

○ Daily

○ Weekly

○ Monthly

○ Yearly

○ Never

○ Prefer not to say

58

What would help you to use your e-mail account and to keep using it?
(Please DO NOT include any identifiable information, such as names in your answer).
*

Enter your answer

YOU HAVE REACHED THE END OF THE QUESTIONNAIRE.
THANK YOU!

Thank you for your time, patience and most of all for your responses.

1. General Survey Population
2. Age
3. Household Income
4. Registered Disabled
5. Literacy and Language
6. Accommodation Type (Social Housing)
7. Carers
8. Sex
9. Sexual Orientation
10. Benefits
11. Education
12. Ethnicity
13. Religion

GENERAL SURVEY POPULATION
How do they prefer to do things

%

Telephone, 4

Face to Face, 13.5

Friends & Family, 9.3

Post/Paper, 2.9

Online, 70.3

■ Face to Face ✎ Friends & Family ☑ Post/Paper ■ Online ☐ Telephone
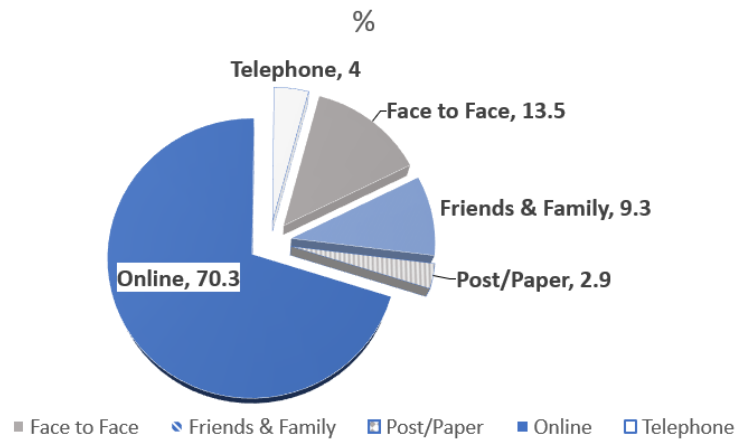
General
Face to Face – Online – Not Applicable

Process	Face to Face	Online	Not Applicable
Buy a product	407	339	38
Travel Reservations	71	380	244
Use Bank services	165 (19.7)	466 (55.7)	108 (12.9)
Compare products & services	41	481	258
Buy Groceries/Food	477	151	135 (829)
Sell things	35	322	538
Find location	29	540	203

GENERAL SURVEY POPULATION
Average value placed on all services %

General Respondent Population %
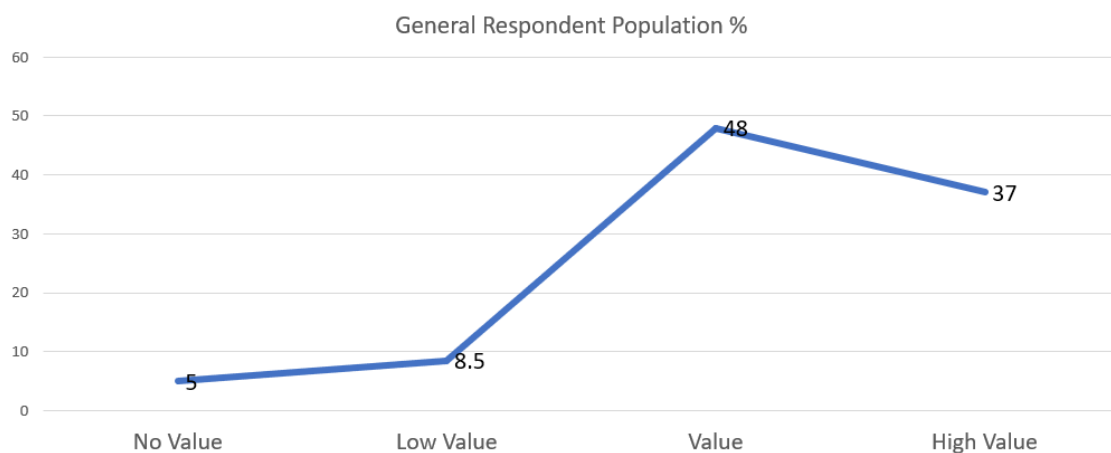
All respondents with internet access on how they prefer to contact an MP/Councillor in %
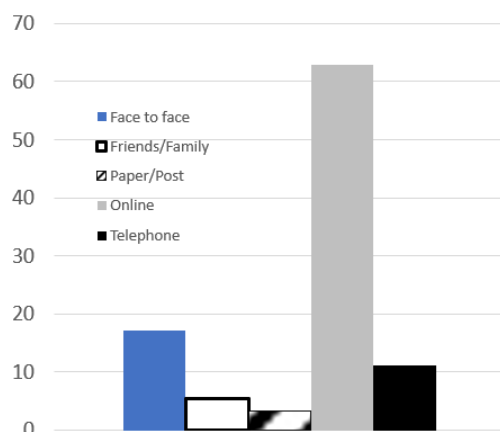
All respondents with internet access on how much they value the preferred way of contacting an MP/Councillor in %
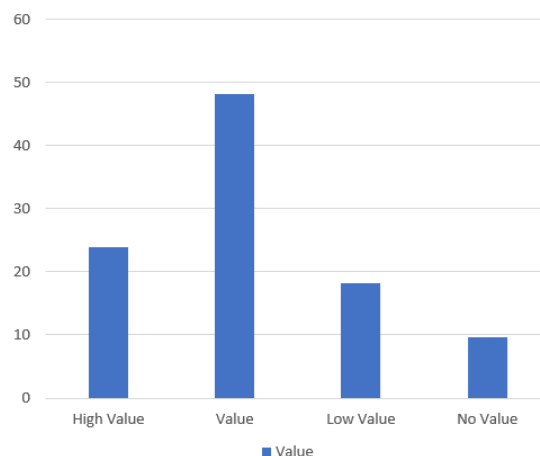
2.　Age

What it is the internet used for
When we consider usage of mobile phone for internet purposes against age bands again higher usage is heavily skewed towards younger age bands. Banking, education/work activity and social media are the main non-voice call uses amongst younger respondents. There is a dramatic fall off of usage after the 65-79 age band with over 80's not using the mobile phone for internet activity.

Several internet activities conducted by mobile phone alone are generally low across all age groups. These include web page development and maintenance, blogging and vlogging, video calling (e.g. skype/zoom) and political activities and engagement.

Usage of mobile phone for internet purposes by age band
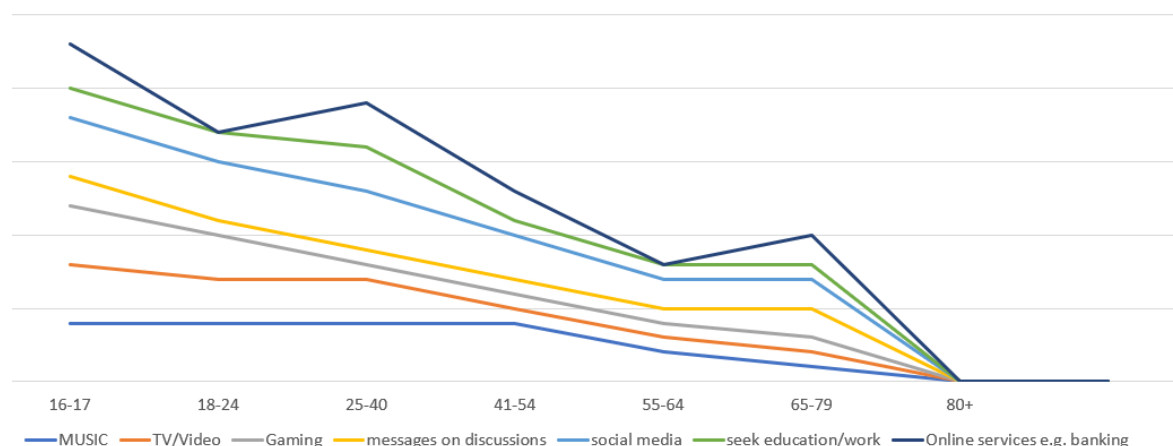
Preference for services and value of that preference

BUY A PRODUCT – Preference for transaction

PAY BILLS – Preference for transaction

Bar chart showing FACE TO FACE (blue) and ONLINE (white) preference by age group:

Age group	Approx. total
16-17	60.0
18-24	54.0
25-40	100.0+
41-54	90.0
55-62	88.0
65-79	90.0
80 +	75.0

■ FACE TO FACE   □ ONLINE

USE BANK SERVICES – Preference for transaction

Age group	Approx. total
16-17	55.0
18-24	74.0
25-40	93.0
41-54	97.0
55-62	91.0
65-79	94.0
80 +	84.0

■ FACE TO FACE   □ ONLINE

FIND OUT LOCAL NEWS/EVENTS – Preference for transaction

Age group	Approx. total
16-17	55.0
18-24	74.0
25-40	93.0
41-54	97.0
55-62	91.0
65-79	94.0
80 +	84.0

■ FACE TO FACE   □ ONLINE

3. Household Income

In general, across a variety of tasks and services the lower the household income the number of respondents who conduct their interaction/engagement face-to-face increases. For example, 25.4% of those in the lowest income household prefer face-to-face banking compared with 6.7% in highest income households.

Average % of how transactions/services conducted – lowest & highest income groups

	Face to Face	Friends/Family	Online	N/A or Don't do this
Under 12,500	12.5	4.2	39.1	36
40,001 +	8.6	3.3	71.5	15.2
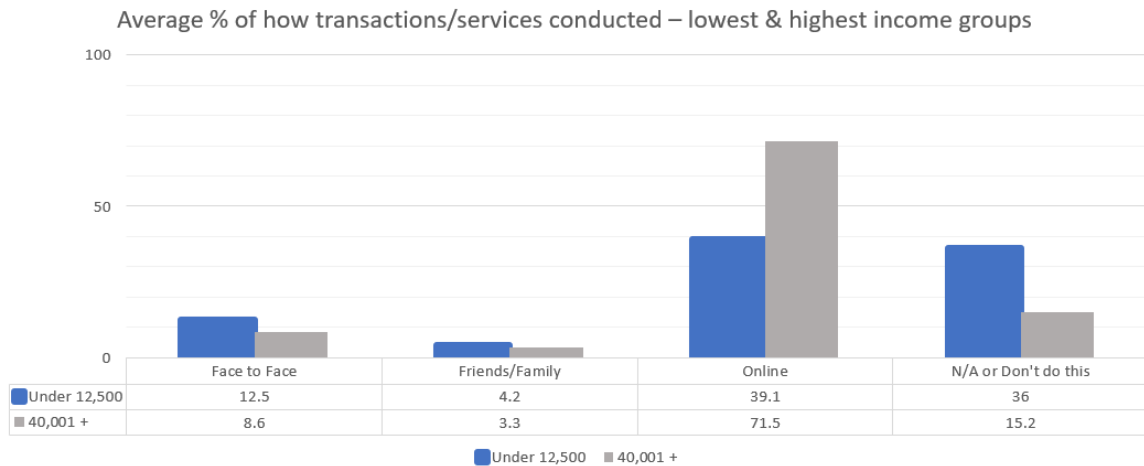
In the highest income group buying products (38.9%) and groceries (65.6%) are the only services/transactions that are really conducted face-to-face. If these two figures are removed from the average calculations, then face-to-face transactions drop to a mere 2.4% of all other transactions being conducted face-to-face by highest income households. If these two outlier scores are removed from online usage then online transactions rise to 75.6%. These two activities skew the higher income scores somewhat.

Face to face service consumption by income in %

	under 12,500	12,501-20,000	20,001-30,000	30,001-40,000	40,001 +
Buy a product	50.0	57.1	53.6	42.6	38.9
Bank services	25.4	31.8	18.3	6.0	6.7
Compare products/services	8.5	12.3	3.6	0.0	1.1
Buy groceries	52.5	42.7	42.4	63.2	65.6
Pay Council	12.9	15.4	6.4	4.4	1.1
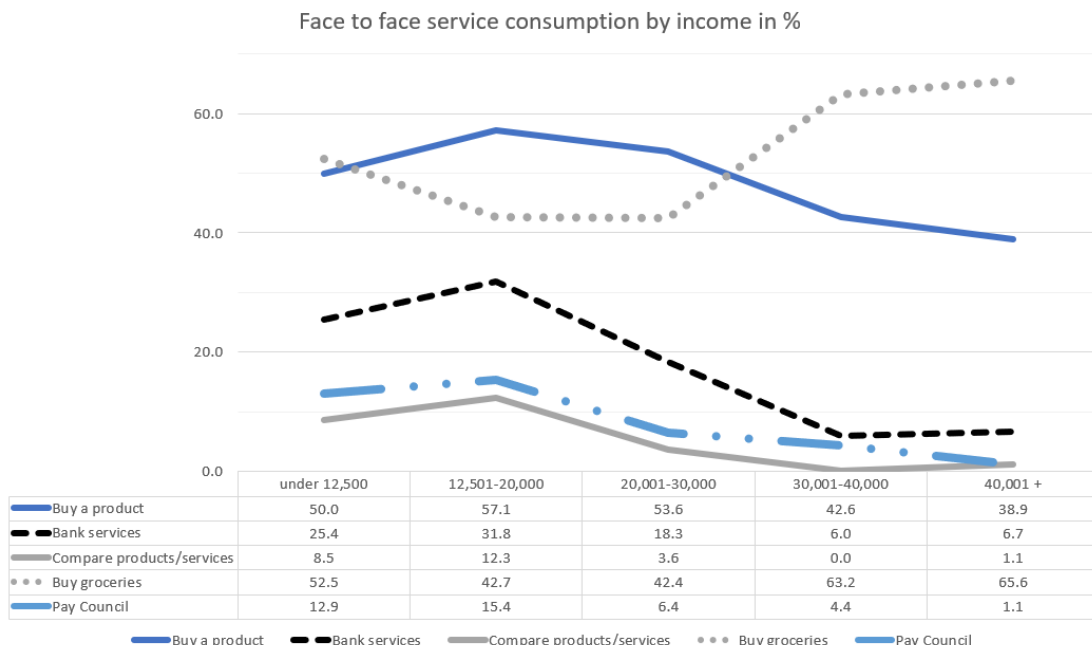
Lower income households tend to carry out face-to-face transactions more than higher income households with the exception of buying groceries.

Online services are used much more by higher income households

Online service consumption by income in %

	under 12,500	12,501-20,000	20,001-30,000	30,001-40,000	40,001 +
Pay bills	51.5	49.7	67.6	79.4	85.6
Bank services	50.7	46.8	67.0	82.1	86.7
Compare Products	47.5	51.0	72.7	79.4	87.8
Find a location/place	50.4	61.9	81.7	85.5	91.1
Get Govt Info	50.4	51.3	78.9	75.0	88.9
Find out news on local events	48.9	52.6	76.1	67.6	83.3

Pay bills   Bank services   Compare Products   Find a location/place   Get Govt Info   Find out news on local events

Consuming services and conducting transactions online can provide financial benefits. For example, comparing services and changing supplier for a cheaper one.

It is more likely that higher income households will do these rather than lower income households thus compounding the issue of having a low income.

4. Registered Disabled

Disabled – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Registered Disabled	19.6	19	2.5	55.6	3.8
General Survey Population	20.4	8.4	2.7	65.1	3.3

Disabled – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
Registered Disabled	7.4	8.5	42	39
General Survey Population	4.9	8.6	48.7	37.8

5. Literacy and Language

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Average of preference for how services are consumed in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
Literacy	24.9	22.6	6	4.2	42.3
Language	62.4	21.5	1.6	4.3	10.2
General Population	20.4	8.4	3.3	2.7	65.1

Average value placed on receiving those services in the preferred way in %

	High Value	Value	Low Value	No Value
Literacy	43.9	40.2	7.9	7.8
Language	35.6	61.2	2.7	0.5
General Population	37.5	48.7	8.6	4.9

Preference for buying a product in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
Language	85.7	7.1	14.3	0	0
Literacy	60.7	6.6	1.7	0	31.1

Value placed on buying a product in the preferred way in %

	High Value	Value	Low Value	No Value
Language Subgroup	29.4	70.6	0	0
Literacy Subgroup	53.3	36.7	6.7	3.3

Preference for making travel reservations/bookings in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
Language	84.2	15.8	0	0	0
Literacy	20	28.6	5.7	0	42.9

Value placed on making travel reservations/bookings in the preferred way in %

	High Value	Value	Low Value	No Value
Language Subgroup	35.6	61.2	2.7	0.5
Literacy Subgroup	43.9	40.2	7.9	7.8

Preference for how bills are paid in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
Language	62.5	16.7	0	4.2	16.7
Literacy	20	31.1	13.3	4.4	31.1

Value placed on how bills are paid in the preferred way in %

	High Value	Value	Low Value	No Value
Language Subgroup	37.5	62.5	0	0
Literacy Subgroup	53.2	36.2	8.5	2.1

Preference for how banking is done in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
Language	52.9	17.6	0	0	29.4
Literacy	35.3	11.8	11.8	0	41.2

Value placed on how banking is done in the preferred way in %

	High Value	Value	Low Value	No Value
Language Subgroup	35.6	61.2	2.7	0.5
Literacy Subgroup	43.9	40.2	7.9	7.8

6. Accommodation Type (Social Housing)

How do Social Housing respondents prefer to access their services in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
General survey population	19.4	8.8	2.7	65.5	4
Social Hosuing	27.5	10.2	3.4	53.3	5.6

Much stronger face-to-face and lower online usage by those in social housing

How they prefer to buy a product in %

	Don't/N/A	Face to Face	Friends/Family	Post/Paper	Online	Telephone
Social Housing	20.5	56	8	1	25	2

How they value buying a product this way in %

	No Value	Low Value	Vale	High Value
Social Housing	3.3	3.3	43.7	49.7

How they prefer to conduct online services e.g. banking in %

	Don't/N/A	Face to Face	Friends/Family	Post/Paper	Online	Telephone
Social Housing	20.5	32	9	0.5	34	4

Social Housing

How they value conducting services this way in %

	No Value	Low Value	Value	High Value
Social Housing	2	4.8	41.6	50.3

Social Housing

Social Housing - How they prefer to pay for things in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Pay bills	25.3	14.7	3.5	45.9	10.6
Pay Council	26	13.8	5.7	51.2	8.1
Pay Government	16.1	10.7	8.9	60.7	3.6

Pay bills   Pay Council   Pay Government

Social Housing - How much they value paying in that way in %

	No Value	Low Value	Value	High Value
Pay Bills	1.8	3.1	47.5	47.5
Pay Council	3.2	10.5	48.8	37.6
Pay Government	4.5	13.3	45.6	36.6

Pay Bills   Pay Council   Pay Government
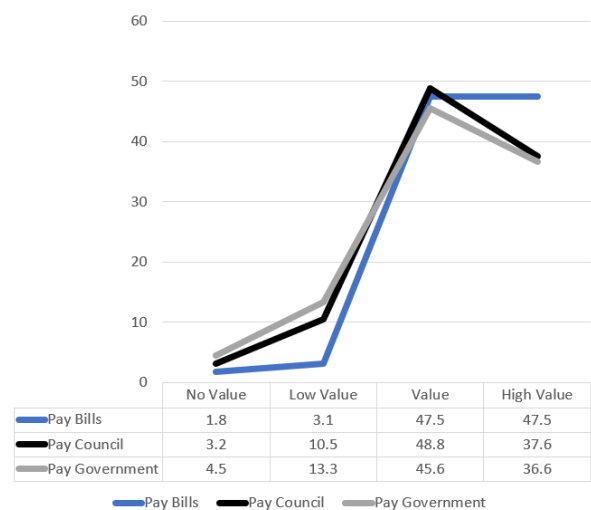
7. Carers

Carers place highest value on three transactions – paying bills, banking services and buying groceries.

Value placed by Carers on Service/Transaction in %
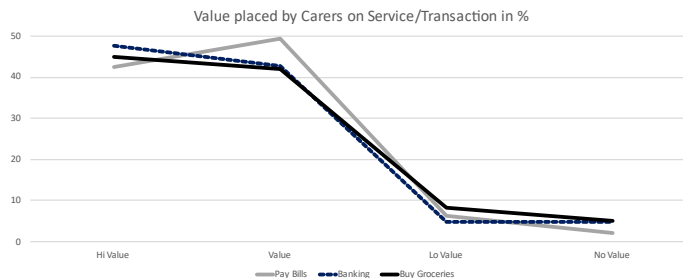
However, there is a variance in how these transactions/services are conducted

Carers – their preferred way of conducting transaction/service in %
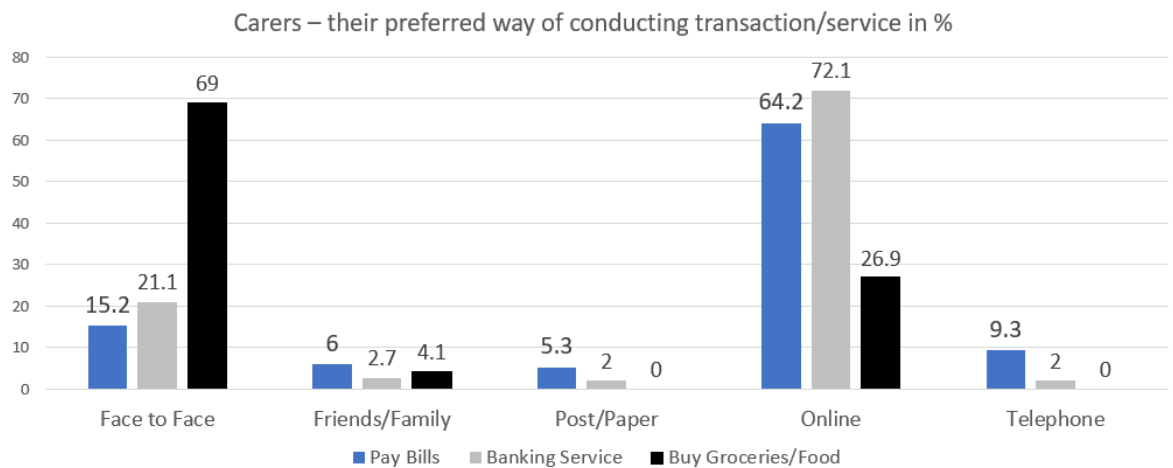
Groceries and food buying is predominantly still a face-to-face activity.
Whilst many do their banking online (72.1%) there are still 25.1% of people prefer more traditional methods (i.e., face-to-face, post and telephone). This is similar for bill paying where 29.8* of the Carer population prefer traditional methods but there is also a reliance on family and friends to do it for them 6%.

8. Sex

Preference and value for online transactions and services

How they prefer to buy a product in %

	Don't/N/A	Face to Face	Friends/Family	Post/Paper	Online	Telephone
Female	3	50.4	4.7	0.4	40.5	1
Male	5.2	47.5	6.8	0.3	38.6	1.2

How they value buying a product this way in %

	No Value	Low Value	Vale	High Value
Female	1.5	4.3	48.9	45.3
Male	2	4	43.8	50.2

How they prefer to conduct online services e.g. banking in %

	Don't/N/A	Face to Face	Friends/Family	Post/Paper	Online	Telephone
Female	11.5	21.6	5.9	1.2	57.3	2.4
Male	13.4	17.7	8.4	1.6	55	4

How they value conducting services this way in %

	No Value	Low Value	Value	High Value
Female	2.2	3.4	42	52.5
Male	4.3	3.5	39.7	52.5

Female/Male - How they prefer to pay for Local services e.g. Council in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
Female Pay Council	12.9	11.4	6.6	61.1	8
Male Pay Council	13.2	12.6	7.4	63.2	3.7
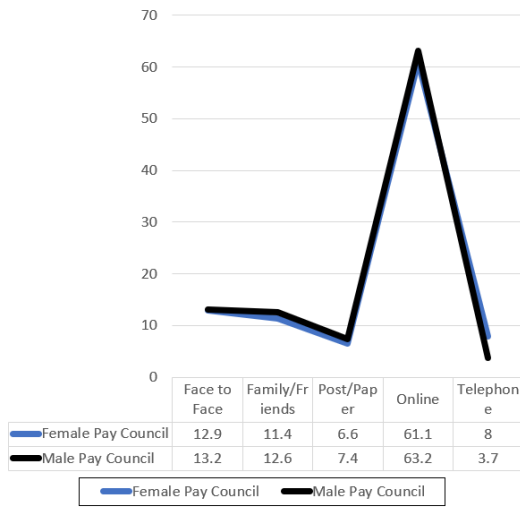
Female/Male - How much they value paying for Local services e.g. Council in %

	No Value	Low Value	Value	High Value
Female	4	11.4	52.9	31.7
Male	5.9	11.3	53.7	29.1
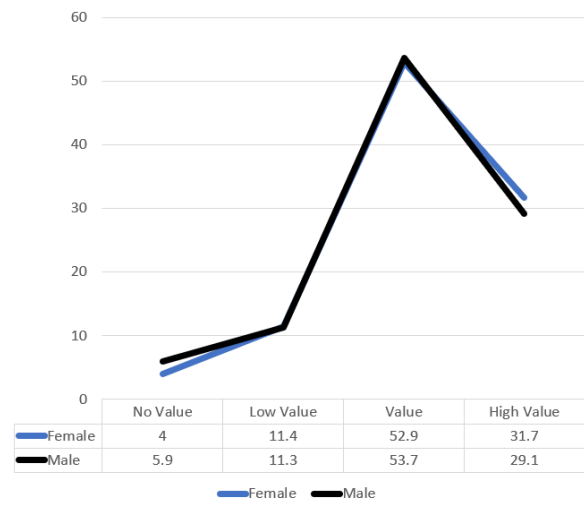
9.   Sexual Orientation

Preference for services and value of that preference

Preference for how services are consumed in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
General Survey Population	13.5	9.3	4	2.9	70.3
LGBTQ+	15.4	6.1	3	1.1	74.4

■ General Survey Population   ■ LGBTQ+

Value placed on receiving the service in the preferred way in %

	High Value	Value	Low Value	No Value
LGBTQ+	34.8	50.5	8.1	6.6

LGBTQ+

Preference for buying a product in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
LGBTQ+	50.9	2.6	1.8	1.8	42.1

LGBTQ+

Value placed on buying a product in the preferred way in %

	High Value	Value	Low Value	No Value
LGBTQ+	39.7	50.5	7.6	2.2

LGBTQ+

Preference for how banking is done in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
LGBTQ+	16.3	0	2	0	57.1

Value placed on how banking is done in the preferred way in %

	High Value	Value	Low Value	No Value
LGBTQ+	44	47.7	4.7	4.7

Preference for buying groceries/shopping in %

	Face to Face	Friends/Family	Telephone	Paper/Post	Online
LGBTQ+	66	8.5	0	2.1	23.4

Value placed on buying groceries/shopping in the preferred way in %

	High Value	Value	Low Value	No Value
LGBTQ+	38.2	47.8	8.3	5.7

10. Benefits

Benefits – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
All Benefits	22.9	8.6	1.7	62.5	4.3
Looking for/Not in Work	26	6.7	1.3	61.5	4.4
General Survey Population	20.4	8.4	2.7	65.1	3.3

Benefits – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
All Benefits	5.414634146	8.243902439	47.3902439	38.95121951
Looking for/Not in Work	5	7.4	45	42.7
General Survey Population	4.9	8.6	48.7	37.8

11. Educational Level

Education – average across all online services/facilities showing non-users in %

	Primary	Secondary	Further Education	Higher Education
E-Mail	69.2	28.1	8.8	0.5
Instant Messages/Texts	48.1	34.7	23.6	18.2
Read/Listen to News	74.1	48.1	32.7	17.1
Online services e.g. Banking	84.6	51	35.4	19.6
Online calls e.g. Zoom	77.8	53.4	41.5	19.7
Cheaper Services e.g. Gas/Elec	88.5	61.2	46.1	28.3

Education - How respondents prefer to access their services in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
General survey population	19.4	8.8	2.7	65.5	3.5
Primary	52	22	2.3	18.5	5.2
Secondary	24.7	15	2.4	52.3	5.6
Further Education	16.5	8.2	1.7	70.7	2.9
Higher Education	13.6	2.7	2	79	2.7
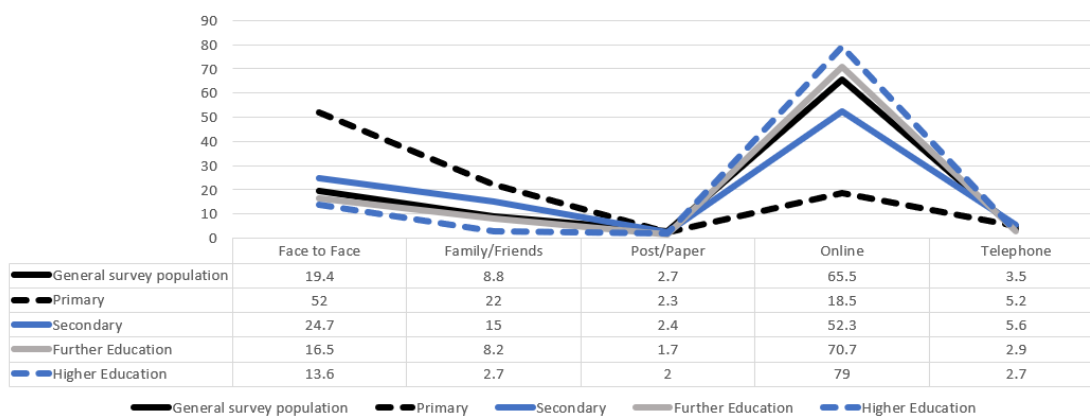
Education - General internet usage perceived skill level in %

	Yes	No & want to learn	Yes but won't	No & no inclination
General survey population	74.3	1.1	18.6	6
Primary	62.5	2.5	22.3	12.7
Secondary	72.8	1	18.7	7.5
further Education	82.5	0.7	13.3	3.5
Higher Education	90.4	0.2	8.7	0.7

General survey population — Primary — Secondary — further Education — Higher Education
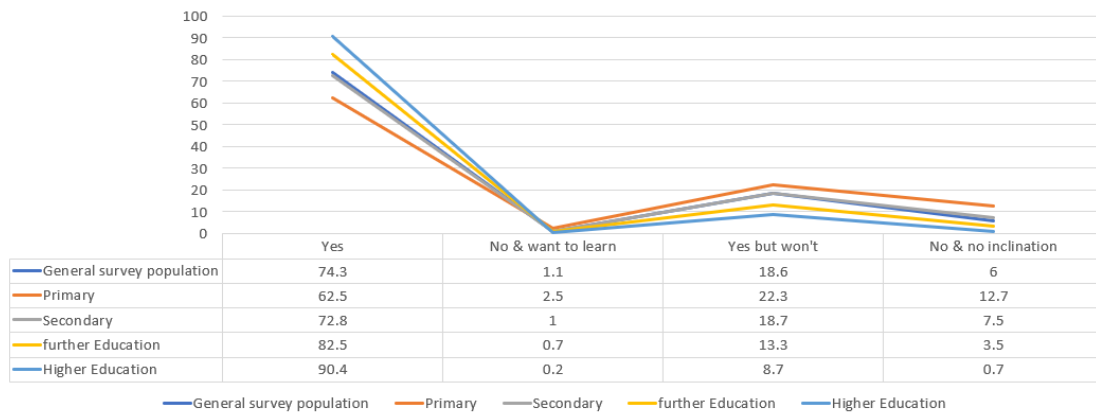
12.   Ethnicity

Ethnicity – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
WHITE	19	8.9	2.6	66	3.5
BAME+	32.4	9.6	2.7	51.9	3.3
General Survey Population	20.4	8.4	2.7	65.1	3.3

Ethnicity – Average of how much respondents value conducting their transactions in this way in %

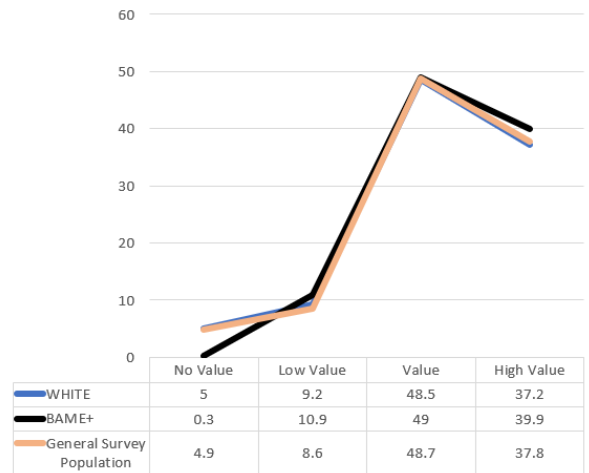|	No Value	Low Value	Value	High Value
WHITE	5	9.2	48.5	37.2
BAME+	0.3	10.9	49	39.9
General Survey Population	4.9	8.6	48.7	37.8

13. Religion

Religion - Frequency of Internet usage in %

	Daily	Weekly	Monthly	Yearly	Never
General survey population	85.6	7.5	1.9	0.4	4.6
Christian	82	7.2	3.1	0.5	7
No Religion	89.2	7.3	0.7	0.3	2.4
Muslim	100	0	0	0	0
Other	91.4	2.9	0	0	5.7

Religion – Average of how respondents prefer to conduct transactions in %

	Face to Face	Family/Friends	Post/Paper	Online	Telephone
CHRISTIAN	20.4	10	3.7	63.9	1.9
NO RELIGION	17.1	6.7	1.9	71.9	2.4
MUSLIM	62.3	5.2	3.2	27.4	2
OTHER	13.9	8.6	0.7	72.9	3.9
General Survey Population	20.4	8.4	2.7	65.1	3.3

Religion – Average of how much respondents value conducting their transactions in this way in %

	No Value	Low Value	Value	High Value
CHRISTIAN	5.2	9.8	48.9	36.1
NO RELIGION	4.9	8.1	49.7	37.2
MUSLIM	1.6	6.1	73	19.3
OTHER	1.6	8.1	37.3	53
General Survey Population	4.9	8.6	48.7	37.8

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