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COMM5600M Dissertation and Research Methods

How successful was the government's digitised Covid-19 communication strategy with the elderly?

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Dissertation submitted in partial fulfilment of MA Political Communication

Word Count: 12,265

Date of Submission: 02/09/2021

Abstract

The presence of digital technology in everyday life has been consistently increasing for years. With it came the growing divide that split the public along the lines of digital literacy. Academics have found that digital literacy varies when comparing different sections of society; however, this dissertation will focus on one group in particular – the elderly. This phenomenon is widely regarded as the digital divide, or when making specific reference to the elderly, the grey divide. Whilst many believe we are currently living through a digital era, the reliance on digital technology appears to have increased as a result of the Covid-19 pandemic. Many looked to the internet to address the communication difficulties that arose throughout the crisis. The government followed suit and introduced a Covid-19 (Covid) website that featured information and updates for the public. Alongside this, a track and trace app was created to help manage the spread of the virus. However, both required digital skills to access. In line with previous research and the wider literature, this dissertation looks to investigate if the grey divide had an impact on the elderly population's ability to access, use and receive the government's digitised communication throughout the Covid-19 pandemic. Seven interviews were conducted, and their responses were analysed using thematic analysis. The results indicated that the government's digitised communication strategy was unsuccessful with the elderly, largely due to the difficulties many found when trying to access the track and trace app. Yet, when participants had the skills to access the website it proved to be a valuable source of information. Despite this, the responses indicated that the unsuccessful communication strategy had little impact on the elderly's ability to remain informed. This was due to alternative non-digital communication methods proving to be adequate sources of information for the elderly. Conversely, this study produced results supporting the notion of a grey divide and highlights the concerns attached with this outcome.

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Introduction

In times of crisis, communication is key. The public look to their leaders for essential information that may determine how an individual can act, travel or communicate on a daily basis. This became a reality for millions in the UK as Covid cases continued to rise. The pandemic fundamentally changed the foundations of our communication methods as we were forced to adapt in the face of lockdowns, isolation, and restrictions. The effects of this extended far beyond the daily conversations between friends and family and saw the government having to establish a communication strategy to convey some of the most important crisis information of a generation. Given the nature of the virus, the adoption of an online approach was seen as a solution to several issues that the pandemic presented. It allowed for information to be shared instantaneously; whilst hosting all the information online in a singular trusted place. This made it possible for key communication to be viewed in the safety of an individual's home, thus allowing fewer instances for the virus to spread. Additionally, apps presented a new and unique opportunity to supply citizens with up-to-date information and combat the spread of the virus through track and trace. With this came the requirement for citizens to understand how to access this digital information. However, it quickly became clear that a baseline assumption that each citizen had equal access to the government's digital communication was not only incorrect but in dire need of attention as disparities between groups in society grew (Castilla et al., 2018; Friemel, 2016; Helsper, 2008; Van Jaarsveld, 2020). This dissertation will focus on one group in particular, the elderly.

It is widely accepted by scholars that a digital divide is evident when taking into consideration a person's age (Castilla et al., 2018; Garcia, et al, 2021; Nguyen et al., 2020; Ramsetty and Adams.

2020; Rizzo, 2020; Selwyn, 2004; Van Dijk, 2006; Van Jaarsveld, 2020). More specifically, older generations struggle to use, access, and adapt to the newest digital developments; consequently, leading them to struggle more as our world becomes increasingly digitised (Garcia et al., 2021). This trend has continued, and arguably it was exasperated by the Covid-19 pandemic (Ramsetty and Adams, 2020). The elderly were now required to catch up or, potentially, get left behind. In addition, governments around the world looked to implement track and trace systems and information campaigns using digital technology (Almagor and Picascia, 2020). My research seeks to critically evaluate the success of this method with a group that was disproportionately affected by the virus. Jong (2021) highlights the unprecedented nature of this pandemic. He states, unlike cases and references within crisis communication literature, the COVID-19 pandemic is ongoing and has extended far beyond the typical hours, weeks or months previous studies have analysed (Jong, 2021). Additionally, the socio-economic impact is unparalleled (Jong, 2021, p.1). Therefore, the pandemic presents a unique opportunity to understand communication strategies burdened by complex restrictions and prolonged impact in ways that have not been done before, especially with the elderly. Moreover, if the changes exhibited throughout the pandemic are signs of the incoming digitisation of healthcare, health information and crisis communication in the UK, important discussions should be had on how this may unequally impact different demographics within society and potentially promote inequalities.

Therefore, the aim of this research is to uncover if the UK government's use of digital communication was able to effectively communicate key information with the elderly throughout the pandemic. I have conducted a series of semi-structured interviews with a group of individuals aged 65 and over. Through the analysis of these interviews, I hope to show which aspects of the

government's communication strategy worked and which did not. In order to do this, I established a definition of success and through thematic analysis look to determine if the government were successful. If they were successful, this research aims to understand how and why in order to better understand digital crisis communication aimed towards this demographic. I believe these will be important and pertinent findings that may contribute to the wider understanding of digitised crisis communication with the elderly. Equally, if the results show that the government's communication strategy was ineffective my aim is to understand why, and possibly make suggestions as to how to improve communication with this age group.

Literature Review

a. The elderly, Covid-19 and the digital divide

The Covid-19 pandemic has required governments across the world to implement restrictions and rules that massively impacted the day-to-day life of their citizens (Jong, 2021; Nyguyen et al. 2020; Ramsetty and Adams, 2020; Van Jaarsveld, 2020: 2). Covid-19 has impacted many lives, but statistics consistently show that the elderly experienced some of the worst effects of the pandemic (Armitage and Nellum, 2020; Davies et al., 2020; Van Jaarsveld, 2020, p.2). The elderly has been disproportionately impacted with "~80% of the death due to Covid-19 occur[ing] in those over the age of 65" (Van Jaarsveld, 2020, p.2). This was extremely concerning for the ageing population in the UK which had approximately 12 million people over the aged 65 and over (Rout, 2020, p.27). To help mitigate the impact on vulnerable groups, such as the elderly, a nationwide 3-week lockdown was put into effect on the 23rd of March 2020, by the UK Prime Minister, Boris Johnson

(Jones and Keynes, 2020). Consequently, 1.4 million of the most vulnerable people in society were asked to shield (Jones and Keynes, 2020). Following this, the UK has experienced several versions of lockdown that continued until July 19th, which saw the majority of legal restrictions gradually eased (Shearing and Lee, 2021). As a result, this demographic was subjected to some of the strictest regulations for over a year (Van Jaarsveld, 2020). This included stay at home orders, social distancing guidelines, mask mandates, isolation periods and shielding advice (Coronavirus (COVID-19): guidance and support, 2021; Jong, 2021). However, with this requirement to isolate, there was also a risk of isolating vulnerable people from community links, family connections, medical care and subsequently, the latest government advice (Armitage and Nellum, 2020; Nguyen et al., 2020). Therefore, the elderly's ability to access the internet became more important than ever within the context of the Covid-19 pandemic.

Many have looked to digital technology to bridge the gap and ease the negative consequences of lockdowns and isolation periods; however, this solution proved to be far more complex for the elderly population (Van Jaarsveld, 2020, p.2). There is an argument to suggest that we are currently living in a digital era, dominated by our ability and capacity to communicate through the internet. Yet, this statement assumes that access to, and the ability to use digital technology is equal. Several scholars have disproven this and highlight that "internet access is strongly correlated with various socio-demographic dimensions such as income, education, gender, and age (Friemel, 2016, p.314). The difference between those who are able to use the internet and those who cannot is often referred to as the 'digital divide' (Castilla et al., 2018; Nguyen et al., 2020; Ramsetty and Adams. 2020; Rizzo, 2020; Selwyn, 2004; Van Dijk, 2006; Van Jaarsveld, 2020). Academics have addressed this issue and concluded that this division appears to be derived from two key issues,

digital literacy and accessibility (Castilla et al., 2018; Friemel, 2016; Van Jaarsveld, 2020). Literacy relates to an individual's ability to comprehend digital technology, and the ease with which they can navigate the digital world (Castilla et al, 2018, p.25). Whereas accessibility relates to an individual's ability to acquire the necessary technology to get online, i.e., smartphones, laptops, computers or WIFI. Van Jaarsveld establishes this as the "uneven distribution of technological access and skill" (Van Jaarsveld, 2020, p.2) and found that the elderly population had less access to technology in comparison with their younger counterparts. Those who were able to gain access had a limited ability to use digital technology (Van Jaarsveld, 2020). Additionally, we currently have an ageing population, yet "the elderly make up the group with the least presence on the Internet" (Castilla et al., 2018, p. 24). Furthermore, this phenomenon is referred to as the 'grey divide' as the elderly appear to be falling behind as society continues to digitise rapidly (Friemel, 2016, p.314; Van Jaarsveld, 2020, p.2).

Simply acknowledging the existence of a divide restricts one's ability to understand this phenomenon in its entirety. Therefore, outlining the consequences of the digital divide is vital to establish its importance, impact and the ways in which we can work to mitigate its effects. Historically, the increase in digital interaction has resulted in large groups in society being excluded from aspects of modern social life (Helsper, 2008). The pandemic has exasperated this process and threatens to leave the most vulnerable behind in a time that they are most in need. Nguyen et al. (2020), comment that "during the Covid-19 pandemic, digital inequalities may be further reinforced by a lack of (access to) digital support". This is concerning as Frimel highlights that the digital divide can negatively impact "political information and participation; health, disability and well-being; alongside social capital, social inclusion and social support" (Frimel,

2016, p.314). All of which are essential to the most vulnerable throughout a pandemic. Most notably is the access to information. Servon and Nelson (2001, p.279), highlight this issue and comment that: "access to information technology and the ability to use it increasingly [has] become part of the toolkit necessary to participate and prosper in an information-based society." Arguably, the pandemic has only amplified these concerns.

Therefore, the Covid-19 pandemic continues to highlight and reinforce the grey divide at a time in which digital literacy is becoming more essential to navigating everyday life (Friemel, 2016; Nguyen et al., 2020). And here lies the paradox of the pandemic, as the most likely to be negatively impacted by the pandemic are also those who will struggle to access vital digital communication (Van Jaarsveld, 2020, p.3). Additionally, the need for collective action is paramount when dealing with a pandemic, yet it is reliant on the mass understanding of how to act appropriately, as decided upon by health and government officials. Collective action is largely reliant on the government's ability to communicate regulations set out to protect the most vulnerable in society. As the elderly are disproportionately impacted by the digital divide (Van Dijk, 2006), one may assume that the same issues occur when trying to engage with key governmental digital information throughout the pandemic. Consequently, there is a potential for the elderly to be excluded from key government information designed to protect them throughout the Covid crisis. Despite this, Friemel (2016) outlines, there has been little academic work that focused on the elderly, digital technology and political communication. However, the context of the pandemic provides ample opportunity to further understand the complexities of the grey divided. This dissertation aims to contribute to this discourse and address the gap within the literature in the hope of providing insight into this pertinent issue.

Moreover, it is clear that academic work supports the notion that the elderly are more likely to have a lower comprehension of digital technology when compared with their younger counterparts. However, the term elderly is broad and should be defined. The choice was made to classify the elderly as those aged 65 and older. As established previously, age was a significant factor in your likelihood to become seriously ill when contracting the virus. When the vaccine role out was announced, the government released a ranked list of what they referred to as "risk groups" (GOV.UK, 2021a). Those aged 65 and over placed 5th. This group was chosen over those ranked as more at risk as it provided a significant size demographic and granted me access to more individuals willing to participate in the study. I believed this to be of importance as I understood that the more individuals I was able to interview, the better the external validity of my study. Additionally, scholarly work on the digital divide often recognised those over the age of 65 as 'elderly (Van Jaarsveld, 2020, p.2). Ideally, I was looking to find a substantial number of participants whilst ensuring the ages of those participants fell within the range of previous research conducted in the field of the grey divide.

b. Defining digital technology

Digital technology is commonly used as a catch-all term referring to several different technological capabilities typical supported by the internet. Consequently, scholars have sought to define digital technology, and whilst definitions differ, I believe Selwyn (2004) provides the most comprehensive description. Firstly, digital technology and communication are widely referred to

as "information and communication technology" or ICTs (Selwyn, 2004: 346). To fully understand what this encompasses, Selwyn (2004: 346) best explains this in the statement:

"the term ICT more accurately refers to an updating of the conventional 'information technology to encompass the rapid convergence of technologies such as computers, telecommunications and broadcasting technologies, as well as stressing the communicative and networking capacity of modern-day information technologies."

Within this study, I will refer to this definition with the additional condition that the ICT requires access to the internet to acquire information. Although broadcasting is mentioned here, Selwyn specifies later that content that one may view through ICTs via the Internet is referred to as "digital" (Selwyn, 2004: 347). Therefore, broadcasting and television programmes were excluded as digital technology within the parameters of this study. It is the digital messages sent through ICTs, from the government to the public, that I will be investigating. Social media does fit within the definition produced by Selwyn (2004); however, I have opted to only include the government's Covid-19 website and app. This was done intentionally to investigate the government's ability to engage with the public through mediums specifically designed to communicate Covid-19 information. Therefore, the strategy used throughout the pandemic could be studied in isolation and produce outcomes that are a direct result of the government's communication plan. Consequently, the impact of external factors such as previous knowledge or frequent use of the government's digitised communication is effectively reduced. Moreover, when speaking of the government's digitised communication, this is in reference to their use of a Covid-19 website and track and trace app.

c. The U.K. government's communication strategy

When evaluating the success of the government's digital communication strategy, it is important to set out what this entailed in its entirety and why particular choices were made. The UK's digital communication campaign can be divided into two categories; the first being the information campaigns created online and for social media and the second being the track and trace app. Both were designed to provide the public with immediate information on the most recent guidelines, medical advice and reminders of the most current regulations.

Due to the scale of the pandemic, it is reasonable to believe that principles of crisis communication were enacted as "a public health intervention to inform and advise the public on necessary measures to minimise the impact of the Covid-19 pandemic" (Jong, 2021, p.1). This is most obvious when looking at the government's Coronavirus (COVID-19) website. To provide a single place to access national Covid-19 information, the UK government launched a website specifically designed to become the home for pandemic information (Coronavirus (COVID-19): guidance and support, 2021). When visiting the website, one can expect to see the most recent government guidelines relating to issues such as the number of people allowed to gather indoors, work from home advice, testing, and upcoming regulation changes (Coronavirus (COVID-19): guidance and support, 2021). As briefly mentioned before, crisis communication is reliant on a governing bodies ability to communicate instructions to the public. This is supported by a report produced by Independent Sage that stated: "Precise messaging is more readily understood which, in turn, enables adherence and consistent behavioural enactment." (The Independent SAGE, 2020). However, the UK government continued to amend and adapt regulations throughout the pandemic

to reflect the current situation in the country. To clarify their messaging the Covid-19 website acted as an information point for the public.

Former Health Secretary, Matt Hancock commented on the importance of a technological response to the pandemic as seen when he commented that; "With infection rates rising we must use every tool at our disposal to prevent transmission, including the latest technology." (Digital Health, 2020). This became evident with the introduction of a contact tracing app that was implemented primarily to alert the public when they were at risk of catching the virus or needed to isolate (Almagor and Picasia, 2020; Altmann et al., 2020; Rizzo, 2020). Almagor and Picascia (2020, p. 1) appear to support this and argue that "in the absence of an effective treatment [...] the only possible mitigation strategies are nonpharmaceutical". Furthermore, "smartphone-based contacttracing is a viable epidemic mitigation strategy, worth pursuing on the part of governments." (Almagor and Picascia, 2020, p. 10). After trials conducted on the Isle of Man and the London borough of Newham, the government released the track and trace app on 24th September 2020 (Digital Health, 2020). This was a free app, compatible with all smartphones. Scholars have noted how the app has the potential to contain and track the spread of the virus without the cost of implementing nationwide lockdowns (Altmann et al., 2020, p.2). It acted as an automatic tracking system for those who tested positive and could alert those who may have been exposed to the virus. This was done using "Bluetooth technology to track time and distance between smartphones devices" (Digital Health, 2020). Additionally, the Quick Response (QR) code check-in capability allowed the app to track the public venues visited by those who had tested positive (Digital Health, 2020). The app also featured frequently asked questions and resources about how to isolate, how long to isolate and symptom checkers. When taking into consideration the inclusion of such features, it is apparent that the government aimed to make communication of Covid information more accessible through digital technology. Executive Chair of NHS Test and Trace, Dido Harding's statement confirms this as she states that:

"We want to make it as easy as possible for everyone to engage with England's NHS Test and Trace service. The NHS Covid-19 app enables the majority of people with a smartphone to find out if they are at risk of having caught the virus and need to self-isolate, order a test if they have symptoms, and access the right guidance and advice."

Considering the comments made by Harding and Hancock and the estimated £35 million spent creating the app, it is possible to argue that the government placed great emphasis on this aspect of their communication strategy (Digital Health, 2020). Therefore, it is essential to understand how a lack of digital literacy may have prevented an individual from accessing this information. Access to both the website and the app require a significant level of digital literacy. Understandably the elderly, who are more likely to have weaker digital skills, would be confused with these forms of communication. Moreover, as public interactions are forcibly decreased "the less tech-savvy might be more in need of support than ever" (Nguyen, 2020, p.2). Therefore, in a time where government communication is essential to navigating daily life safely; accessibility, clarity of message and understanding is essential. This is concerning as clear crisis communication is a vital aspect of public health intervention as the citizens need to be adequately informed and advised on the "necessary measures to minimise the impact of the Covid-19 pandemic" (Jong, 2021: 1). Furthermore, it is important to assess how there may be barriers to accessing this information

which may contribute to confusion or misinformation about details of the most recent public health measures. More concerningly, it is important to review the access that the most vulnerable citizens have to key healthcare information, to uncover if using digital communication negatively or positively impacts this group.

Hypothesis

There is substantial consensus throughout the literature that highlights the growing divide between the digitally literate and those who struggle to use ICTs. As previously established, the elderly are overwhelmingly more likely to be digitally illiterate. Therefore, in the context of the Covid-19 pandemic, I hypothesise that communicating with the elderly will bring several challenges for the government that has the potential to impact the success of their communication strategy with this demographic. Unlike any recent examples of digital communication campaigns conducted by the government, the elderly were forced into isolation away from communities, families and aides who may have been instrumental to their ability to access online governmental information. As the pandemic was unpredicted, the government had little time to equip the elderly with the tools and information needed to access some of their online resources. Consequently, I hypothesize that the elderly will express significant difficulties accessing and using the digital communication methods developed throughout the pandemic. Thus impacting their ability to be fully informed of the government's rules, regulations and policies relating to Covid.

Methodology

a. Research Method

To test my hypothesis, I elected to carry out semi-structured interviews with individual participants. I arrived at this decision when taking into consideration the format best suited to investigate complex responses that can produce a "potentially much richer and more sensitive type of data" (Hansen and Machin, 2013, p. 222). A semi-structured interview allows for "the interviewee [...] to elaborate and explain particular issues through open-ended questions" (Alsaawi, 2014: 151). It was also important to ensure that participants could access the study with lower digital literacy and in a Covid safe manner. Furthermore, an experiment such as a survey would have been significantly harder to carry out without the use of the Internet. Therefore, a qualitative method was chosen as it allowed a wider scope of investigation that was not possible when using a quantitative method. Moreover, the interview style provides ample opportunity to understand an individual's experiences, values and motives (Barriball and While, 1994, p.329). A semi-structured style allows the interviewer to ask 'follow-up questions' which allows for further clarification when faced with ambiguous responses (Barriball and While, 1994). This was essential for a study that worked with participants who may not have a complete understanding of the subject matter. A semi-structured interview allows the interviewer to address the participant if they are confused at any point and provide clarity; whereas quantitative research methods would not allow this and had the potential to negatively impact response rates. Therefore, consideration of the varied backgrounds and comprehension of digital technology required a looser structure that was able to adapt when needed (Barriball and While, 1994, p.329). For these reasons, I believed semistructured interviews would be best.

b. Conceptualising success

The central aim of this research is to understand the extent to which the government communicated successfully. However, success is subjective and should be defined to ensure that researchers can arrive at similar conclusions through the application of a uniform method. Therefore, when the parameters for success are established one can easily deduce which participants believe the government was successful. Whilst some have suggested that measuring the success of government communication online is "senseless" and should not be attempted (West, 2004 in Hofman et al, 2013, p.388); I counter that this is not an entirely worthless exercise in this instance. When taking into consideration crisis communication literature and the aims set out in the UK government communication plan, it is possible to establish what the government and the wider academic literature may consider successful communication throughout the Covid-19 pandemic (Government Communication Plan 2021/22, 2021; Jong, 2021; Wang et al., 2021). Correspondingly, the UK government published their 2021/22 communication plan which featured the aims moving forward in the pandemic, and aspects of their previous communication strategy they referred to as "achievements" (Government Communication Plan 2021/22, 2021). To label something an achievement implied they had successfully achieved their intended goal; thus, providing insight into the aims of their communication strategy from the previous year in the height of the pandemic. From this, it is possible to deduce what the government's ideas of success were and if they were able to meet these expectations. Arguably, to solely use the government's published plan as the basis for the definition of success, within this study, would open the research results to criticisms of bias. To counter this, the definition of success will be based on the combination of what the government aimed to achieve and crisis communication literature.

Therefore, the research is not restrained to the concept of success as defined by the government, or by the wider literature that has the potential to miss the nuances and specificity needed for the Covid-19 pandemic. Additionally, when assessing the success of a crisis communication strategy it would be somewhat regressive to suggest that it can be judged on a binary of success or failure. Instead, I am in agreement with Jong (2021, p.2) who states that "many outcomes [...] will lie somewhere in between". As reflected in the research question, the extent to which the UK government's digitised communication strategy was successful is the central focus of this investigation.

There are clear overlaps between the crisis communication literature and the government's communication plan and here lies this study's framework for systematically defining success. Firstly, sense-making. Jong (2021, p.966) defines this as a "crucial task" as it enables communication professionals to plan a clear strategy that can be adapted to meet the needs of the time. Additionally, through monitoring, the government can understand public thinking and produce "rumour-rebuttal response[s]" when needed (Jong, 2021, p.966). Wang et al. (2021, p.2) support this as they emphasise the importance of "consistency and congruence" for "effective communication" about Covid-19; as individuals can only react to a perceived threat accordingly when provided with the relevant information from key stakeholders. This is reflected in the government's plan to "continue to drive changes in public behaviours to help beat COVID-19" (Government Communication Plan 2021/22, 2021). Subsequently, the aim here is for their communication strategy to influence the publics' behaviour in line with Covid regulations. A report conducted by Independent SAGE (The Independent SAGE Report 22, 2020, p.1) echoed this and advised that lexical choices are intrinsically tied to the public's ability to understand, interpret and

act upon the relevant rules put in place for their safety. Therefore, the participant's ability to understand and follow the regulations can be seen as the first determining factor of successful communication.

The need to communicate through digital technology significantly impacts the way in which one would judge the success of a communication strategy. In this context, to simply understand and act upon government communication requires the ability to access it. Whilst many scholars within the crisis communication field focus on clarity (Jong, 2021), there is little attention given to accessibility. Arguably, this should be the foundation for all communication campaigns that seek to influence as many citizens as possible. This is touched on within the government's communication plan as they highlight that their "COVID-19 campaign helped deliver over 21 million downloads of the NHS Covid App" as one of their achievements (Government Communication Plan 2021/22, 2021). Here, the government's aim is clear – get people downloading the app, accessing the information and using the track and track system. However, as was mentioned in the previous chapters, accessing such technology presents complex issues for the elderly. Yet, access is an essential factor in crisis communication, and this will be the second criterion used to critically evaluate the government's digitised communication strategy.

Overall, the factors that will determine success within this study are as follows: firstly, the participants' ability to clearly understand the government's communications and secondly, to access those communications. A final judgement will be made in the concluding chapter with supporting references from the wider literature and established government aims.

c. Data analysis

After conducting the interviews, I opted to carry out thematic analysis on the responses I had collected. The primary aim of this process is to "identify patterns and themes within qualitative data" (Maguire and Delahunt, 2017, p.3352). This method was chosen as it provided a structured system of "analysing, organizing, describing, and reporting themes found within a data set" (Nowell et al., 2017: p.2). The uncovering of themes within the data afforded me the opportunity to utilise rigorous analysis that could "produce trustworthy and insightful findings" (Nowell et al., 2017: p.2). This can largely be attributed to thematic analysis' ability to highlight any similarities or points of contention between participants perspectives, whilst simultaneously "generating unanticipated insights" (Braun and Clarke, 2006; King, 2004 in Nowell et al., 2017: p.2). Therefore, I was confident in its ability to produce findings and conclusions that could be used to generalise the success of the UK government's digital communication with the elderly; in turn, promoting the external validity of this research. Moreover, prior to initiating the analysis, I transcribed the interviews verbatim (see appendix c for example). This style was chosen as I felt it was important to reflect any hesitations, sudden changes in opinion or hedging as this may have indicated uncertainty or doubt in an opinion that could not be adequately analysed in a nonverbatim transcription.

Furthermore, upon the completion of the transcriptions, I followed Braun and Clarke's (2006) sixstep thematic analysis framework. Maguire and Delahunt (2017, p.3353) argue this to be the "most influential approach" amongst social scientists, as it uses a "clear and useable framework". Therefore, in using this framework I hoped to imbue confidence in my results by providing a clear guide to my research, thus enhancing the replicability of this study. The steps were as follows: Step 1: becoming familiar with the data. This consisted of re-reading the transcripts and starting to make notes on my initial impressions. Following this, Step 2 is coding. Here, I led with a "theoretical thematic analysis" approach as I had clearly defined criteria for 'success' (Braun and Clarke, 2006). Therefore, I chose to make the research question the focus on my coding process. This involved going through the transcripts and highlighting any data that may be of interest to the research question. Despite using this top-down method, I specifically used "open-coding" (Maguire and Delahunt, 2017, p.3355), thus allowing for more flexibility. This was to ensure that potentially significant data was not excluded for not fitting into my preconceived definition and criteria of success. Moving on from this, Step 3, involved organising the coded data into broader themes that specifically related to the research question (Maguire and Delahunt, 2017, p.3356). In line with Braun and Clarke's (2006) thinking, themes were created and based on their significance within the study. Step 4 is where I reviewed the themes (Braun and Clarke, 2006). This entailed checking for coherence between the data and themes to ensure each section of the coded interviews strongly supported their relevant theme. Considerations of how the themes work within a singular interview and across the data set were addressed at this stage and modifications were made accordingly (Maguire and Delahunt, 2017, p.3356). Step 5 is where I looked to "identify the 'essence' of what each theme is about" (Braun & Clarke, 2006, p.92). From this, themes were refined, and subthemes were generated (Maguire and Delahunt, 2017, p.33511). This simplified the process of comparing the data. Opinions and experiences on the same theme could be easily identified and analysed within each theme or subtheme. The final step was to write my findings (Braun & Clarke, 2006), the result of which can be found in Chapter 5. Thematic Analysis.

d. Participant selection

This study is largely reliant on individual participation so I was careful to ensure I enacted as little influence on who would participate in the study. I addressed this in two ways. Firstly, I approached local organisations, charities and groups that had connections to the participant pool I was hoping to interview. This was beneficial as it removed the requirement to advertise online. Due to the pandemic, most places typically frequented by the elderly were temporarily closed or reduced to restricted access. Similarly, many of the people within this demographic had been asked to isolate or shield. Paradoxically, the safest means of contacting potential interviewees was online. However, I hoped to avoid this as advertising online would produce a barrier to access for those with lower digital literacy; thus, potentially impacting my results. Therefore, charities and churches with a historic connection to those over 65 were the most Covid safe and digital novicefriendly means of contacting participants. I was able to partner with a charity and a church group with individuals of varying digital abilities and understandings of the pandemic. Secondly, I provided these organisations with detail about the study (see Appendix e) and encouraged them to share this with their members. Those who were interested were given information on how to express interest in this research and made direct arrangements to conduct interviews over the phone or via a video conferencing app. This method was designed to avoid cherry-picking or skewing my results in any one direction.

e. Interview composition

As previously established, the interviews were conducted in a semi-structured format. However, the choice of questions was established in accordance with three key categories. These were knowledge, experience and preference. Questions in the knowledge category looked to establish the digital literacy of each individual participant. Understanding the group's ability to use digital technology was essential as it allowed me to make wider assumptions about this group as a whole. From this, I hoped to uncover the extent, if any, of the grey divide. More specifically, I wanted to establish what areas of digital technology those over the age of 65 struggled with. This was done by asking questions that investigated their awareness of different aspects of digital technology.

The second section of the interview looked to understand the participants' experience with ICTs. My intention was to understand why they choose to use digital technology by asking questions that revealed the aspects of digital they had positive experiences with. There is a suggestion within the literature that a reason for the grey divide is not simply due to a lack of access or literacy but a lack of motivation (Van Dijk, 2006). Arguably, there are not only 'have nots' but also 'want-nots' (Van Dijk, 2006, p. 226). Alternatively, the experience questions may reveal an element of digital technology use that is specific to this demographic. This may relate to digital literacy, access or something entirely new that has yet to be addressed within the literature. Understanding why a person chooses to use, or not to use specific ICTs, could possibly explain why aspects of the government's digital strategy are less likely to be successful. Furthermore, this section addresses the notion that individuals are actively choosing what digital technology to engage with. Asking questions about their experience allows us to analyse the reasoning behind their choices and feasibly implement them into a strategy designed in a manner that could promote digital political communication with the elderly.

The final stage of the interview was designed to uncover the communication preferences of this demographic. The responses to this section had the potential to outline the best form of communication for this group. Arguably, this information could be used to improve communication strategies with this demographic by utilising the ICTs and digital communication they prefer. It may also reveal if there were any weaknesses in the current communication plan used throughout the pandemic that may perform better when using a different ICT platform.

Thematic Analysis

After familiarising myself with the data, it became apparent that many of the participants shared similar experiences which could then be codified. An extract from my coding notes can be found in Appendix d. It was then possible to organise these codes into broader themes and sub-themes directly related to the research question. As demonstrated in Table 1. below, I defined these themes as the digitally left behind and the reluctance to use digital technology, alongside the subthemes of access, fear and preference for non-digital communication.

Table 1.

Theme	Sub-theme	
The digitally left behind	Access	
	Knowledge/ use of digital technology	
Reluctance to use digital	Fear	
technology	Preference for non-digital communication	

These themes were then analysed in relation to their impact on a participant's ability to understand and access the government's digital communication in order to determine success. This can be found in the following section.

a. The digitally left behind

The notion of being left behind emerged as a dominant theme as participants voiced their frustrations and feelings about being excluded from modern digital communication methods. This is exemplified as Participant 1 remarked that: "if you are completely digitally excluded then nowadays you are just getting left behind from everything". A similar sentiment was echoed by Participant 7 who stated that it was "annoying" as she believed the government had not considered her age group. As a result, her worry was that: "we'll get left behind because not everybody's got a smartphone". As explained earlier, another barrier may be seen as individuals struggling to access government information as result of low digital literacy. Data provided by participant 4 supports ideas throughout the wider literature, and she outlines how she struggled to learn and keep up with digital technology as result of it being "harder" for her due to her dyslexia. She comments that the government "needs to think about the elderly, some of them can't access the internet and sometimes as well when you're dyslexic as well, it's harder for you to understand." When asked specifically about the app, participants 1, 6 and 7 all confirmed that they had knowledge of the app but were unable to use it due to not having a smartphone. Participant 1 commented that: "I was never going to be able to use it myself because I don't have a smartphone". Similarly, participants 6 and 7 spoke about having a mobile, "but it's a mobile that just makes calls". Alternatively, participant 2 expressed difficulties in using a mobile phone as she was unable to "see the screen properly", an issue she believed to be common amongst others her age. Instead, she expressed how

a laptop was more suited to her needs. These accounts demonstrate the first hurdle many people over the age 65 face when trying to interact with government information. Mobile phones present further difficulties for the elderly, not only because the elderly may not own one, but also because of their usability. Whether this be due to dyslexia or eyesight issues, it is clear that smartphones are not the preferred method of communication for those 65 and older. Notably, participants 1, 6 and 7 all expressed relative ease when trying to find government information online. When asked if he felt more comfortable accessing websites as opposed to apps Participant 1 responded: "definitely, yes". Correspondingly, participants 6 and 7 both highlighted how they were able to "google" easily. The app presented a barrier to entry that caused people who were otherwise techliterate to be excluded. As three of the seven participants encountered issues relating to accessing digital communication one may deduce that ensuring the elderly have the tools to download apps is a significant step towards communicating with more people over the age of 65.

Returning briefly to the topic of the grey divide, as discussed in previous chapters, it is interesting to note that all but one participant said they regularly use digital technology for a range of tasks. From Participant 2 highlighting how she used her laptop to check "emails" and "look through the newspaper"; to Participants 1, 2 and 7 all talking about how they access NHS and government information online. Whilst the skills needed to carry out such tasks may be deemed basic; it was clear that the majority believed they could carry out these functions. More importantly, six of the seven participants were digitally literate enough to access the government websites. Conversely, the grey divide was more apparent when asked about their ability to use apps. It was here that it became more evident that the necessity for a smartphone restricted access to information for many participants. Additionally, for those who did have a phone where it was possible to use the app, all

but one required help from others to download it. Arguably, here lies the key to closing the divide. Participants 2, 3 and 4 talked about getting help from others to navigate their digital technology. Participants 2 and 3 referred to their time with the local community centre in which they were introduced to basic skills. Whereas participant 4 said she would "ask a friend" to help her with any difficulties. Through this help, each was able to access websites. As a result, these participants were able to access key Covid information. However, as the pandemic meant many were unable to be in physical contact with their usual support systems, many struggled to keep up with the digital demands that were now required of them throughout the pandemic. Therefore, the divide continued to grow and exclude the elderly, as they struggled to access and navigate the new technology developed during the pandemic without their usual support systems.

Overall, the fear of being left behind appears to be intrinsically tied to, what participant 7 describes as, everything "happening a bit too quick". Whilst some have had the time to learn how to use laptops and access websites, it appears that many were now faced with the demand of keeping up to date with smartphones. A need that became more essential throughout the pandemic and with the introduction of the track and trace app. Prior to the pandemic, participants recalled primarily using digital technology for "banking" or "shopping". None of which required skills for mobile phones. Suddenly, the pandemic required the elderly to acquire new digital skills and quickly. Participant 7 voices this as she laments that "we're not used to getting information that way". Participant 1 appears to be in agreement as he discusses "digital exclusion" and his concerns for those who are "just falling further behind". Furthermore, it isn't simply that there is a digital divide, but the feeling that it is growing and has only been exasperated by the pandemic and the government's push to use more digital communication methods. Moreover, the data suggests that this is not just an issue of being unable to understand how to use digital communication, but it is a combination of lack of knowledge, not owning ICTs that are compatible with apps and the struggle to keep up with the new technological developments. All of which contributes to the feeling of being left behind.

b. Reluctance to use digital technology

Upon analysis of the data, it became apparent that many of the responses could be categorised as a reluctance to use digital technology, whether this was due to fear or a preference for alternative non-digital communication or a combination of the two.

Overwhelmingly, the respondents each highlighted issues relating to fears of digital communication. Primarily, the fear of being scammed online and how this contributed to their reluctance to engage with the government through ICTs. Participant 3 spoke of her concerns that she would be unable to differentiate between scammers and government information. As a result, she found it easier to avoid digital communication as she believed that it was "too much to look out for at our age". Participants 6 and 7 shared these concerns and spoke of how they avoided digital technology altogether due to fear of scams. Participant 4 echoed these worries, and she was unsure if the information she was receiving was "real of it it's not". Despite not having the technology to download the track and trace app, Participant 1 was still wary. He details how he found issues with the app, particularly reports of it being overly "sensitive". Consequently, he said that he "would have been concerned about using" the app. Perhaps this fear can be linked to the previous section's discussion on digital literacy. Arguably, with more digital knowledge the

participants may have felt more confident in their ability to differentiate between real information and scams.

Furthermore, the fear of being scammed appears to have produced a desire for trustworthy information. On the one hand, participants 1, 3, and 4 all communicated that they were more likely to trust information if they could clearly see it had been produced by the government. Participant 4 avoid digital communication as she was unsure "who to believe". However, when asked if there was a way for the government to make it clear that it was them, and then asked: "would you look to find information online"; she enthusiastically responded, "yes, yes I would". Correspondingly, participant 3 said she only trusted government and NHS websites and she "wouldn't trust anything else". Participant 1 shared this same sentiment and noted that he would not get information from non-governmental sites as they were unreliable. On the other hand, whilst participants 6 and 7 feared being scammed, they were equally unsure of government information. They spoke of not being "politically minded" and preferred to get their Covid information from a politically neutral source as they were critical of the government, and explicitly stated this preference was a result of a lack of trust in the government. Additionally, Participant 5 chose to avoid online Covid information altogether and instead opted to watch the news. She felt this way she could avoid those who were making "doomsday argument[s]". In summary, the participants articulated the importance of trust and accessing trustworthy news. This fact appears to be a significant decider as to information they will or won't engage with. This suggests that ensuring the elderly are able to identify trustworthy sources is an essential step when looking to spread important crisis information. The data implies that without the foundation of trust, the elderly are highly unlikely to engage with digital communication.

Alongside the reasons previously mentioned, many argued that they had no need to use the government websites or app. This was often due to participants believing they were already informed enough and that the "news" or "TV" was providing adequate coverage of the latest Covid-19 news. Participant 4's responses mirrored this as she simply commented that she "watch[ed] the news" to become more informed. Additionally, a response made by Participant 2 encapsulates this perfectly as she states: "I'm using the government websites online a lot less than you maybe thought. Because information on television, [and] like clicking on the newspapers and [...] you know just googling something like Covid world figures". She reaffirms this idea when she says: "I think the main thing has been the government briefings on the telly." Despite, speaking highly of technology and recently learned software, such as zoom, participant 2, like her counterparts expressed a distinct preference for receiving information via television. Uniquely participants 2 and 5 both used the digital resources provided by the government as an additional source of information, as opposed to it being their primary source of government information. It was in times of confusion that they would search and google questions if needed. However, both admit that this was a rarity. This is evident as Participant 5 comments: "I used to take the news if I need something else, I researched it on the website." and then follows this up with "I don't go online because I see it all on the television". Participant's 6 and 7 avoided the government's digital communication and were entirely reliant on the TV as they explained they got any information from "the television," and they preferred this as opposed to "government websites". The only outlier was participant 1 who actively used government websites; however, these were primarily the "Leeds City Council website" as opposed to the national government's Covid-19 information website. Yet he also indicated that due to the nature of his work and volunteering he received

sufficient information through word of mouth; demonstrated in the following response: "I am often talking with people from the council when I go to my meetings and my work with the third sector anyway. So, I am kind of up to date with things.". He further elaborates that because of this, he didn't need to look online as he was "kind of involved already". Despite this one anomaly, the trend here is clear. No participant expressed a substantial need to engage with the government's digital communication. Instead, most were reliant almost entirely on getting their Covid updates through the news or TV. From this, one may deduce that the preference for non-digital communication substantially impacted the likelihood that a participant would engage with the government's digitised Covid information. Participants 1, 2 and 3 all showed appreciation for digital communication, with participant 2 calling it "fab" and participant 3 describing how technology can do "marvellous things". However, neither felt that the government's digital resources were an essential part of how they received Covid information. Participants' responses indicate that they felt adequately informed by the news and other TV shows relaying Covid information. Therefore, there was little need to engage with the government's digital content. Arguably, this provided ample opportunity to avoid using technology they feared or did not have the digital literacy or tools to access.

Connected to this was the recurring reference to not needing to use any digital technology as many were shielding. Participant 7 comments that "we've just kept out of the way, shielded ourselves a bit [...] we've never needed to think about track and trace or getting a test". Additionally, a similar line of thinking can be exhibited as participant 5 states: "I rarely left my home [...] so I don't use any apps or anything like that". Equally, participant 4 speaks of "not going anywhere" in order to "protect" herself. Therefore, she saw no need to use the app or search for additional information.

Participant 3 continues this trend as seen in her response to a question about the app in which she says, "I've heard of it. Not having gone out, I haven't dealt with it.". The overwhelming consensus here appears to be that the app was not essential for a group who were instructed to stay at home. Furthermore, a statement made by Participant 2 potentially sheds further light on this phenomenon. She comments that throughout the pandemic she has "not been confused at all about it. It's all been pretty straightforward". This exemplifies why the participants felt little need to conduct further research, their rules and regulation remained relatively consistent throughout the pandemic. Whilst many of the participants detailed frustrations when encountering digital technology, all spoke of how they stayed at home and stayed safe. Subsequently, when asked if they felt well informed, most participants responses were positive. Participant 5 said: "As far as I am concerned, I don't think the government could inform me more than what they have done.". Likewise, Participant 3 gave a glowing review of the government as she believed their communication strategy "covered most of my needs and, I knew I was keeping safe by staying in". She continues, "I've been pleased with the information that I have got. It has been online. It has been on, through the post. Both have been useful". Alongside the health benefits, the simple and unchanging message to stay at home was ideal for the elderly for several reasons. Primarily, it could be easily communicated through the news, therefore reducing the likelihood that an individual would require further information that could only be accessed online. This is especially notable as participants responses showed them to be reluctant to use digital technology. In turn, this reduced the need for the elderly to visit the Covid website or use the app, therefore allowing the elderly to receive most of the information through their preferred medium – the television.

Discussion and Conclusion

a. Summary of findings: determining success.

In consideration of the analysis previously discussed, I believe several deductions and conclusions can be made in regard to the success of the government's digital communication with the elderly. As previously stated, success will be based on the strategy's accessibility and success in clearly communicating information.

I outlined that participants ability to access the government's digital communication was an essential factor in determining success. As the data above demonstrates, this is not a simple yes or no answer; and the app proved to be more problematic. Unlike the website, the app required individuals to have a smartphone in order to use it. Consequently, 3 participants were unable to use this piece of communication as they did not have access to compatible technology. Additionally, those who did have it did not actively use or check the app. From this, an assessment of the success rate can be made, and the app may be considered a failure for two reasons. Firstly, and arguably the most obvious reason is that it presented barriers to access that disproportionately affected the elderly. Demonstrated as many voiced a preference for simpler phones and traditional communication methods. Therefore, several participants did not own a smartphone or a mobile capable of downloading apps. Secondly, the government believed that downloading the app was an indicator of success, yet the data collected within the study reveal a very different picture. For those who were able to download the app, no participant mentioned using it. This can be attributed to participants' beliefs that they did not need the app as they rarely left their homes, yet I would argue for an alternative perspective. Within the app, the public was able to access a plethora of information, ranging from symptom checks to testing. These were all features that may have been useful, even for those who did not leave their homes. However, no participant indicated that they were aware of the information available on the app. Instead, they all saw it as a tracker for those who were venturing into public spaces. Furthermore, the failure here may have been the government's inability to communicate to the public that the app featured a wider range of useful information, in addition to the track and trace system. Subsequently, it is debatable if download figures can be simply translated as a success for the government as participants indicated that many were not using the app to its fullest potential. To determine success, it is important to establish the goal of the app. Track and trace was key, but communicating information was also of importance and this required participants and the wider public to actively use the app. The data suggests this did not happen which leads me to deduce that this aspect of the strategy may be deemed as unsuccessful.

Paradoxically, despite the government's digital communication methods excluding the elderly, many felt they were well informed and happy with the information they received. In turn supporting the argument that the government successfully 'made sense' (Jong, 2021, p966) of the pandemic and communicated well with the public. However, to suggest that was caused by perfect digital communication would not be entirely true. Instead, I believe this to be the result of two things. The first being that many were already satisfied with the information they were receiving through other methods, namely the television. The news and briefings provided information for the participants through a resource that they had experience using and did not require additional ICTs to access. This phenomenon may be better assessed as the government briefings, in conjunction with the news, as being the best methods of communicating Covid information for the

elderly; so much so that there was little need for the elderly to use the government's digital platforms. Secondly, this was aided by the simplistic message targeted towards their age group. Whilst their younger counterparts sought to find out if they could go to work or how many friends they could visit, the messaging for the elderly remained the same, simply – stay at home. As all of the participants clarified that they understood and abided by the government's messaging, it is reasonable to suggest that the government successfully communicated the most essential information effectively. However, this was not done primarily through the use of ICTs. Therefore, high praise can be largely attributed to the simple messaging and the non-digital communication strategy as opposed to the digital one. This is supported as all of the participants were opposed to the government taking a fully digital approach, thus highlighting the elderly's reliance on traditional communication methods. This should not detract from the few positive responses I received when I asked the participants about their experiences using the Covid-19 website. For those who did use it, the website became a place to access additional information in times of confusion. One may argue that the Covid website is best described as beneficial as opposed to essential. Therefore, I would deem this aspect of the government's communication strategy a partial success. Whilst it may not have been used by many, when it was, it could be accessed and navigated with relative ease and provided participants with the information they required. More importantly, it was an accessible alternative option for the elderly; thus, contributing to the government's "sense-making" abilities.

Initially, I had hypothesised that 'the elderly will express significant difficulties accessing and using the digital communication methods developed throughout the pandemic.' Yet, my hypothesis had not considered the importance of the digitised communication amongst the elderly.

I correctly predicted that the elderly would 'express significant difficulties', however, I overestimated the impact this would have on their ability to be informed throughout the pandemic. I initially presumed that participants would feel less informed as a result of their digital exclusion. The data showed no evidence of this. Instead, they were adequately informed through non-digital methods that they were accustomed to using. As a result, they did not need to use the government website or track and trace app often enough to feel the full effects of their exclusion. Arguably, my hypothesis placed excessive emphasis on the elderly's use of digital technology. Had the government taken an entirely digital approach, I believe the impact may have been far greater. This was not the case and the elderly's reluctance to use digital technology helped to shield them from the realities of their digital exclusion. In addition, there appears to be no real drive to use digital technology due to a preference for non-digital communication and simplistic messaging. This does not mean the government's strategy was successful. Instead, it appears that the government were unsuccessful and fortunately, the effects of this had very little impact on the elderly's ability to access and comprehend the information.

In sum, the success of the government's digitised communication strategy should be assessed in two parts – the website and the app individually. When taking this approach, it is clear that the app was largely unsuccessful. Conversely, the website appeared to be the most accessible and useful digital resource produced by the government. Yet, the extent of the success with the website can still be debated as participants did not express enthusiasm for this resource and instead were more reliant on alternative methods of communication. Whilst this does not diminish the effectiveness of the website, it should be noted. Paradoxically, the government were unable to ensure their information could be accessed but could successfully communicate clear messaging if the elderly

found a way to access it. Yet the biggest failure was the government's inability to encourage the elderly to use the digital resources they provided. As stated previously, the website proved to be beneficial; yet it cannot be seen as fully successful as it was not used widely enough for participants to potentially reap the benefits. There is also an argument to be made that the participant's felt well informed through their use of non-digital technology and that their experiences with digital technology are less significant when assessing their ability to communicate with the government throughout the pandemic. One may also argue that an individual's perceptions of being informed are restricted to their own idea of how much information is available to them. Many may have felt they were informed whilst simultaneously being unaware of the abundance of information they had the possibility to access. Correspondingly, it would be ideal to have the public be as informed as possible in times of crisis, such as a pandemic. Therefore, if the aim of the government's communication strategy was to inform as many people as possible, their strategy may have seen further success had they highlighted the safety of accessing their resources and emphasised the information that can be found on their digital platforms. For this reason, I would argue that the government's digited communication was largely unsuccessful.

b. Suggestions for the application of findings

Arguably, the research conducted here can suggest improvements that may help to address some of the issues that have arisen. If there were to be a similar crisis in which digital technology was more essential to the everyday lives of the elderly, it is important to question how the government's strategy could be improved. The data collected may be used to pinpoint the key areas of weakness within the strategy and present arguments for amendments accordingly. In consideration of this analysis, it is possible to advocate for several changes that may help the government to be more successful in the future.

The findings of this study revealed a significant gap in usability between the government's website and the app. I argued that this was a result of the elderly falling behind as technology evolves and develops. Research conducted by Garcia et al. (2021) provides several suggestions as to how this issue may be addressed. They argue that digital education is essential as it "promotes better opportunities for adaptation" for the elderly in a society that is "in constant change" (Garcia et al., 2021, p.197). One may argue that a focus on improving digital literacy through education can, not only help to address the grey divide, but also prevent the gap from widening further. If a similar event were to take place, the elderly would be better equipped to receive the government's digital communication in a wider range of methods. Additionally, Garcia et al, (2021, p. 200) argue that the education method may also "provide older adults with enough competencies to reduce the exposure and vulnerability of this population to threats such as fake news and cybercrime". Fear was a recurring theme across the responses and subsequently led many to avoid digital technology altogether. A report produced by the Oxford Internet Institute found that negative attitudes towards the internet must be addressed on a cultural level as even when barriers to access are removed, personal preferences and worries should be addressed (Helsper, 2008). Moreover, ensuring that the elderly are confident in their ability to identify government communication can begin to combat the anxieties felt by older adults.

Additionally, the government may consider adapting technology to fit a wider cross-section of the public to enhance the accessibility of their platforms. Sanchiz et al. (2019)'s research found that tools adapted and designed for the elderly saw significant improvement in usability. They continue to advocate for design alterations such as the inclusion of "larger characters", "simpler page options" and "providing ways to help users navigate, find content and determine where they are" (Sanchiz et al., 2019) to reduce the barrier to entry most elderly people are presented with when trying to access government information. Alternatively, Helsper (2008, p.58) advocates for governments to provide the public with "multiple channels" in order "to address digital choices as well as divides". Arguably, presenting those who struggle with digital literacy with choices can prevent further exclusion. This was done successfully through the daily government conferences and the news via the television thus reducing the reliance on the website. However, there were no alternatives to the app, which contributed to the elderly's digital exclusion throughout the pandemic. Potentially the government could capitalise on the elderly's reliance on the television and use non-digital communication to promote, educate and inform the public of the government's digital resources. Thus, promoting digital inclusion, education and introducing more people to the government information available to them.

c. Limitations and reflection

Upon review, it is clear that there are limitations within my research. Perhaps, most obviously is the reliance on individual participants own accounts of events and understanding of the topic. Due to the complexity of the subject matter, there was significant potential for confusion or misunderstandings, especially as many were unfamiliar with the jargon that surrounds digital technology. There was always the possibility that a participant was not entirely confident with the terms and language used throughout the interview. Interestingly, this can be seen within this study as all of the participants at one point referred to online banking. It quickly became apparent that many equated the internet and online activities almost exclusively with online banking. However, within the parameters of this study, online banking would not be included as a form of governmental digital communication, however, the significant role it plays in the digital lives of the participants places it at the centre of their understanding of the internet. Whilst this misunderstanding did not have a major impact on the study it is impossible to know if smaller misunderstandings may have affected other answers given by participants.

Additionally, when asked about their individual capabilities, I was reliant on their own selfassessment. Due to practical constraints and Covid restrictions, there was no safe way to conduct tests to establish if the self-assessments were accurate. As a result, it is difficult to measure and compare participants knowledge as each individual will measure their understandings on different scales. A similar argument can be made for answers that detailed their ability to conduct a task online. For an individual who rarely uses the internet, being able to google something may be perceived as an expert level task. Moreover, when describing their knowledge and capabilities individuals are limited by the depth of their own digital literacy. Subsequently, making it difficult to conclude exactly how they evaluate their capabilities. An understanding of an individual's abilities is not impossible; however, it does require a substantial amount of inference and multiple questions. Testing would have provided a more concrete and more easily comparable answer.

Whilst the focus of this study was age, it is important to highlight that there may have been other determining factors that may have impacted success. I had briefly mentioned how scholars have found substantial evidence to support the idea that socio-economic factors impact accessibility

(Friemel, 2016, p.314; Helsper, 2008). However, to address this further background information on each participant would have been required. Arguably, this research would be unable to adequately answer questions relating to the intersectionality of factors that contribute to digital exclusion.

d. Implications of findings and future research

I believe this study has supported previous findings within the literature that the grey divide exists, consequently impacting lines of communication between the government and the elderly. Not only this, but this study elaborated on how the pandemic may have accelerated the rate at which the grey divide is growing, demonstrated by the responses detailing how the elderly struggled to keep with the technological advances occurring throughout the pandemic. Whilst the previous section highlights how the findings of this study supports calls for change, I also believe that this research highlights the vast possibilities for future research. In response to the limitations outlined in the previous section, there is a potential opportunity for additional research to be conducted that looks at the intersectionality of different factors affecting digital literacy amongst the elderly. Many scholars have found that age, education, wealth and many others play a role in reducing digital literacy and accessibility (Friemel, 2016; Helsper, 2008); however, I am confident that there is an opportunity to understand how these factors interact with each other. Especially within the context of a crisis. It is likely that digital communication will continue and become a prominent aspect of governmental communication strategies. This research has the capability to highlight those who may struggle to access this information and provide insight as to how governments can ensure that as many people as possible remain informed.

Furthermore, the results of this research have shown that teaching the elderly digital skills is a vital factor in ensuring they are able to keep up with changing technology and subsequently digitised governmental communication. In the event that digital technology becomes a necessity for this age group, it will be essential to ensure that we understand how to teach the elderly or adapt technology in a way that is more inclusive. I believe there is a gap in the literature as few scholars have sought to understand how the elderly interact with digital technology in order to provide teaching techniques. Whilst Eshet-Alkalai and Chajut's (2010) work established the cognitive difference between age groups that impact the way in which they interact with digital technology. I have not encountered research that looked to implement these findings into workable technology for the elderly. Moreover, further research could bring forth new ideas as to how we could adapt technology to allow people with a range of skills to access governmental information. Investigations into this could provide governments with useful insight into how to make their information more accessible; thus, addressing issues of accessibility highlighted within this research study.

Finally, this research confirms that the elderly are capable of using digital technology, however issues arise with the speed in which it develops. Participants in the study voiced frustrations of keeping up to date with technology, ultimately resulting in the feeling of being left behind. Conversely, what is not clear is whether this issue is isolated with the current generations who have not grown up with modern technology, or if this is likely to be an issue that arises as successive generations age. From this, several questions arise – does preexposure to digital technology positively impact one's ability to use and understand digitised government

communication? Alternatively, is this the last generation that will be excluded from the government's digital communication methods? And finally - is it inevitable that generations will be left behind the older they get? If so, how can governments continue to use digital technology in a way that does not exclude the aging populations? Connected to the previous point, it is important to understand how aging impacts our ability to use, learn and understand digital technology and digital communication, especially if the government intend to use similar strategies in the future.

e. Closing statement

Whilst the world continues to rely heavily on digital communication, this study places a spotlight on the elderly who have remained digitally elusive throughout the pandemic. This can largely be attributed to fear, reluctance and the inability to physically see those who could teach them. Consequently, those who took part in this research highlighted how the elderly struggled to keep up with the technical changes being made; this resulted in many being unable to use the government's track and trace app. Despite being digitally excluded, this appears to have had minimal impact on the elderly as the simplicity of the government's regulations for their age group required little additional research. Furthermore, many felt that there was no substantial need to engage with the government's digital communication methods. However, I believe digital literacy is still an important skill and will only continue to become more of a necessity in the years to come. In the event of another pandemic or crisis, it will be important to understand how to engage with the digitally excluded, or how to adapt technology in a way that is more inclusive. In this instance, the need for technology was not great enough to significantly impact the elderly, however, more work can be done to avoid such an event in the future.

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Appendix

Appendix a. Module Level Ethical Review Form (MLERF)

COMM5600M Dissertation and Research Methods

a. Interview Questions

Knowledge of digital technology

- Do you know what an app is?
- Do you know what a website is?
- Do you know of any government websites?
 - Would you know how to access a government website?
- Are you aware of a track and trace app?
- Are you aware of any websites you can use and trust to find government information on COVID-19?
- Do you know of any websites or apps that publish information on Covid-19?

Experience with digital technology

- Have you used the Covid 19 app?
 - If yes, what was your experience like?
 - No, why not?
- Have looked online for information about what the government has said about covid 19?
 - No, has your ability to use the internet prevented you from doing this? If you were more confident in your ability to look online, could this be an option for you?
- If you were confused about the government's COVID-19 rules/ restrictions, where would you look to get further information?
 - Why this place as opposed to others?
- The government created a website with the latest COVID-19 information have you used it?
- Where do you get your government COVID-19 information from?

Communication preferences?

- How would you like to receive government information on COVID-19?
- If you were confused about the current government regulations, where would you prefer to find the information?
- If you were more comfortable using digital technology, would you use the digital technology to find government information about COVID-19?
- Has the pandemic changed your views on the importance of digital communication?
 - How informed have you felt throughout the pandemic?
 - Where has your information come from?
 - Do you think the government did a good job at informing you about your health care needs and information throughout the pandemic?

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Appendix c.

This is a transcript of an interview conducted by Casey Magloire as part of MA dissertation research.

Transcript of a phone call Date: Monday 24th May 2021

Time: 13:00 PM (GMT: London)

Present: Casey Magloire (CM) and Participant 2 (P2)

- CM Does that all sound alright?
- P2 Yes, definitely.
- CM Perfect, so just to get started. So how old are, if you don't mind me asking?
- **P2** 80
- CM 80, perfect. So, my first question is, basically about what digital technology like you're aware of and which ones do you use? So, are you, do you use the internet quite often, in like your day-to-day life?
- P2 Yes.
- CM Yes?
- P2 Yes, yes definitely.
- CM And is this more like, government websites? Are you googling things?
- P2 Erm, well, obviously for emails
- CM Yes.
- **P2** I don't buy a newspaper, but I do look though the newspapers on my laptop.
- CM Yes.
- **P2** Usually whizzing through just picking up the odd articles. I don't really use the government websites very much, to be honest.
- CM Yes.

- **P2** Any information I want, I will find it on the internet. I mean if need to go to government information I will but, a lot of the time you don't need to actually. I mean every day I type in Covid world figures and straight away you get a long list of probably all the countries in the world, what their covid figure are. Do you know?
- CM Yes, yes, no, I know exactly what you're on about.
- **P2** So, there's loads of information out there about everything isn't there really. Anything you want to know you can get it. You can type in what you're looking for and you get it basically.
- **CM** Yes, no I completely agree. So, at the beginning of the pandemic, the government brought out like a Covid-19 app, the NHS app. Do you use apps very often?
- P2 No. No, I am very good on my laptop.
- CM Yes.
- P2 But I don't like my mobile phone, as a matter of fact I'm going in to Crossgates, to Good Neighbours, to Sam tomorrow for her to give me some more help on using my mobile phone, because that's something I am rubbish at. I got it just before lockdown.
- CM Yes.
- **P2** And then lockdown came. I bought a manual, £12.99, but it doesn't really help its useless or I'm useless one or the other.
- **CM** I am sure it isn't you, they are difficult for everyone, trust me.
- P2 I do dislike my mobile phone; I love my laptop; yet; quite dislike my mobile phone. I've got that app on it where you can put it, you if you go into a café or something, you can hold it up to that square box. I don't know what they call it.
- CM Oh yes, yes, yes, yes.
- P2 You know it clicks that you've been there. You know things like that if I've got to do it,I can do it. You know, but I get no pleasure out of a mobile phone.
- **CM** No that's really interesting. So, when you, so obviously you got your mobile phone just before lockdown, did some teach you how to use it or was it just the booklet that youyou were referring to? Especially, when you were like scanning things like when you go to places with the box, did someone teach you how to do that?
- **P2** Well before I had this mobile phone, I had the little old fashion Nokia one, you know which one?

- CM Yes.
- P2 It's a really pleasant shape to hold. And it just did essential things like, it was there for an emergency, or you could ring somebody if you had to do on it. Although, I prefer my landline as a telephone.
- CM Yes.
- **P2** And then, the Nokia packed in, I loved it, but it had, had its day. And one of my granddaughters took me to Car warehouse at the Armdale before it closed, and we chose this mobile phone. The all singing all dancing ones that can do everything, but I've just never got into it to be honest.
- **CM** Yes, no its, erm, it is a huge difference because I used to have the Nokia as well. And it can do a million and one things, can't it and there's always something else it can do that you will never know about. Erm, so...
- P2 Hopefully Sam will make me better, I'm sure she will because Sam's ever so good.
- **CM** Yes, she definitely will, definitely will.
- **P2** I'll spend time with Sam, and I should begin to dislike it less, let's put it like that.
- **CM** So, when you first started hearing about apps, where did you hear about them? And where did you hear about specifically the government medical apps?
- **P2** I think a friend of mine, she-she said, no I think it might have been my son. I didn't do it, he put it on for me. Or whoever put it on for me, I didn't. I don't have many apps to be honest. When I click on the app for the bus, the 19a, which is, I live at Colton and that's the bus I always catch, I can get erm, I can click on the direction I want to go and the stop I want to leave from, and that. And then all it ever says is, this information is not available at this time. And I've put wi-fi on and everything.
- CM Yes.
- P2 So, I've never understand why it's telling me that this information is unavailable. And then if you're outside, and you're at the bus stop for example and you're thinking, oh I wonder if this bus is going for me. You-you think it might be the information on, and the lights very bright so you can't see the screen in any case so.
- CM Yes.
- **P2** That's another thing I don't like about them.

- CM But it sounds like you are able, you're quite aware of them. Like you've got quite a wide knowledge of like the different apps you can use, and you're starting to use them as well. Because I know that I've struggled with the bus app myself so, I think it's probably -
- **P2** I just put it off.
- CM Yes.
- P2 I'll just have to go through it and 'sorry no services are available at this time' so.
- **CM** That's interesting.
- **P2** And then on the screen, there's erm, arrivals, emails, settings, camera, calendar, gmail, map, gallery, chrome, youtube, duolingo, there's all sorts but, I have no kind of desire to use it on my own, you know. I would rather do it on my laptop.
- CM Yes, so when you're on your laptop, you kind of mentioned it briefly in the beginning, do you use government websites? Or are you aware of any government websites for Covid-19?
- P2 Yes, I am aware of them but, I can't say I find that I really need to get the information much from official websites.
- CM Yes.
- **P2** Not, not really to get much from them.
- CM Yes.
- **P2** The NHS website, that's quite good if you want information about anything really. I think the NHS website is good. But I mean the government ones are, I know that, before my husband died about three years ago, I actually, online, did lasting powers of attorney completely by myself, you know.
- CM Oh wow, yes.
- **P2** Quite straightforward with the help there was marvellous, telling you what the next step was and what you did next. And it was quite complicated, you've got to get, you've to print quite a lot off and you've to get witnesses and what not together at the same time to witness each other's signatures. And so, it took a fair bit of doing but it was really good and really helpful and saved you having to pay a solicitor, do you know. So, yes, it can be really useful.
- **CM** Yes. That's really interesting, no really interesting. Thank you. So, I guess with all the restrictions and all the rules going on, have you ever been confused with the regulations

and what is happening? And if you were, what did you do to find out information on it – on the Covid-19 regulations and rules?

P2 No, I've not been confused at all about it. It's all seemed pretty straightforward.

CM Yes.

- P2 I mean, it is what it is. It's been a terrible thing that's happed all over the world. I have kept up on the information, I'm sure I have. I've just felt so sorry for so many people. Especially, for the young people I've felt. One of my granddaughters she just started in the 6th form with her A Levels.
- CM Oh gosh yes.
- **P2** And she thoroughly enjoying it, you know, wearing your own clothes, and it being absolutely lovely, feeling more like a student than a school kid.

CM Yes.

- P2 And then of course it's snatched from them, and you're talking about thousands and thousands of lovely young people who have had their teenage year stolen off them. So, I feel more for the young people than anybody really.
- **CM** Oh wow. Yes, I guess, I guess when, erm, you're young and just going through you don't really think that other people have thought about it but, yes. It's especially, like, for people like your granddaughter it's a rough time. I can't imagine trying to my A levels right now, I think I am quite lucky that I am at university and it's a bit more independent and I've done it for a few years. But A levels are incredibly hard.
- **P2** Which 6^{th} form are you at then? The main one or -?
- **CM** Yes, I'm at the University of Leeds.
- P2 Because my son works there.
- **CM** Oh really, it's a small world isn't it.
- **P2** The girls' daddy he works there, he's human resources.
- **CM** Ahhh right, right.
- **P2** I don't think he's dealings with students, well I know he doesn't.
- **CM** Well... yes. I have only been in a couple of times in person because of the pandemic. So
- **P2** Yes, he's working from home.
- CM Yes.

P2 Yes.

CM So, in terms of how you prefer to get your information about Covid-19,

- P2 Yes.
- **CM** How, what's your preference, like do you prefer to go online? Do you prefer to speak to people? Do you prefer to watch the news? What's your preference?
- **P2** I think the main thing has been the government briefings on the tele. If I've not been around at the time, I've pressed record to make sure I could look at them when I've had the time.
- CM Yes.
- P2 I've kept up pretty much, definitely with the government when Boris sort of comes on the tele and, and he's, the ones who's been the experts about the vaccine and everything. I've listened to all that. I think that's been pretty good.
- CM Yes, so do you prefer that to searching for all you information online, do you think?
- P2 Yes, I do.
- CM Ah.
- P2 And also, I think the main source has been, I'm not a great conservative, I don't pretend to be, but I don't think anybody could have made a better job, I don't see how you could. I mean, it's totally unknown territory and I just think, they've done their best. And you can't really ask for more, do you know.
- **CM** Definitely. So, has the pandemic changed your views of digital technology and the internet at all?
- **P2** Erm, well the absolutely wonderful thing for me, as a widow still seriously grieving the loss of my wonderful husband; it's been through Good Neighbours at Crossgates and through Sam in particular, giving us zoom has been a wonderful, wonderful thing.
- CM Yes.
- P2 Zooms been, I've just come off zoom with Julie doing poetry and literature and then tomorrow its book club on zoom, and Friday I do the quiz on zoom. Thursdays been keep fit on zoom. Zoom has been a life saver for me.
- CM Wow.
- P2 It really has.

- CM No, it sounds like you get a, because I have spoken with Sam about all the different programmes they run there, but it's so good to hear that you are so involved with it. And, honestly, I struggle with zoom 95% of the time, but -
- P2 I love Zoom.
- CM Yes, it's great isn't it.
- P2 Thanks Sam, I mean without Sam, she, every Monday morning she sends an email of the programmes of the week with all links on. Now all I have to do is choose a programme and press on the link at the right time. I couldn't do it by myself. You know you need that help from the Samantha's of the world.
- **CM** Yes. So, do you think, more people over the age of 65 would enjoy this if they had more people to teach them how to do it?
- **P2** Well, I don't know if I should say this and maybe it's between you and myself, but one of my jobs that I have done for Good Neighbours over the winter as a volunteer is to ring lots and lots of old people with a questionnaire asking how they have coped with Covid over the winter.
- CM Yes.
- **P2** A series of questions, and at the end I've asked them, would they be interested in having lessons with Sam. You know IT. When this is over, or would they be interested in being shown how to go into zoom now. A large proportion of them don't have any technology, so you know a laptop or anything, they have no interest in having one. Quite a few who can do things like order their shopping online, still have absolutely no interest in developing their technology further. There is a massive, massive reluctance among so many old people, older people to have anything to do with it.
- **CM** Yes, I have definitely picked up on that. So, what is it that made you want to get more involved with this, digital technology?
- **P2** Well, when I was very young, first of all I was a secretary.
- CM Yes.
- P2 Then I went to teacher training college, Greaton Hall, which used to be part of Leeds University and trained to teach as a teacher. And whilst I was teaching the very first computers came into school. And because I already had keyboard skills, could touch

type and everything, I was madly interested in it. And I was one of the first to have a computer in my classroom.

- CM Oh wow.
- P2 That-that's really, that how I've just been luck really that, I remember going on an elevenweek computer course, many, many years ago. Where it was just one evening a week. And the man taking it was called Rob, and he was, we were all green teachers, you know.
- CM Yes.
- P2 Listening and learning. And he was saying things like: 'one day you will be doing your shopping online, one day you'll be doing banking', and we were all looking at each other and giggling, what's this idiot going on about.
- **CM** I love that. Wow, yes.
- **P2** So, you can't believe how far we've come. You just cannot believe it. I find it very hopeful. I think we will go on and do with this kind of technology we will learn to conquer climate change and reduce carbon footprints. There's so much that we are going to do now. I mean, I won't be there to see it maybe, but that doesn't matter. The thing is, the world is going to become a better place, a truly is. I just know it will.
- **CM** Yes, I completely agree with you. I think that's why I am so interested in this research, because there is a whole generation that is possibly missing out on the wealth on information that's there. But I definitely agree there seems to be a link with people who have had some introduction to technology early on and those who are a bit fearful of it later on, because, they haven't had that introduction.
- P2 Yes, and quite proud of having nothing to do with it.
- CM Yes.
- P2 And you know they just dismiss it totally. 'oh no', you know, 'I don't need that' you know, 'I don't need that.'. I have a best friend who is brilliant on the mobile phone, she can do many, many more things than I can do, on a mobile phone. But she wouldn't have a computer in the house, you know.
- **CM** Oh, that's interesting. Well, it's... yes, it's... I completely. I'm getting a really good image of all differing views, it's so interesting. So, it's clear that you've kind of got this really good understanding of digital technology and where to get your information.
- P2 Yes.

- **CM** Do you think that you've missed out on any information from not being able to use certain aspects of the internet?
- P2 Erm, well, it's fab to have YouTube, I love YouTube. I mean on my television I can just press a button and say YouTube into the microphone and YouTube will pop up. I mean television is marvellous, it's a wonderful gift for somebody old living on their own, in the winter especially. But there's lots of technology on modern television. You know, I've got a Q box from sky, and you can do all sorts, really.
- CM Yes, you can.
- P2 I love banking online, on my laptop. I've got a smart metre in my kitchen for my gas and electricity, to see that usage. So that's really useful. Erm, I'm missing out on, erm? Silly little things like, I've tried to order a takeaway online, and I couldn't do it because I didn't have the app that you need, and I don't know how to get the app that you need.
- CM Yes.
- **P2** So trivial things like that, which I'm hoping Sam will put right for me, you know.
- CM Yes, I think, to be honest it sounds like you've got a really great understanding of it all. But I think it sounds also like, it's good to have that person there to refer to ...
- P2 Yes
- **CM** That maybe other people might not have that has maybe prevented them. It sounds like Sam is really key to any issues you encounter with digital technology. Is that, am I assuming that correctly?
- **P2** Oh Yes. I mean, the thing is with my grandchildren, they're 16 and 18, they're busy studying for a start. But when I have seen them and asked them to show me this on the lap- on the, erm, mobile phone, well I've got to, when I've got my normal glasses on, I can't see the screen properly. So, I have to, first of all take my glasses off because I see better without them. You know just the way your eyes change as you get older. And then, they are just going click, click, click, click and they think you're going to take it in, and you don't, because they are doing it too quickly.
- CM Yes,
- P2 Whereas Sam will do it at my pace. Give me time to take it in. Do you know, just? And Sam will let you have a go yourself and watch you doing it step by step. Rather than, and my son's as bad, he's as bad as the girls are, you know just click, clic

click; and I don't have a clue what they've done to tell you the truth. But I know with Sam I will you see.

CM Yes.

- **P2** She will do it at my speed, not lightening.
- **CM** No, I completely get you, I know, I have to, I do it with my mum as well and I am really bad at it. I've just got one more question then, it's...
- P2 Right.
- **CM** because of the pandemic a lot of things have move online. Do you think that people in your age group have been, is this a disadvantage to people in your age group?
- **P2** Say that again lovie, have people? Are they at a disadvantage?
- **CM** Yes, because obviously we can't see each other in person, a lot of the government information has moved online. So, like the government website, or you can google things to find out. Do you think it's a disadvantage for people in your age group when they want to find out about the government and what's going on with Covid-19?
- **P2** I suppose it, for myself I don't think it has, but I can imagine for lots of people it will have been. And things like doctors' appointments by telephone instead of face to face, your mental, sorry not your mental, your medical records being all online, I find that really useful.
- CM Yes.
- **P2** I can click on and find everything I want to know about, say if I have blood test but instead of having to wait for a doctor. I mean, it's online on my computer within a couple of days. That's great things like that. I mean I do think people are really missing out who can't do things like that.
- CM Yes.
- **P2** I mean shopping online, after covid is finished I shall still get an order online, it's a great blessing, do you know?
- CM Oh no, it's a mazing. We do the same thing in my house.
- P2 Yes.
- **CM** I think we have covered all the key points I really wanted to cover. Is there anything that you thought might have been of interest to me, that you wanted to say before we finish?

- **P2** Erm, I mean apart from the fact that I think, certainly in my case, that I'm using the government websites online a lot less that you maybe thought. Because information on television, on like clicking on the newspapers and getting what they are saying by clicking on, you now just googling something like covid world figures, gets you loads and loads of information without specifically needing to go to government websites.
- CM Yes, wow, I didn't think of that. That is really helpful actually, thank you.
- P2 No, no, I am sorry I am a bit vague and woolly, but -
- **CM** Oh no, honestly, you are not at all. This is so helpful and more than you even realise, and it is very much appreciated.
- P2 Good, good, I hope so.
- CM Yep, hold on I will stop the recording.

END OF INTERVIEW

Appendix d. Coding

Below is an example of my coding process for the code – Access. This was one of 12 codes that were then organised into the two themes outlined in the thematic analysis chapter of this dissertation.

Access

Participan t	Page	Quotation	Notes
P1	2	I was aware of that, but I was never going to be able to use it myself because I don't have a smart phone It was a big deficiency of the system because not everyone has got a smartphone, especially not older people.	Were you aware about the track and trace app they used in the beginning of the pandemic?
P1	8	don't make communications that can only be taken up if you have an internet connection because you're going to miss out a lot of people	
P2	7	A large proportion of them don't have any technology, so you know a laptop or anything, they have no interest in having one.	
P2	10	when I've got my normal glasses on, I can't see the screen properly	
P4	4	Yes, yes.	Willingness to learn more to access government information.
P4	5	Well, they need think about the elderly, some of them can't access the internet and sometimes as well when you're	

		dyslexic as well, it's harder for you to understand.	
P5	3	Yes.	Did you find it easy to find? Online gov information.
P5	4	Yes.	when you were on the website, did you find it easy to use?
P7	2	we've not got a smartphone. we use a tablet.	
P7	3	well, we've not got a smartphone so we couldn't have it on the phone.	
P7	8	So, if they, so if they wanted you to have erm, a covid certificate for going abroad they assume you've got it on your smartphone.	
P7	8	the test says you know, use your smartphone. Well not everybody's got a smartphone, and we don't want one	
P7	8	we've got a mobile, but it's a mobile that just makes calls	

Appendix e. Participant Leaflet

The leaflet below was distributed to local community centres and churches in order to find participants for the study. This was used to outline the nature of the research and the criteria needed to participate in the research interview.



UNIVERSITY OF LEEDS

Volunteers wanted for Univerity Student Research

OVER THE AGE OF 65?

I WOULD LOVE TO TALK TO YOU ABOUT YOUR EXPERIENCE WITH THE INTERNET, DIGITAL TECHNOLOGY AND FINDING GOVERNMENT INFORMATION ABOUT COVID-19.

IF INTERESTED PLEASE CONTACT CASEY AT

