Exploring Loneliness Among Older People and Their Related Use of New Technologies

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Abstract

This research reports the findings of a multi-method study which explored how older people use new technologies to help with loneliness.   A central concern is a 'loneliness paradox'; namely that despite the greater opportunities that exist for social contact using new technologies, loneliness persists among older people. Older people were defined as those 65 and over and new technologies were defined as computers, laptops, smartphones and tablets that combine both personal and mass broadcast communication. A multi-methods approach was used in this study, which involved a self-completion survey (paper or online) and semi-structured interviews. The fieldwork was undertaken between November 2015 and May 2016 using a purposive sampling procedure. Older people were recruited through working with charities, peer groups and social care organisations in a diverse conurbation (East Midlands UK) both in urban and rural locations. Visits were undertaken to day services, lunch clubs, social groups and residential care homes. Thirty semi-structured interviews were undertaken with a cross-section of older people and 126 self-completion questionnaires were returned. The research explored three areas: uses of new technologies by older people, whether they made any difference to loneliness, and the experiences of loneliness in the context of increasing use of new technologies.   The study found that new technologies were used by older people to make social contact. However, this contact did not always help with loneliness. Further exploration of the experiences of loneliness highlighted a new framework to understanding loneliness and new technologies through the idea of four Modes of Loneliness (Existential Loneliness, Comparison Loneliness, Loss Loneliness and Alienation Loneliness) and three strategies for utilising new technologies to help; social contact, distraction and therapy. Case studies were used to highlight this alternative approach and to demonstrate how new technologies can be seen to help with loneliness for older people.

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Chapter One: Introduction

The condition we are studying is so disturbing that we surely have responsibility to do what we can to be helpful to those who experience it (Weiss 1982, p.79).

1.1 Loneliness and social isolation among older people

Loneliness and social isolation are regarded as serious and complex problems that have been shown to be features of the social world of older people (Victor et al. 2009). Cann and Joplin (2011) have estimated that over one million older people are lonely and half a million spend Christmas day on their own in the UK. They also found that 49% of older people have television or pets as their main form of company; 41% feel out of touch with the pace of modern life; 12% feel cut off from society; 9% feel trapped in their own home and 6% leave the house only once a week or less. Where loneliness and social isolation exist, research indicates this can lead to a poorer quality of life. There is evidence that chronic loneliness increases the risk of serious health conditions such as diabetes, heart conditions, strokes, depression, dementia and subsequently, increases hospital admissions and premature admission to residential care (Age UK 2014; Kempton and Tomlin 2014; ILC 2015b). A recent charity campaign, *No one should have no one* by Age UK, found a big response to a TV advert on loneliness where 76% who saw it reported it made them want to help older people who were alone. This suggests that the public is very concerned about loneliness among older people (Mortimer 2016). Loneliness is also considered a big problem among older people themselves (Hoban et al. 2013) and research has shown that their greatest fear of dying is of dying alone (Kempton and Tomlin 2014). Loneliness and social isolation of older people, in

particular, therefore, is a major issue in contemporary Britain and has attracted much attention from researchers, charities and the media.

Loneliness and social isolation have also been rising up the policy agenda as the Government highlights the need to tackle these problems (ILC 2015b). *A Sure Start to Later Life: Ending Inequalities for Older People* (Office of the Deputy Prime Minister 2006), for example, identified the benefits for individuals as well as communities of increasing the social participation of older people. *Putting People First* (DoH 2007) identified a system-wide transformation of the social care system which included the alleviation of loneliness and isolation as a priority for that transformation. In social care, further emphasis was also placed on building community capacity in the national concordat *Think Local Act Personal* (DoH 2010) and the *Care and Support White Paper* (DoH 2013). This included the requirement for better integration and the need to tackle loneliness and social isolation in communities. The subsequent Care Act (2014) introduced the requirement for councils to promote wellbeing, including how an individual 'contributes to society' as a measure of wellbeing. In this respect, the *Adult Social Care Outcomes Framework* (DoH 2015/2016) includes a measure of social isolation, drawing on self-reported levels of social contact as an indicator of social isolation.

A recent tragic event has raised the profile of loneliness and social isolation in mainstream UK political discourses and policy-making. On 16th June 2016, MP Jo Cox was murdered. She had already started to work on a cross-party campaign to look at loneliness but her death, in such tragic circumstances, means the issue was heightened further and saw the establishment of a cross-

party commission in her memory (BBC 2017). 'Ridding society of loneliness' is the objective of the Jo Cox Loneliness Commission (2017) where the aim was to start a national conversation about the scale and impact of loneliness in the UK. The Commission is chaired by two MPs and works in partnership with thirteen charities to put together a manifesto and ask the Government to look into ways of reducing the problem. It sought to 'turbo-charge' the issue as one of national urgency and 'expose the growing crisis of loneliness'. The emphasis of this work was on addressing the impact of loneliness, and the different aspects of loneliness in sections of society. It included taking positive action to recognise loneliness and steps to combat it, including building connections and strategies of self-help (Jo Cox Loneliness 2017). In response, in January 2018, the Government appointed a minister for loneliness to work across political parties to tackle the issue (BBC 2018).

1.2 The increasing use of new technologies

It is within the context of these growing concerns that this study explored the use of new technologies by older people to help with loneliness. New technologies have the potential to change lives. New digital technologies are growing exponentially and seeing the potential to maintain, participate in and create new social relationships. New technologies, however, may also create the potential to displace activities, for example, those that might involve face to face contact and other traditional methods of communication and contact (Kraut et al. 2006). The debate about the impact of technological innovations on human behaviour has a very long history and has existed within preindustrial, industrial and post-industrial societies (Brynin and Kraut 2006). The impact on

social life of the introduction of technologies such as telephones in the 1900s and TV in the 1950s and 1960s are examples of this debate. In this respect, television viewing, for example, saw concerns raised about the displacement of social life outside of the home and conversations within the home (Robinson and Haan 2006).

Recent debates have focused on the increasing use of new digital computer technologies as they enter homes and impact on the daily lives of individuals (Poster 2002; Brynin and Kraut 2006; Bakardjieva 2011; Sinclair and Creighton 2015). This is particularly evident with the rapid increase in the use of new technologies for social connection via the Internet. The Internet is now more widely and more easily accessible but also the equipment to access it has become cheaper, more mobile and ubiquitous. A major feature of new digital technologies is the combination of both interpersonal and mass communication functions. In this respect, relatively new developments such as social media are arguably transforming the way people are connecting with each other. According to one source (Cabinet Office 2015a), it took 38 years for radio to reach 50 million people, 13 years for the TV and 4 years for the Internet. When Facebook was released, it had 50 million users within 10 months.

Communication systems are viewed as particularly important for creating and maintaining social networks and social relationships for older people (Bowling 2005). Newer digital technologies are increasingly becoming a main communication channel for social relationships (Cabinet Office 2015a). However, they may not always be seen as positive by older people. Cann and Joplin (2011), for example, reported that 36% of older people felt out of touch

with modern life and although many older people have an Internet connection, they never use it. The ways in which new technology features in the social lives of older people, therefore, remains open to question.   On one hand, new technologies may be passing older people by because of not using them or because of difficulties in engaging with them.   On the other hand, new technologies may be on the verge of a breakthrough for use by older people as they become more pervasive and ubiquitous, connecting them to more people every day. Accordingly, there remain unanswered questions about the impact of new technologies on the social worlds of older people.

The background to this study is, therefore, a social world which is changing, and where older people may be more connected by new technologies than ever before. The potential for older people to use new technologies to help with loneliness and social isolation has never been greater. However, what has been described as the 'loneliness paradox' (Sutherland 2013 p.24) appears to exist. The 'loneliness paradox' is the idea that despite the greater density of social networks in society and ways of maintaining these relationships, like new technologies, we continue to see unacceptably high numbers of older people experiencing loneliness. This was a central concern for this study which set out to explore loneliness among older people (over 65) and their related use of new technologies.

1.3 Understanding loneliness and social isolation

There is often a lack of clarity and disagreement about the distinction between loneliness and social isolation (Courtin and Knapp 2015; Wang et al. 2016). A distinction can be made between an objective social isolation, having limited

social contact, and a subjective feeling of loneliness. However, some writers have argued that this notion is too simplistic and does little to illuminate the issues faced by older people (Victor et al. 2009). Therefore, trying to differentiate the concepts of loneliness and social isolation does little to clarify the confusion surrounding them. Andersson (2010), for example, identified a four-way typology of the relationship between loneliness and being alone:

1. Being alone and feeling lonely
2. Being alone but not feeling lonely
3. Not being alone but still feeling lonely
4. Not being alone and not feeling lonely

Accordingly, loneliness in the first sense of being alone and feeling lonely has been found common among older people - living alone or spending most of their time alone (Victor 2003; Cattan 2011; Age UK 2014). This suggests that being isolated can be a trigger for and a component of loneliness. Loneliness in this respect can be defined by the conditions that give rise to it, like social isolation (Paloutzian and Janigian 1987). However, there is not necessarily a direct causal relationship between social isolation and loneliness (Suedfield 1982; Andersson 2010; Cacioppo, J. et al. 2015), and loneliness can merge the objective degree of lack of social contact with subjective experiences of the adequacy of that contact (Wang et al. 2016). This complexity often sees conceptual confusion surrounding the differences between loneliness and social isolation, leading to criticism of the concepts being used loosely and interchangeably (Valtorta et al. 2016). The argument in this thesis, however, is that there is a need to move beyond a simplistic loneliness/social isolation dichotomy. In this thesis, social isolation is seen as a dimension of the wider phenomenon of loneliness. Loneliness is viewed as the more important concept

because of its potentially damaging consequences, which may or may not involve social isolation as one of the characteristics. Ideas about loneliness, in this study, will be grounded in the meanings and experience of older people themselves rather than starting with a predefined concept, and this may or may not include being alone and social isolation.

Many studies that address the use of new technologies for loneliness, however, tend to treat loneliness in this unidimensional way and equate loneliness with a lack of social contact. This previous research has also tended to treat older people as a homogeneous group and so risks replicating negative or positive stereotypes of older age. By utilising findings grounded in the loneliness experiences of older people, this study will consider both agency and social structural aspects of later life. Agency is seen as the unique personal world experiences and choices made by the individual, and social structure as the social location and institutions that constrain and shape these choices (Thompson 2006). Social structural aspects of older people's loneliness experiences are not routinely considered in previous studies into new technologies and loneliness but may be an important aspect of the 'loneliness paradox'.

1.4 Research problem and questions

The 'loneliness paradox', identified above, may exist for several reasons and is explored in this study. The first reason may simply be that older people are not using new technologies and so these are unlikely to have any impact on their loneliness. Accordingly, the first research question seeks to explore the experiences of older people in terms of adapting to and using new technologies.

It aims to establish how older people are using new technologies and any difficulties they had in doing so:

1. How are older people adapting to and using new technologies?

Following this, if new technologies are used by older people, a question exists if they can provide an effective mechanism for helping with loneliness. Older people may find new technologies unsatisfactory for curbing their loneliness and may have concerns about how they impact on their social relationships. Therefore, the second research question seeks to explore this further and consider what differences using new technologies are making to social relationships and mitigating experiences of loneliness among older people:

2. What differences did new technologies make to older peoples' social relationships and mitigation of loneliness?

Finally, the 'loneliness paradox' may be explained by the nature of older people's loneliness and the complexities of the phenomenon which make it hard for new technologies to help in every respect. Exploration of whether loneliness experiences can help us consider a different way of thinking about how new technologies help with loneliness for older people is warranted. A third research question, therefore, explores the experiences of loneliness for older people with the aim of understanding what these experiences tell us about using new technologies to help with loneliness:

3. What are the experiences of loneliness for older people in the context of new technologies?

1.5 Definition of older age

A consensus does not exist about what should constitute old age, and it is recognised that older people are not a homogeneous group. Some people prefer terms such as 'senior' or 'elders' rather than old or older people as they do not identify with being old or feel that the term 'older people' lumps them together (Hoban et al. 2013). A recent programme in the UK, which was aimed at addressing social isolation with older people, defined users as 50 years of age and older (Big Lottery 2015). However, administrative definitions of old age have tended to dominate the research literature. This has normally been defined in the UK as 65 years and older; the age at which people have traditionally been able to receive a state pension (Coleman et al. 2000). Although this age has recently been extended by Government policy to 67, the age of 65 and over continues to be widely used by local authorities such as Adult Social Care and the NHS, who continue to differentiate service provision and commission services on this basis. Furthermore, older people's charities such as Age UK, continue to define older people as 65 and older for the purpose of providing statistics on later life in the UK (see Age UK, 2017). As many organisations who support older people continue to use 65 years and over to define them, it is difficult to argue for including all those who are 50 and over. This study, therefore, focused on those people 65 years and older as 'older people', in line with the administrative and popular approach.

1.6 Definition of new technologies

Technology is defined as *"machinery or practical devices designed using scientific methods"* (Oxford English Dictionary 2015, p547). What constitutes

technology under this definition can be very broad. For older people, it can mean using everyday household equipment such as washing machines to more specialised 'disability' equipment like grab rails or stair lifts. Within the area of social and healthcare, there is an emphasis on assistive technologies which are recommended and provided for specific needs, such as mobility aids (Age UK 2010a). The focus in this study, however, is on the newer digital information and communication technologies. Information and Communications Technology (ICT) often includes older forms of technology relating to personal communication such as telegraphs or telephones, and mass broadcast forms of communication such as cinema, radio and TV. It was, however, newer forms of digital technology which involve the Internet and different devices (desktop computers, laptops, mobile/smartphones and tablets), combining both personal and mass forms of communication in one place, which were the main interest in this study. These are referred to as 'new technologies' throughout this thesis.

1.7 Contribution to knowledge

One objective of this research is to understand the experiences and perspectives of older people and so add to the current debates about the potential of new technologies to help with loneliness. In this respect, the study sees a contribution to knowledge in two ways. First, the study will offer new findings on how older people use new technologies to make social contact and will explore with older people whether this greater use of new technologies helps with loneliness. Second, the study will deliver new findings on the nature of loneliness and consider whether a multidimensional concept of loneliness may be useful when considering how new technologies may help. This study

aims to inform debates about whether new technologies can help with loneliness at the individual, service and policy levels. The writing of the study is undertaken in an accessible and informative way which can be accessed by older people and those who support them. In this respect, a contribution to knowledge is raising awareness of what older people have said allowing supporting organisations to offer improved technological interventions and solutions to support people in later life. Loneliness is more likely to feature in the work of the health and social care sector in the future, and research should inform this work.

New technologies will also be an important development of services which aim to help older people maintain independence (Cabinet Office 2004).   The Association of Directors of Adult Social Services (ADASS 2015), in a recent 'Call for Evidence' on new technologies, found that some of those working in social care are looking at the potential of using new technologies to improve the outcomes of individuals within the context of an environment of scarce resources. Thus, 70% of respondents to their survey believed that older people will be the greatest beneficiaries of technology; 26% of councils were considering using Skype and 3% were already using Skype to speak to older people; and 12% of councils were using social media to provide information for older people, with a further 48% considering it. However, there has been some fear that the delivery of services using new technologies may provide a substitute for human contact rather than complementing and improving traditional services (Cabinet Office 2004). A challenge exists, therefore, in terms of whether social care and health services can utilise new technologies without isolating individuals further and potentially contributing to loneliness.

Accordingly, this study can inform these technological developments so as not to see disadvantage created for older people.

1.8 Outline of the Study

Following this introduction, Chapters Two and Three review the research literature within the scope of this study. Chapter Two is focused on what factors and life events are associated with loneliness in later life and several different perspectives of loneliness. This sets the scene for developing the research methodology with respect to who is more likely to experience loneliness, and provides a frame of reference for understanding loneliness experiences in the later analysis. Chapter Three is focused on research that considers the impact of new technologies on social relationships, barriers to using new technologies for older people, and whether new technologies are a positive and successful intervention for loneliness. This highlights the importance of social context, rather than reducing the experience of loneliness to one dimension and/or abstracting older people from their social situations to consider the impact of new technologies on their loneliness. Consequently, Chapter Four focuses on the methodologies adopted for this research to analytically examine the views of older people to understand how they feel about loneliness and new technologies and the meanings they attach to new technologies. Chapters Five to Seven present the findings of the study based on the research questions above.

Chapter Five examines how participants adapt to and use new technologies in their lives. The aim is to establish how older people use new technologies, the difficulties they experienced, and take these as a starting point for exploring the

'loneliness paradox'. Chapter Six considers what difference new technologies makes for participants in terms of their social relationships and loneliness experiences. Specifically, this chapter examines whether the use of new technologies provides an effective mechanism for helping with loneliness, and how participants feel about this. Chapter Seven focuses on participants' experiences of loneliness with a view to understanding what these experiences tell us about using new technologies to help with loneliness. Chapter Eight utilises two case studies to present Modes of Loneliness, a new framework for thinking about the relationship between loneliness in later life and new technology. Finally, Chapter Nine, the conclusion, summarises the research and brings together recommendations regarding interventions using new technologies to support older people living with loneliness.

Chapter Two: Perspectives on Loneliness in Older Age

We're all of us sentenced to solitary confinement inside our own skins, for life (Williams 1957).

2.1 Introduction

The aim of this chapter is to review the research literature on loneliness in later life. Chapter Three will consider the research literature that considers the impact of new technologies on older people. The first section of this chapter will consider the approach undertaken in reviewing the literature in both respects. Following this section, the chapter includes three aspects derived from the literature review on loneliness in later life. First, the prevalence of loneliness among older people and the factors which mean older people are at risk of loneliness. Second, the main perspectives found in the research on the nature of loneliness and what they reveal about loneliness for older people. Three main perspectives; existential, psychodynamic/ psychological and sociological were identified. Third, what methodological issues are important when exploring issues of loneliness among older people.

2.2 Literature review approach

The approach taken to reviewing the research literature in this thesis was a *'critical review'* (Grant and Booth 2009). Grant and Booth (2009) describe a *'critical review'* as a narrative review of literature that *"goes beyond mere description to include a degree of analysis and conceptual innovation"* (p93). This approach was felt appropriate and important as the aim of the literature review in this study was to identify the significant literature in the field and

provide a critical analysis and synthesis of existing thought. In this respect, literature was drawn from primary studies but also secondary studies, reports and evidence reviews on later life, mainly from charitable organisations.

The reviews incorporated also elements of a 'systematic approach' (Aveyard 2014) to help search for research studies. Thus, a number of general key search terms were used (Table 2.1), alone and in combination to search electronic databases. This was useful to capture a range of studies in the first instance.

Table 2.1: Some General Key Literature Search Terms

Social Isolation and Loneliness	Ageing population	Technology
Social connectedness	Older adults	Computers
Social connections	Older age	Social media
Networks	Older People	Facebook
Desolate	Later life	Twitter
Solitude	Elderly	Instagram
Friendless	Aged	Digital
Withdrawn	Technogeriatrics	Friends reunited
Estranged	Old	E-harmony (dating agency sites)
Detached	Geriatric	Hangouts
Disconnected	Grey	Snapchat
	Mature	Chat rooms
	Silver surfers	Gaming
	Senior citizens	Gerontechnology
	OAP	Apps
		Tablets
		ICT
		Information technology
		Smartphones

Electronic databases were chosen to offer both diversity in and range of disciplines and resources. These included Google Scholar, Proquest, Web of Science, Cumulative Index to Nursing and Allied Health Literature and PsycINFO. These searches were then supplemented by other ways of finding literature such as iterative searches and 'berry picking':

- Searching bookshelves. For example, using Dewy catalogue number 302.545 for loneliness.
- Searching the online catalogue of the university.
- Looking through the bibliography of books and articles and identifying useful texts.
- Searching through some frequently cited journals and books.
- Searching on websites of key charity providers and campaigns.
- Advice from supervisors on key texts to read.
- Attending seminars and conferences of relevance.

Strict adherence to a precise systematic approach was not undertaken as it was recognised that some of the literature found included qualitative and theoretical research (Boland et al. 2014). Furthermore, with respect to a *'critical review',* appraisal of literature was undertaken based on the judged contribution to the area of study of the study rather than a more systematic approach. A perceived strength of a *'critical review'* is to 'take stock' and evaluate what is of value in a previous body of work (Grant and Booth 2009) and this was the main inclusion/exclusion criteria in this study. However, a further inclusion and exclusion criteria (Table 2.2) was loosely applied to manage the extensive literature derived from these searches. An assumption was made that there would be a saturation of the issues within the literature, and resources would repeat themselves. Accordingly, a 'saturation principle' helped to manage what was included/excluded in the literature reviews.

It is important to recognise the limitations of this approach. First, only the author was involved in the searching, reading and interpretation of the literature found. It was not, therefore, a pure 'systematic' approach in the sense of being repeatable by others and will contain biases. Second, it is acknowledged that this approach also carries risks and limitations, in that it may miss useful

resources and reduce the richness of data included in the literature review. As Grant and Booth (2009) argue, however, a 'critical review' serves to aggregate the literature on a topic, providing a starting rather than an endpoint for discussion.

Table 2.2: Literature Review Inclusion and Exclusion Criteria

Inclusion	Exclusion
Primary and secondary research/discussion relevant to a topic identified	Literature not related to the topic
Resources that contribute something new to the concepts and theories of loneliness and new technologies	Resources not adding new themes or approaches as the literature progresses (the saturation principle)
English-language only	Not English-language
Published literature only	Unpublished research
Post-1945 literature	Pre-1945 literature

2.3 The extent of loneliness in later life

Research on loneliness in older age has reported on prevalence (Victor et al. 2005; Victor and Yang 2012). Estimates of the extent of loneliness among older people are often the ones that provoke headlines in the media, particularly at Christmas. Such statistics are often used to highlight the need for action and to raise funds for charities. Some have suggested that the experience of loneliness increases with age (Dahlberg et al. 2014) and the prevalence is less for younger than older people (Burholt 2011). Those over 80 are found to have higher reported feelings of loneliness compared to other older adults, with almost half the over 85s experiencing loneliness some or most of the time (Jopling and Barnett 2013). However, the relationship of loneliness to old age has not been found to be simple and there are often inconsistent findings and more evidence

emerging of younger people experiencing loneliness (Jopling and Sserwanja 2016).

The proportion of older people who are lonely often or all of the time has been argued to remain stable over the last 60 years (Victor et al. 2009). Victor et al. (2009), for example, found that 61% rated themselves as never lonely, 31% as sometimes lonely, 5% as often lonely and only 2% as always lonely. The majority of older people, therefore, do not experience loneliness, which is consistent with other studies and international comparisons (Victor et al. 2009). Taking the available data together, Joplin and Sserwanja (2016) suggest that it is not possible to make definitive statements around the age at which the risk of loneliness is greatest among adults in the UK. Rather, accordingly to these authors, there is a reasonable degree of consistency in the levels of loneliness across all ages (around 10%-15%), indicating that a significant and substantial minority of people experience chronic loneliness, feeling lonely often or always, overall.

Many societies, however, are seeing a rise in the number of older people, who increasingly account for a greater proportion of the total population (Coleman et al. 2000; Cabinet Office 2004). The downward trend in birth rates and increases in life expectancy mean that the number of people over 65 is increasing globally (ILC 2015a). The UK Census of 2011 recorded 8,660,529 individuals aged 65 and over in England; 16% of the population (Lloyd and Ross 2014). This is set to double reaching 16 million people, or 25% of the population, by 2040 (ILC 2015a). The actual numbers of older people likely to experience loneliness are therefore set to increase.

2.4 Intersectionality and loneliness

Age is therefore found to be an important aspect of loneliness. Older people are, however, not a homogenous group and loneliness among them needs to be contextualised in respect of age, gender, sexuality, class and ethnic identities which shape social relationships and the social world of later life (Victor et al. 2009). Within this context, certain groups of older people have been found to experience loneliness more than others (Jopling and Sserwanja 2016). Historically, women have tended to report feeling lonely more than men (Tunstall 1966). Certain life events which change social relationships have been found to make older women vulnerable to loneliness; in particular, widowhood, migration experiences, suffering from depression or having mobility problems. (Beal 2006; Dahlberg et al. 2014). A more complex picture is now emerging, however, on the inconclusive effect of gender on loneliness (Burholt and Scharf 2013). Some research has found that the overall self-reported prevalence of chronic loneliness shows little difference between men and women (Victor et al. 2006). It has also been suggested that older men may be unwilling to disclose their emotions and so under-report feelings of loneliness (Beech and Bamford 2014). Older men have generally been found to have smaller social networks and these have been associated with work and occupation, and have less contact with friends and family (Williams et al. 2010). Retirement and death of friends and family reduce these social relationships further for men. Older men have also shown a reluctance to get involved in social groups, preferring task orientated activities such as carpentry, rather than 'social' support (Arber and Davidson 2002; Hoban et al. 2013; Beech and Bamford 2014). As such, the loneliest older men are often more isolated than the loneliest older women

(Beech and Bamford 2014). Loneliness among older men may also be increasing because this population is growing faster than women. This is because men are beginning to live as long as or longer than women. The number of older men living alone is projected to reach around 1.5 million by 2030, an increase of nearly 65% (Beech and Bamford 2014).

The ageing population in the UK is also becoming more diverse. Members of minority groups have been found to be more disadvantaged when it comes to experiencing loneliness. For example, a survey of lesbian, gay and bisexual people in later life found that compared to heterosexual people, this group were more likely to be single, more likely to live alone and less likely to see a biological family member on a regular basis, thus raising their risk of becoming lonely (Jopling and Barnett 2013; Hughes 2016). Some older people from black and minority ethnic (BAME) communities are also found to be significantly more vulnerable to loneliness than other groups (Victor 2014b). Victor et al. (2012), for example, identified very high rates of reported loneliness among older people originating from China, Africa, the Caribbean, Pakistan and Bangladesh, ranging from 24% to 50% compared to 8–10% for White British. Older people from BAME communities were also found to have higher than usual rates of loneliness in deprived urban areas (Scharf 2011), suggesting that these issues can intersect with socio-economic factors with respect to experiences of loneliness.

Indeed, loneliness rates have consistently been found to be higher for older people in deprived areas than in affluent areas (Rowntree 1947; Tunstall 1966; Scharf et al. 2002; Kearnsa et al. 2015). Around 16% of older people were

reported to live below the poverty line in the UK in 2011 (Cann and Joplin, 2011). The ability and opportunity to facilitate social contact includes material resources such as having a car and sufficient disposable income to enjoy social activities (Sörensen and Pinquart 2000; Bowling 2005). Older people with limited material resources are therefore found to be more at risk of loneliness (Andersson 1998; Savikko et al. 2005; De Jong Gierveld et al. 2011; Niedzwiedz et. al 2016). It has been found that 16% of older people who live in poor and deprived urban areas were lonely often or all of the time compared to 7-10% more generally (Scharf 2011). Research has also found loneliness is as common among older people who live in rural areas (Savikko et al. 2005). Burholt (2011) suggested that there were predictors in this environment, such as limited public transport, which make it more difficult to maintain relationships and participate in social and community activities. Public transport in rural areas, in particular, has been found to not meet the needs of older people, and the ability to travel and be mobile is an important contributor to alleviating feelings of loneliness (Holley-Moore and Creighton 2015).

2.5 Life events and loneliness in later life

Research suggests that loneliness is not simply influenced by group characteristics and geo-social factors but is also found at different stages of life or at transitions (Jopling and Sserwanja 2016). Older people, in particular, may be more vulnerable to particular transitions that happen in later life (Cann and Joplin 2011). There is a large amount of literature on retirement and the impact of withdrawal from working life on older people (see Philipson 1993 and Künemund and Kolland 2007 for overviews). Retirement for some is seen as a

time of opportunity and leisure, However, this varies and can be differentiated in terms of class, gender and ethnicity and the extent to which an individual's personal and social identity were orientated to work (Philipson 1993). Retirement for some has therefore been found to result in a significant shrinking of an individual's social network and can lead to a drop-in income with less money to engage in social activities (Jopling and Sserwanja 2016).

Research has also found bereavement is an important risk factor for loneliness for older people. In 2010, over 50% of women and over 20% of men aged 80 were widows or widowers, and these figures rise to over 80% of women and 50% of men aged 90+ (ONS 2010). The death of a partner often leaves individuals living alone which can greatly increase their isolation and loneliness. This may be especially true for older men, who are more likely to depend on their wives to connect them to social networks (Beech and Bamford 2014). Bereavement often follows a period of caregiving. Carers also report low levels of wellbeing due to loneliness (DOH 2012a). Research by Carers UK (2015) found that 83% of carers had felt lonely or isolated due to their caring role, and 57% of carers had lost touch with family and friends as a result of caring. The reasons found were not being able to leave the house due to caring responsibilities, limited time, problems with money, not feeling comfortable in talking about caring to friends, and lack of practical support from services (Carers UK 2015).

It has also been argued that changes in the size and structure of families may increase the risk of loneliness (Coleman et al. 2000). The level of co-residence of older people with their adult children has decreased, reducing geographical

proximity and thus the potential for everyday support (Victor et al 2009). *'Intimacy at a distance'* (Rosenmay and Kocheis 1963), has been found to often be the norm for older people, where individual bonds of affection and ties are experienced across geography (Victor et al 2009). Having no children, or children that live far away is now more common and is a risk factor for loneliness amongst older people given the previous importance of family relationships (Townsend 1957). In a recent study, many of those ageing without children feared becoming lonely (Ageing Without Children 2015). As contemporary UK cities are also largely age-segregated (Kingsman 2016), those older people without families or children may often lack this main source of intergenerational exchange and support (Kohli et al. 2005). There has been some suggestion that cross-generational contacts i.e. contact with children and young people as well as contact with one's own (grown-up) children is an antidote to loneliness (Age UK 2014).

The loneliest individuals have also consistently reported lower levels of subjective wellbeing than those who are more socially connected (ILC 2015b; Shanker et al. 2015). In this context, loneliness has been associated with a long list of general health issues which range from mental health problems such as depression and anxiety to physical health problems like fatigue, headaches, stroke, heart disease and even death (Andersson 1998; Steptoe et al. 2013; Valtora et al. 2016). Health problems are found to amplify the problems of loneliness for older people by reducing social contact (Victor and Bowling 2002; Burholt 2011; Mushtaq et al. 2014; Jopling and Sserwanja 2016). The experiences of mental illness, for example, have been found to have an impact on loneliness among older people by limiting social interaction (Kearnsa et al.

2015, Wang et al. 2016). Although loneliness and depression are strongly correlated, however, it is important to recognise that not all lonely people are depressed and not all depressed people are lonely (Burholt and Scharf 2013).

Cognitive impairment has also been associated with loneliness (Sheldon 1948) and feeling lonely has been associated with an increased risk of dementia in later life. Holwerda et al. (2012), for example, used logistic regression analysis to examine the association between social isolation and feelings of loneliness and the risk of dementia. Controlling for sociodemographic factors, medical conditions, depression, cognitive functioning and functional status they found older people with feelings of loneliness were more likely to develop dementia than those without such feelings. Increasingly, therefore, loneliness research has shifted towards seeing the problem in terms of a cause of illness. Loneliness has been shown to be associated with increased risk of mortality (Perissinotto et al. 2012) and some estimates suggest the impact on mortality is comparable to smoking and alcohol consumption (Holt-Lunstad et al. 2010). This has heightened attention on loneliness among the public, charities, policy-makers and researchers and so the study of loneliness is increasingly being characterised by epidemiology as a 'hidden' problem of public health.

One consequence of increased physical or mental ill-health in later life may be moving into a care setting. Approximately 6.5% of older people with a long-standing health condition or disability live in communal residential or nursing care settings. Further, 80% of people living in care homes have either dementia or severe memory problems (Lloyd and Ross 2014). Some studies have found lower levels of loneliness in housing with extra-care, suggesting this type of

housing may play a role in reducing loneliness among its residents (Beech 2015). However, older people living in residential and nursing care are considered particularly vulnerable to loneliness (Jopling and Barnett 2013). Moving home has been found to be difficult for older people in terms of making new friends or being away from previously well-established networks. Thus, whilst there are more opportunities for socialising, residents do not necessarily make new friendships (Burholt et al. 2013).

Concern about loneliness is rising among those who have a role in supporting older people. There is a popular consensus that loneliness is an unpleasant experience and the same negative discourse also dominates social scientific work (Larson et al. 1982). The research literature on prevalence suggests the need to explore loneliness among older people based on a diverse range of social identities and life events faced by older people. Accordingly, obtaining views from different groups of older people including those from LGBT and BAME communities, both urban and rural populations, those living alone, in different housing situations and those who experience caregiving, bereavement and health problems is important. These factors are taken into account in developing the methodological approach outlined in Chapter Four.

2.6 Different Perspectives on Loneliness

Different approaches to loneliness have emerged that differ in their perspectives on the underlying mechanisms which create the individual experiences of loneliness (Peplau and Perlman 1982; Suedfield 1982; De Jong-Gierveld 1987). These varying approaches and perspectives to understanding the nature of loneliness, provide a frame of reference for understanding loneliness in later

life. Early ideas about loneliness can be found in the writings of philosophers, poets and novelists (Mijuskovic 1979) but it was not until the 1940s and 1950s that academic concepts and theories of loneliness began to emerge (Peplau and Perlman 1982). Research continued during the 1970s and 1980s when social scientists began to formulate or elaborate further on theoretical and conceptual approaches, and this continues today. However, much of this work has arguably produced only a scattered field, lacking a connected framework to the study of loneliness (Sønderby and Wagoner 2013). The leading perspectives on loneliness with respect to older people are considered here.

2.6.1 Existential perspectives

Dealing with time spent alone is an experience that occurs throughout the lifespan, including older age. An existential perspective on loneliness is defined in terms of a person's experience (Cacioppo, J. et al. 2015). There is a distinction made between an existential sense of loneliness – the idea we are *always* alone as a basic fact of human embodiment and a psychological/social one – the idea that loneliness is a *reaction* to perceived or real deficits in social relationships. These may also be described as primary loneliness and secondary loneliness (De Jong-Gierveld and Raadschelder 1982). For example, Mijuskovic (1979) saw loneliness as a primordial experience and an inevitable part of the human condition. In the primary sense, people are born alone, die alone and in between try to find worth and meaning from their relationships with others (Satre 1956; Moustakas 1961). Such views include the positive associations of being alone or solitude. This suggests there may be both a positive and negative type of loneliness (Perlman and Peplau 1981).

Suedfield (1982), for example, highlighted how people have reported benefits from solitude. It is important to recognise that some people choose to be alone and solitude is not loneliness. Solitude is arguably the glory of being alone where loneliness expresses the pain of feeling alone (Tillich, 1980). It is, therefore, the second 'painful' sense of being alone which, in Western societies, is viewed as a negative one unless aligned to the creative eccentric, artist or poet (Peplau and Perlman1982; Suedfield 1982; De Jong-Gierveld 1987).

Loneliness has therefore been mostly associated with this 'painful' feeling of being alone, feeling aloneness or social isolation, whereas higher levels of social participation and engagement are argued to be positive for older people and see positive well-being outcomes (Bowling 2005). For older people, the experience of loneliness, for example, may be seen as more common among those who live alone or spend time alone. Although living alone is not necessarily indicative of feeling lonely, if not a positive choice, it may be a good proxy for loneliness (Perissinotto and Covinsky 2014). One study found that 30% of older people living alone expressed feelings of loneliness, particularly when depressed or with limited social networks (Zebhauser et al. 2015). Some writers have suggested the idea of a "personal convoy" which sees relationships as assets that are taken forward throughout life, and that attention should be paid toward safeguarding and preventing the loss of the convoy for later life (Cann and Joplin 2011). Social relationships are therefore a highly important resource when considering loneliness and are found to be second only to health in importance for older people (Hoban et al. 2013). Most older people attach a very high intrinsic value to social contacts and in particular personal relationships (ONS 2011; Zavaleta et al. 2014). Resilience towards difficulties

in life has been found to be rooted in supportive ties from families, friends and the membership of clubs, societies or religious groups (Victor et al 2009). Relatives are found to be effective at providing care, and friends are found to provide companionship, emotional support, morale and reduce the fear of loneliness (Bowling 2005). A combination of both is found to offer the best range of emotional and practical resources and so potential protection against loneliness (Bowling 2005). This existential approach, therefore, sees social relationships and social ties as important to a good quality of life, particularly in old age (Victor et al. 2009; ILC 2015b).

Schultz and Moore (1987) argue further for a socio-biological foundation to loneliness in this respect. Socio-biologists see social behaviour resulting from evolution. In this context, individuals have an evolutionary inherent and universal need for social relationships. This is because they need to co-operate with each other to increase the likelihood that their genes will be preserved (Cacioppo, J. et al. 2015). Loneliness is argued to be an unpleasant symptom whose relief drives people towards making these social contacts to increase this likelihood. Other social animals share similarities, and so what is thought to be uniquely human quality is not the case (Cacioppo, J. et al. 2015). More recent biological perspectives also hold that loneliness is linked with genetic predispositions that impact on behaviour (Cacioppo et al. 2014).

Cummings and Henry (1961) proposed the functionalist theory of *"disengagement"* in which ageing was seen to be accompanied by a steady decline of social interaction and role activity. They proposed that normal successful ageing involved a mutual disengagement between the individual and

society. As such, it was thought that older people would not want to be involved or interested in social interaction. Rather, they would prefer to be left alone to reminisce or introspect about their past instead of engaging in face to face interaction with other people (Weiner et al. 1978). Accordingly, being alone and by extension, loneliness might be seen as a natural functional process that prepares people for their decline and eventual death.

Critics of these biological and functionalist perspectives on loneliness have argued that they risk being mechanistic, reductive and simplistic. Disengagement theory, for example, has been criticised for attributing the problems of ageing to individual adjustment rather than wider structural forces (Townsend 1981). Wood (1987) suggests humans are both physical and social beings, which means loneliness is complicated and subjective and cannot simply be reduced to biology. Furthermore, being alone or socially isolated is not totally synonymous with loneliness (Wenger et al. 1996; Andersson 1998). Both human and animal research has indicated that loneliness is not equivalent to objective social isolation (Cacioppo, J. et al. 2015). Accordingly, although there is evidence to support the view that physical isolation is closely associated with loneliness and is a predictor of feeling lonely for older people (Victor 2003; Cattan 2011; Age UK 2014), loneliness also exists for older people who are not alone. Decreased social interaction does not necessarily result in a permanent state of loneliness for older people. For example, the loneliness experienced after widowhood can decline over time (Wenger et al. 1996) and older people can adjust either their levels of social interaction or personal expectations about their relationships (Peplau and Caldwell 1978; Cacioppo, J. et al. 2015). It has also been suggested that the association between loneliness and living alone

has weakened, perhaps reflecting the greatly increased number of older people who now live alone (Victor et al. 2002). Many older people want to live alone rather than with children and siblings. Older people value their independence and like to have their own household, to live close but separate from children and family; to have *'intimacy at a distance'* (Rosenmay and Kocheis 1963).

2.6.2 Psychodynamic and psychological perspectives

Following on from the previous discussion, it is argued that objective measures of social isolation need to be paired with considerations of the subjective measures to appreciate all of the dimensions of loneliness (Cloutier-Fisher et al. 2011). Although some researchers feel that it is essential that loneliness is connected in some way with objective aloneness (Suedfield 1987), for others, the association of loneliness with being alone, aloneness or social isolation (whether as a positive or negative experience), represent only one aspect of it (Weiss 1973). Psychologists and psychotherapists, for example, insist loneliness must be seen as an interior, subjective experience not simply an external objective condition. Since the 1950s there has tended to be a narrowing of how loneliness is understood in this respect, towards a more psychological/cognitive view of loneliness (Wood 1987; Victor et al. 2009).

The psychodynamic perspectives see the causes of loneliness as pathological, lying within the individual and rooted in childhood (Sullivan 1955; Fromm-Reichmann 1959). Loneliness is seen as both a motivator that forces sociability, and an emotion that leads to helplessness and isolation (Perlman and Peplau1981). Fromm-Reichmann (1959) identified 'real' loneliness as the want of intimacy, which is different from solitude or the transient feelings when a

person is simply left alone. It can also be distinguished from bereavement and depression. Sullivan (1955) also argued:

> *Loneliness....is the exceedingly unpleasant experience connected with inadequate discharge of the need for human intimacy, for interpersonal intimacy (p.290).*

In terms of older people, therefore, this perspective sees childhood experiences as important, that early experiences in adolescence can change an individual's cognitive abilities and influence social relationships throughout life (Qualter et al. 2015). However, although such experiences may be important, it is difficult to show or assess the extent to which these early experiences increase the risk of loneliness later in life (Joplin and Sserwanja 2016). Therefore, such perspectives have tended to only be influential in shaping other views where the distress of loneliness is based on the failure to satisfy a human need for intimacy or a close emotional attachment (Weiss 1973; Cacioppo, J. et al. 2015).

Intimacy can be defined as a close emotional attachment (Weiss 1973). In this context, Weiss (1973) provided a very influential social needs and interactionalist perspective on loneliness. He identified two types of loneliness.

> *Loneliness is caused not by being alone but by being without some definite needed relationship or set of relations... In many instances, it is a response to the absence of provision of a close, indeed intimate, attachment. It also may be a response to the absence of the provision of a meaningful friendship, collegial relationship, or other linkage to a coherent community (Weiss 1973, p.17).*

The emphasis on two types of loneliness, emotional and social, distinguishes between the closeness and intimacy associated with close emotional

attachment such as lovers, spouse or close kin (emotional loneliness) and a larger set of social contacts such as community friends and acquaintances (social loneliness) (Perlman and Peplau 1981; Wang et al. 2016). Some research has considered the ideas of closeness and intimacy in friendship and found that a distinction is not always made between the two, although intimacy may be associated with a romantic/sexual component or greater level of acceptance, trust and disclosure (Parks and Floyd 1996). For Weiss, however, different social relationships may be seen as different in nature and fulfil different social needs (Masi et al. 2011; Wang et al. 2016). He saw emotional loneliness as 'separation distress' which is triggered when assurance and security are required but there is an absence or loss of an attachment figure (Weiss 1989). These ideas are based on attachment theory (Bowlby 1978) and are associated with the psychodynamic tradition above, which emphasis childhood antecedents of adult behaviour (Perlman 1987). In terms of social loneliness, ordinary friendships do not provide this closeness and intimacy associated with an emotional attachment but may provide something that intimate relationships may not, like a sense of community or belonging (Weiss 1989).

Weiss (1989) has suggested that emotional loneliness may reduce with age (given less need for an attachment figure) but social loneliness may increase with age (given a greater dependence on others for support). Older people, he argued, were prone to social loneliness as their experiences can include many of the factors that lead to it like changes in social roles or contexts such as retirement, unemployment, disability or migration (Weiss 1973). Social loneliness can also be precipitated by 'emotional loneliness' (such as

bereavement). Others have suggested both social and emotional loneliness can exist alongside one another throughout the life course (Cacioppo, S. et al. 2015; Qualter et al. 2015). Accordingly, it is argued by Paloutzian and Janigian(1987), that rather than trying to fit experiences into preconceived categories like emotional and social loneliness, experiences of loneliness are better served by observations of situations where loneliness occurs and identifying different types as they emerge. In respect of older people, for example, Wood (1987) suggested that in care homes, feelings of safety and security associated with an attachment figure can be provided by staff. The quality of the social relationship is important in this respect. How care is provided is, therefore, as important as who is providing it. This emphasis, therefore, concerns both the need and *desire* for social relationships rather than just *levels* of social contact (Perlman and Peplau 1981).

Social relationships are not just about the presence of others. People need to feel connected to others and in the presence of others who they like, trust and can be together with (Cacioppo and Patrick 2008). This requires a wider set of variables to consider when trying to understand loneliness, such as the expectation a person has about their social relationships and their attitude to being on their own (Perlman 1987). The emphasis placed on loneliness as a direct consequence of failing to satisfy a human need for intimacy is therefore argued to ignore any intervening cognitive processes that may create feelings of loneliness (Perlman and Peplau 1982). In this respect, drawing on an attributional perspective, Perlman and Peplau (1982), conceptualized loneliness as the discrepancy or lack of match between an individual's desired and achieved levels of social relations.

Loneliness is a response to a discrepancy between desired and achieved levels of social contact: and…cognitive processes, especially attributions, have a moderating influence on loneliness experiences (Perlman and Peplau 1982, p.8).

This cognitive discrepancy between *desired* and *achieved* social relationships is a product of a complex process (Wang et al. 2016) and can explain those experiences where loneliness is not anomalous with social isolation e.g. loneliness in a crowd (Cacioppo et al. 2009; Burholt and Scharf 2013; Cacioppo, J. et al. 2015). As loneliness is subjective, cognitive factors that mediate between any social deficiency and the emotional response to that deficiency need to be taken into account. For example, whether a person has perceived control over the experience (Perlman and Peplau 1981) or if the person is depressed (Burholt and Scharf 2013) may be mediating factors as to whether they feel lonely or not. This perspective is therefore critical of other loneliness perspectives, like emotional loneliness (Weiss 1973), which fails to outline how cognitive processes intervene in these emotional experiences of loneliness (Wang et al. 2016).

Many of the scales used to measure loneliness, in the context of the cognitive discrepancy perspective, are also strongly related to internal personality factors and not external situational variables (Jones 1987). Much loneliness research from this perspective has tended to focus on these 'psychological' aspects particularly the personal cognitive aspects of *'mismatch'* or subjective responses to actual or perceived social deficits, rather than actual existential loneliness (De Jong-Grieved and Raadschelder 1982; Peplau and Perlman 1982). Personality characteristics have therefore featured strongly as part of

this perspective (Goossens 2006). Certain personality traits are seen to reduce social attractiveness to others, influence interpersonal interactional behaviour, or affect different individual reactions to changes in social relationships (Peplau and Perlman 1982). Tunstall (1966), for example, raised these issues in respect of older people and to what extent loneliness was influenced by personality patterns and the ability of the older person to adapt to changes in the life course. Some older people may perceive themselves as *"loners"* or *"shy"* and indicate a preference for being on their own and for engaging in solitary activities. Others appear optimistic and resilient in the face of adversity (Cloutier-Fisher et al. 2011). Rokach and Brock (1996) have suggested a correlation between negative life events and loneliness mediated by the personality trait of *"competence"*. Those who experience more negative life events tend to exhibit lower levels of *"competence"* and in turn higher levels of loneliness.

Personality inadequacies may also exist. Behaviours that are associated with loneliness across all ages are poor communication and social skills (Perlman and Peplau 1981; Peplau and Perlman 1982; Clarke et al. 2015). People can be blamed for their own loneliness (Perlman and Peplau 1981). There is found a strong link between loneliness and poor self-esteem in general (Peplau, Miceli and Morash 1982; Vanhalst et al. 2013). Regardless of age, people without family and friends may be viewed by others as failures, deviants and undesirable (Perlman and Joshi 1987). Some suggest that non-lonely people avoid the lonely and so stigma exists (Fromm Richman 1959). They react negatively to people who are lonely creating a self-fulfilling prophecy of loneliness for the lonely person (Perlman and Peplau 1981). For older people, in particular, being surrounded by these negative perceptions and labelling of

their group as a burden can lead to low self-esteem and confidence (Hoban et al 2013).

However, it has been argued that it is unclear where the cognitive discrepancy lies between *'desired'* or *'needed'* perceptions of social relationships (Paloutzian and Janigian 1987). Jones (1987), for example, argued that this cognitive discrepancy perspective cannot answer the question of why some people feel loneliness under the same conditions and others do not. Although the cognitive discrepancy perspective helps to differentiate the subjectivity of loneliness from objective social isolation, it can lead to a conflation of loneliness with other states, for example, social anxiety and depression, in which a person's subjective experience also plays an important mediating role (Perlman and Peplau 1981; Burholt and Scharf 2013). Psychodynamic/psychological perspectives on loneliness have tended to prioritise the contribution of individual differences and personality traits to loneliness over the social situation and social structure. By contrast, sociological perspectives tend to see social change as a key feature of loneliness experiences and view it as a product of social forces that lie outside the individual (Perlman and Peplau 1982).

2.6.3 Sociological perspectives

Key aspects of social changes can include the decline in primary group relations, increase in family and social mobility, altered ways in which society fails to meet members' needs, and changes in attitudes associated with individualistic culture (Wang et al. 2016). For example, changes from preindustrial rural societies to modern urban ones have transformed the nature of social life and relationships. Extended kinship and a village community are

replaced by mobility, distance and the increasing importance of a nuclear family. Traditional collective ways of life are replaced by individualism and self-reliance (Giddens 1986). Modern capitalistic culture leads to people being 'cut off' resulting in a transformation of individuals into alienated and estranged human beings (Fromm 1984; Bottomore 1975).

With such changes, in the USA and UK, there are increasing reports of people not only `bowling alone' (Putnam 1995) but also dying alone (Kellehear 2009) respectively. In Japan, the combination of an ageing society and economic decline sees the rise in 'kodokushi' – people dying alone and remaining undiscovered for long periods of time (Huffington Post 2018). Participation in all aspects of society is regarded as important to wellbeing and so loneliness is an indicator of social disadvantage and `modern poverty', as it represents an inability of people to participate (Hortulanus et al. 2006). A wider concern is, therefore, a breakdown of social norms and integration. Loneliness becomes an indicator of this failure of contemporary societies to support social networks and life satisfaction - where the lonely get sicker and are more disadvantaged because they do not have people to take care of them or support them (Tomini et al 2016).

When considering the association of loneliness with old age, the sociological literature on older people that emerged following the Second World War has been important for developing a perspective on loneliness in terms of social structure (Victor 2011). In the UK, a report by Rowntree (1947), for example, might be regarded as the starting point for highlighting the issues of loneliness among older people. This study was pioneering in respect to gathering

information to consider the various problems associated with ageing and old age; both individual and social. Here 'loneliness was found to be a distressing feature of old age' (Rowntree 1947, p.52). Following this, loneliness featured in a number of community-based studies of older people which considered the contribution of family life and the importance of social relationships towards the wellbeing for older people (Sheldon 1948; Townsend 1957; Tunstall 1966). These early studies emphasised certain aspects of loneliness as a particular problem of later life such as bereavement (Tunstall 1966). Their insights would inform the later development of international comparisons, for example, Shanas et al (1968) exploration of the position of older people in three industrial societies (Shanas et al. 1968) which revealed the nature of loneliness for older people which continues to inform research today. This social structural approach to loneliness in respect of older people provides an influential background for the present study.

For example, the work of Townsend (1957) is regarded as a 'classic' study of older people. The context was a post-war Britain experiencing social change, and the focus was on uncovering the lives of older people in a particular geographical location; Bethnal Green in London. Using mixed methods, the study posed a number of questions about whether family ties were becoming less enduring, if older people were becoming more isolated, and what the impact of smaller family units may have on the social worlds of older people at that time. Townsend also believed that older people must be studied within the context of family membership as this determines the security, health and happiness. Townsend felt that by looking at the social characteristics of those people who use state services, we could recognise the practical problems of

loneliness and isolation. He found problems included higher rates of admission and longer stays in hospital or institutional care for older people without family resources (Townsend 1957).

Townsend (1957, 1973) made a distinction between 'desolates' (those who have either recently become disabled through illness or who had lost a close relative whether through death or migration) and 'isolates' (those with sustained little or no social contacts). Desolates were those isolated relative to their previous situations rather than because of having little contact with others in the past. His view was that older people who experienced loneliness were more likely to be 'desolates' rather than 'isolates'. Companionship for Townsend was important in older age and came from marriage and not necessarily children. Loneliness was 'the unwelcome feeling of lack or loss of companionship' (Townsend, 1973 p.256). This was most likely to be found where bereavement had deprived an older person of this companionship and so enabled comparison with an earlier stage of life.

A key to understanding his argument was therefore that social participation for older people was relational. Isolation felt by older people could be compared to that of peers, younger generations, previous generations of older people or a previous time in their life as when people became bereaved (Townsend 1973). This idea of a comparison to a previous situation was also found by Tunstall (1966), where loneliness was based on previous experiences of social relationships, for example, where those who have never been married may experience less loneliness (because there is no relationship to compare to) than those who had been married and whose spouse had died.

Townsend (1957) and Tunstall (1966) both found that older people were more likely to experience the death of a spouse. Moreover, such losses took longer to heal and/or could not easily be met by substitutes, which may be because of social isolation due to disability or the previous investment in affection given to the departed (Townsend 1957). Accordingly, this work could be used to argue that older people judge loneliness based on previous life experiences and social relationships; what made them previously happy and created a former sense of 'self'. Older people compare their current situations with past ones and evaluate whether their current situation is worse or not in terms of their social relationships. Feelings of loneliness are therefore relational and not fixed but are relative to both social relationships and to the social situation within which social relationships are embedded (Victor et al 2009).

These 'relational' aspects of loneliness are also found in other social perspectives. Wood (1986) suggests a social constructivist approach to loneliness, where narratives and stories highlight the variations of loneliness across life-cycle, gender and other differences. Wood (1987) has also argued that there are moral and social expectations embedded in some experiences of loneliness; that we 'ought' to feel loneliness if we have a deficit in some relationships. For example, we 'ought' to have intimate relationships or 'ought' to have friends or maintain family relationships. Failure to meet expectations is considered 'wrong' and loneliness is seen as a failure for the individual producing negative connotations for those that experience it. Accordingly, older people may make excuses for being alone but expectations exist that they will be lonely when particular events happen, such as being recently widowed (Wood 1987). If services do not take into account this hidden aspect of

loneliness, it has implications in causing harm and suffering for older people as a result of these expectations. Accordingly, there is a problem for older people being negatively evaluated if they admit loneliness, or if they do not, in such situations (Wood 1987). For older people, negative perceptions of older age and labelling of their group as a burden can lead to low self-esteem and low levels of confidence, which are associated with loneliness (Hoban et al. 2013).

Such aspects highlight that experiences of loneliness are connected to the social norms and values of any given society and shape attitudes towards older people, and the attitudes of older people towards themselves. Loneliness is a culturally sensitive phenomenon. Accordingly, it cannot be assumed to be universal where trends which are observed in one country also pertain to others (Johnson and Mullins 1987). Cross-cultural studies suggest that cultural differences exist with loneliness experiences (Rokach and Bauer 2004). Key variables include the importance of collective or individualistic cultures and the emphasis placed on family, friends and social roles within different cultures. However, it is less clear what particular cultural structures may influence these experiences (Sønderby and Wagoner 2013). For example, research in Southern Europe has found that although families may be emotionally and physically closer (Höllinger and Haller 1990), there may be greater expectations of family contact that are not met among older people that can lead to loneliness (Sundström et al. 2009).

Victor et al. (2009), in their work with older people, have suggested an approach to understanding the social world of older people from the perspective of the

older person concerned. They challenge the 'objective' nature of the concepts of loneliness and social isolation, rather…

> *We view loneliness and social isolation as subjective lived experiences that exist in the form of multiple realities constructed and reconstructed by individual older people within the context of different lives and different histories (Victor et al 2009, p.38).*

Loneliness experiences are therefore constructed and reconstructed by individual older people within the context of their lives. For example, different realities are linked with social structures, social institutions, place and levels of social engagement. This may be based on subgroups of older people such as gender, class or ethnicity, for example, experiences of loneliness for older people from LGBT communities (Victor et al. 2009).

Furthermore, Victor et al. (2009) focus on a wider range of social relationships, cultural activities, civic participation and resources than previous sociological studies. In this respect, although the majority of daily contacts in the social world of older people are relatives, they argue there has been a tendency for social research to focus too much on 'the family' rather than wider community-based contacts. The activities older people undertake have been found to often involve routines of structuring the day, including times of contact with friends. Friends arguably play a much more central role today for many older people who have lifelong friends who are important emotionally and practically, given the increasing geographical mobility and the dispersal of families (Victor et al 2009). These non-kin ties help to build individual social networks and protect against loneliness (Holmén and Furukawa 2002; Cloutier-Fisher et al. 2011, Age UK 2014).

Contemporary society is different from previous generations experiences. Victor et al. (2009) suggest that it is easy to overlook the magnitude of structural change and how these changes provide a new context within which old age and later life is experienced. They cite changes that included demographic change e.g. how people are living longer, reorganisation of work/leisure, the role of women, immigration, legislative change, rising levels of prosperity amongst the old, the impact of globalisation and global capitalism, and changes in social attitudes and norms towards ageing. Particularly important for this study are scientific and technological innovations. New technologies have created a structural change in society by aiding the transformation of social relationships (Nowland et al 2017). Social relationships are not just shaped by individual personality characteristics or responses to life events, but also by the structural features of societies. This increasingly includes access to resources such as communication systems (Bowling 2005), which now includes new technologies. For example, Victor et al. (2009) found 40% of older people reported feeling closest to family members who were not the nearest geographically, and 22% kept in contact by telephone.

A strength of sociological research is, therefore, to consider loneliness within the wider social context rather than simply as an individual's psychological or emotional state. Thus, existential and psychological aspects should not be over-estimated against these sociological aspects of loneliness when investigating the phenomenon (Peplau and Perlman 1982).

2.7 Rebalancing quantitative with qualitative methods

The different perspectives on loneliness lead to the conclusion that it is difficult to simply quantify loneliness, and that exploring the issues of loneliness also requires qualitative methods. The literature highlights a number of different perspectives making it difficult to argue for a one-dimensional view of loneliness; for example, that it is simply caused by social isolation. Previously, loneliness research has tended to understand or discuss loneliness in a unidimensional way (Jones 1987) perhaps as a result of trying to quantify the phenomenon. This might be partly explained by a desire to simplify the phenomenon in order to operationalise it.   Even in the classic sociological studies, a single item loneliness question was often used to measure if older people feel lonely or not.

For example, Sheldon (1948) was the first to use this and asked older people if they felt: 'very lonely', 'lonely at times', or 'not lonely'. Townsend (1957) and Tunstall (1966) followed this approach. Other scales have been developed which do not ask people directly about loneliness. For example, the UCLA Loneliness Scale (Russell 1996) or De Jong-Gierveld Scale (de Jong Gierveld and Tilburg 2006). These scales have been amended and shorted and are often used by service providers (Campaign to End Loneliness 2015). The UCLA 3 item scale was used in this study and is discussed in Chapter Four. The shortened De Jong-Gierveld Scale contains 6 items; I experience a general sense of emptiness; I miss people around me; I often feel rejected; there are plenty of people I can reply on when I have a problem; there are many people I can trust completely; and there are enough people I feel close to. The scale

uses three response categories; Yes, more or less and No and are scored either 1 or 0 to create a scale of 0-6. Zero as least lonely and 6 the loneliest.

Perlman (1987) has suggested that findings on the percentage of people regarded as lonely are consistent regardless of the scale used (Perlman 1987). A consequence, however, of the dominance of these scales and questionnaires is that loneliness has tended to be studied unidimensional and more quantitatively, rather than by qualitative approaches which may include interviews with lonely people, and/or use of representations in film, literature or music (Sønderby and Wagoner 2013).

Although quantitative measures can be useful for evaluating loneliness interventions, for some researchers, the dominance of focusing on measuring loneliness has neglected a focus on the 'unique' experience of loneliness found amongst individuals (Sønderby and Wagoner 2013). As such, we need to consider other methods to investigate loneliness, rather than simply relying on questionnaire scales (Paloutzian and Janigian 1987). Only through methods which include and enable the thoughts, feelings, emotions and experiences of the person to be placed at the centre of analysis, can the different dimensions of loneliness for each person be considered. As loneliness is experienced subjectively, quantitative measuring instruments alone struggle to identify how it is expressed (Weiss 1982).

The emphasis on the social construction of loneliness and history of individuals is important. Townsend (1957), was open to the experiences of older people and the meanings they gave to loneliness. He felt that individual biographies were important in the reporting of loneliness. For Stokes (1987) also, to

understand loneliness and the role it plays in people's lives, there is a need to focus more on the in-depth analysis of the meaning loneliness has for those individuals. For Stokes, this was unlikely to happen just by the aggregate data collected from people trying to fit their experience into categories created for questionnaires. Rather, the study of loneliness should explore social relationships and the feelings people have towards these relationships rather than just responses to questionnaires which are a 'crude reflection of experience' (p.61). Similar arguments may also be applied to the study of using new technologies by older people, as will be outlined in Chapter Three.

2.8 Conclusion

The aim of this chapter was to set the scene on the nature of loneliness in later life. Being connected to others, both family and friends is found to be an important protector and thus any developments that increase or decrease connectivity, like new technologies, can create the potential for loneliness experiences to change (Peplau et al. 1982). However, a range of social positions and life transitions for older people may also have an impact on their experience of loneliness; for example, living alone, retirement, bereavement or disability, and these can combine to make preventing or alleviating loneliness extremely complex. Where loneliness exists, it may derive from various factors and for some people, it may be triggered by a culmination of one or more factors (Goodman et al. 2015). Social relationships are therefore not just shaped by individual personality characteristics or responses to life events, but also by the structural features of societies. This suggests that in order to explore loneliness

among older people, a diverse range of factors need to be included when recruiting participants to study.

The various perspectives on loneliness described contain different but valuable constructions of the nature of loneliness in later life. This does not mean that all perspectives should be regarded as having equal value in all contexts, but that each may have some value in some contexts. A key point is that no perspective may claim universality when it comes to the phenomenon of loneliness because it is a complex phenomenon. There is no agreement about one single concept of loneliness, but rather a variety of different perspectives and factors which shape the experience and can be drawn on to understand the experience for older people (Victor et al. 2009). In this respect, there is some value in bringing together different perspectives on loneliness and what they show us about loneliness in later life. Accordingly, simply using unidimensional concepts of loneliness, often aligned with quantitative measurements, needs to be balanced with qualitative methods to understand the different aspects of individuals experiences. Therefore, to explore whether new technologies are a resource for mitigating loneliness requires the use of multi-methods. Before developing this methodology further in Chapter Four, the next chapter will review the research literature on the use of new technologies by older people.

Chapter Three: New Technologies and Older People

It has been claimed that psychoanalysis does not resolve problems but merely displaces them…. We might say the same of technical and industrial progress (Virilio 1998, p.37).

3.1 Introduction

This chapter reviews the research literature relating to the use of new technologies by older people over the last 20 years. Details of the 'critical review' approach (Grant and Booth 2009) to the literature review are found at the beginning of Chapter Two. The aim is to provide a background for the analysis of uses of new technologies and the impact they may have on the social worlds of older people. New technologies may be transforming current relationships, and access to the use of new technologies may be a potential resource to help with loneliness among older people. The information gathered in this review contributes to exploring these issues, by first considering the research on the digital exclusion and inclusion of older people. Second, the review considers the research on the impact of new technologies on social relationships, and specifically research focusing on the use of new technologies to mitigate loneliness. Finally, a critical consideration of the research is provided to highlight some of the difficulties of researching the impact of new technologies on older people, and what methods are needed.

3.2 Digital exclusion and inclusion for older people

If it is assumed that utilising new technologies to maintain and develop social contacts is a significant benefit, then not engaging with new technology may be

a disadvantage for older people (Sinclair and Creighton 2015). As Damant and Knapp (2015) noted, use or non-use of new technologies is often framed in terms of age. From this perspective, older people are utilising new technology less than younger people. For example, in 2013, according to the Office of National Statistics (ONS) figures, almost all, (99%) of 16 to 24 year-olds had used the internet, compared with just over a third, (36%) of adults aged over 75 (ONS 2013b). Ofcom (2017) also found that older people who did have an Internet connection at home tended to use the Internet less than other Internet users (7.4 hours weekly using the Internet for those over 75 compared to 35.2 hours using the weekly for those using the Internet who were 16-24). It has been suggested that non-use of new technologies be viewed as 'ICT poverty', similar to material poverty, where there may be transient and permanent populations who become 'ICT poor' (Anderson 2006). As communication and transactional channels increasingly shift over to an online presence there becomes a digital divide between those who are digitally engaged and those unengaged or non-users including older people (Olphert et al. 2005).

In this respect, older people have been found to have both material (access and costs) and non-material (skills and attitudes) barriers with using new technologies (Damodaran et al. 2014; Cabinet Office 2015b). For example, it has been found that older people have physical difficulties due to age-related decline and difficulties in managing daily activities that may stop them using technology (Age UK 2010a; Feist et al. 2010; Dutton and Blank 2011). The dexterity, for example, required to use new technologies is often highlighted as a problem (Damodaran et al. 2014), for example when using computer peripherals like a mouse, buttons or keys (Eastman and Lyer 2004; Carpenter

and Buday 2007; Hill et al. 2008; Leora, 2008; Tse et al. 2008; Independent Age, 2010; Sayago and Blat 2010; Williams et al. 2010; Hardhill and Olphert 2012). Poor eyesight has also been shown to be a problem, particularly when required to read small print or screens (Leora 2008; Williams et al. 2010; Olphert and Damodaran 2013; McGrath and Astell 2017). Even with newer technologies like computer tablets, there is a debate about accessibility for older people, with some suggesting there is little evidence for how accessible the newer 'touch screens' are for older people (Damant and Knapp 2015). However, others have found using touch screens is simpler and more satisfying for older people (Astell et al. 2010; Page 2014; Ramprasad et al. 2017) and has the potential to be easier for older people with dementia (Joddrell and Astell 2016). Wandke et al. (2012) point to the growth in demand for tablet computers by older people as an indicator they are easier to use.

There is a strong association between low income and access to new technologies amongst older people (Mason et al. 2012). In one study, nearly a fifth of older people identified costs of equipment and access as an issue for them using new technologies (Berry 2011). New technologies are often seen as a luxury, not a necessity for improving the quality of life, and so older people may be more hesitant to spend money on new technologies compared to younger people (Damant and Knapp 2015). Costs can extend to maintaining, updating and replacing new technologies (Independent Age 2010) and rely on adult children to purchase equipment and subscriptions for their elderly parents (Damant and Knapp 2015).

Across all age groups, educational attainment is associated with greater use of new technologies (Wager et al. 2010; Leppel and McCloskey 2011). Educational attainment has also been found to determine ownership of computers by older people (White et al. 1999; Raban and Brynin 2006; Yardely et al. 2016). In addition, previous experiences of technology, and the right learning and support have been found to be important for take-up by older people. Many older people are able to use new technologies without help (Adams et al. 2005; Independent Age 2010; Damant and Knapp 2015), but often require support. Family and friends are the biggest sources of help and also act as 'proxy' users, using new technologies on behalf of older people (Morris et al. 2007; Helsper 2008).

There is, however, a correlation between age and the lack of skills required to use new technology (Wagner et al. 2010; Damant and Knapp 2015). Unfamiliarity with new ways of doing things may mean older people are reluctant to engage with new technology. Some research has found that older people might perceive its use as too time-consuming, with others expressing a view that they are too old to learn compared to younger people (Feist et al. 2010; Dutton and Blank 2011). In 2015, 53% of people who lack basic digital skills were aged over 65 according to the Government (Cabinet Office 2015a). Older people have reported feeling stupid, insecure or fearful of making mistakes and so quickly disengage from new technologies (Age UK 2010a; Plant et al. 2012). Trust and confidence in using new technologies, for older people, has also been highlighted as major factors in the use of such technologies, with a positive attitude towards them helping to overcome a fear of technology (Raban & Brynin 2006; Sinclair and Creighton 2015). Many

studies have described negative attitudes and anxieties that older people have towards using new technologies such as fear of scamming, viruses, lack of privacy and breaking the equipment (Hill et al. 2008; Independent Age 2010; Wright and Wadhaw, 2010; Mason et al. 2012).

Older people disengaging from new technologies, therefore, goes beyond limited access, skills or learning (Berry 2011; Plant et al. 2012). However, research has shown that frequent usage results in a higher probability of overcoming any barriers and creating more appetite to learn about new technologies with confidence (Plant et al. 2012). The term 'digitally excluded' may most accurately to applied to those who have few opportunities to access new technologies but want to learn, while the term 'digitally dismissive' has been applied to those who do not want to use new technologies at all (Plant et al. 2012). This is supported by evidence from 2015 which found that 62% of older people said that they were 'not interested' in being online, with adults over the age of 75 found to be the least intent on going online (Cabinet Office 2015a).

Previous research has therefore shown that some older people are not interested, while for others, it is not always easy for them to access new technologies. However, the extent of these barriers is arguably difficult to quantify given the speed of innovation in this area. For example, in the past decade and the period covered by this literature review, the changes in new technologies have seen them spread globally, grow rapidly, change in nature, and at a pace that few could predict (Damodaran 2001; Kelly 2016). While writing this chapter it was reported that Facebook had over two billion users every month; a quarter of the world's population (Sky News 2017). New digital

technologies are now associated with many human activities and reach into most areas of everyday life. It is hard to imagine a world without smartphones, computers, the Internet and social media. Multitouch screens and the ability to swipe and pinch to input into the computer has also seen the potential for computer applications to grow exponentially.   Studies have reported the demand for healthcare apps has grown rapidly, with about 165,000 healthcare apps available in early 2015, double the number from 2011 (Patrick et al 2016). For Patrick et el (2016), ubiquitous computing, just a vision 30 years ago, has now arrived. It would seem, at least on the surface, that the combination of new available computers, smartphone and tablets, coupled with the Internet, has the potential to profoundly shape everyday life for older people.   In terms of their applicability to the loneliness of older people, it, therefore, remains important to understand how they are continually adapting to and using these new technologies.

The benefits of using new technologies reported by older people have varied (Damodaran et al. 2014) but include communicating with friends and family (Adams et al. 2005; Sayago and Blat 2010; Dutton and Blank 2013), accessing information (Olson et al. 2011; Robertson-Lang et al. 2011) making travel arrangements, carrying out hobbies and playing games (Choudrie et al. 2010). The UK Government sees the benefits of these new technologies extending beyond the individual into society. Their Digital Strategy (Cabinet Office 2015a) was based on the view that the Internet is transforming almost every aspect of public, private and work life; creating a new economy, new industries, reshaping government and public services.

The UK Government has taken two approaches to support the use of new technologies. First, 'assisted digital' which will ensure that people who have difficulty being online can access digital services with the help and support of Government, private and voluntary/community sector providers. Second, through a Digital Inclusion Strategy (Cabinet Office 2015b) designed to provide people with the skills and motivation to be online. Accordingly, the Government has invested in campaigns, programmes and interventions to ensure take-up of new technologies, including some programmes specifically for older people (Plant et al. 2012). Many third sector organisations now offer support to older people whether by raising awareness, providing information, advice and/or access to computers and the Internet, or assisting older people to develop skills (Age UK 2010b; Independent Age 2010; Soubati 2011; Damant and Knapp 2015). Such interventions and policies are often seen as positive in promoting confidence in using new technologies for older people and meeting hard to reach people (Cabinet Office 2004; Agnew and Ripper 2011). They equally provide a background to changes in how some older people may be accessing, adapting to and using new technology, which is central to this study.

3.3 New technologies and the social relationships of older people

New technologies are increasingly being seen as a potential solution to a variety of problems in society. There are many new innovations and much technical progress, but a problem remains concerning how these are to be applied to the social lives of older people (Sinclair and Creighton 2015). One can recognise the changes and developments of using new technologies but the social impact they are having on everyday life for older people is less obvious. The focus on

the effect of new technologies on social relationships carries a great deal of fascination for researchers (e.g. Brynin and Kraut 2006) and the impact of new technologies on social life has been characterised in different ways and has produced a range of views in the research literature. Debates are often characterised by a polemic ideological division between utopian and dystopian views of the effects of new technology on social life (Ihde 1997; Horrigan 2006; Robinson and Haan 2006; Shkiovskil et al. 2006; Tufekci 2011). Table 3.1 below provides a summary of some of the main aspects of these debates as they relate to all age groups.

Table 3.1: Utopian and Dystopian Discourses

Utopian	Dystopian
New technologies are used for interpersonal communication which strengthens social relationships leading to a healthier and happier life	People are spending more time at home and isolating themselves from other people
The ability to stay connected may enable larger social networks to develop and prevent friendships from ending	The quantity of time we spend with other people decreases as new technologies displace the time which would be spent with family, friends or other people
Communication is easier online for those previously excluded, enabling people to develop more relationships	Communication is less expressive and so is unable to develop meaningful correspondence/contact with other people
New technologies offer greater opportunities for freedom; sociability, education, entertainment and consumption. The Internet is a space for self-expression whether artistically, socially or politically	The quality of social contact ultimately cannot satisfy the human need for sociability and leads to psychological problems like depression and anxiety
New technologies are a great leveller. They support access to information, enable people to access services quicker and easier, and enable more influence in shaping those services	A channel shift is occurring which effectively forces people to use the new technologies or become excluded
New technologies are reshaping communities as people can share interests, values and beliefs over great distances and with diverse sets of people	New technologies threaten privacy as information systems collect data about us and penetrate the intimacy of our social lives

Sources adapted from the work of Horrigan 2006; Robinson and Haan 2006; Shkiovskil et al. 2006; and Tufekci 2011.

In broad terms, the central issue concerns whether there is a loss of face to face interactions which undermines social life or if new technologies enable more social contact, which enhances and broadens social life (Horrigan 2006). Some see a radical discontinuity between new technologies and previous generations while others are sceptical over changes (Fuchs 2012). As more evidence accumulates, some of these arguments are becoming moderated, as researchers report no noticeable effect on social relations at all (Robinson & Haan 2006). Thus, how people use their time and invest in social relationships may be stable and resistant to change (Shkiovskil et al. 2006).

Brynin and Kraut (2006) suggested there are different aspects of the social impact of new technologies across all groups. First, new technologies are simply tools which enable people to achieve the same goals and activities in new ways. As such, new technologies will simply displace other activities that are functionally equivalent. An example would be keeping in contact by email rather than by letter. Second, new technologies are used to achieve new social goals and so can make qualitative changes to the individual's daily life. For example, a shy person being able to participate in online discussions whereas previously they would not have much social interaction. Third, new technologies support individual health and welfare. This covers a broad range of areas including physical and mental health, income generation and maintaining privacy. For example, the use of computer applications to monitor health may lead to changes in routine. Finally, new technologies will have consequences for society, such as changes to social relationships. For older people, therefore, new technologies may be positively or negatively changing the nature of social relationships, including experiences of loneliness.

This raises the question of whether new technologies have been found to help mitigate loneliness. Such a question, however, might be asked in the context of what the literature suggests with respect to other more 'traditional' ways that loneliness may be mitigated such as social groups. Such efforts have led to different types of support being developed (Age UK 2014). Most are based on an intuitive understanding of loneliness (Cacioppo, S. et al. 2015), for example, that increasing social contact is considered the "cure" for loneliness (Rokach et al. 2004). Charities and professional organisations have often devoted resources to setting up social groups/clubs with a belief that this type of social interaction and support will bring benefits for older people (Cattan 2007). As Brown (1992) argues, the evaluation of groups as an effective helping medium is subjective and relies on assumptions that group work is beneficial to members.

Mitigation of loneliness, therefore, is assumed to occur by introducing older people to potential friends and involving them in pleasurable activities in the group. Group activities may include educational programmes relating to health and physical activities, and support groups such as those for the recently bereaved or for older people with mental health problems. Day services and lunch clubs are also examples of the group approach (Kempton and Tomlin 2014). However, there is no consensus that this is an effective way to increase social support or contacts (Hogan et al. 2002). Additionally, increased social support is also simply assumed to have an impact on subjective feelings of loneliness in group interventions, but the evidence is mixed (Hogan et al. 2001). Others have gone further, suggesting such evaluations are often contradictory

by focusing only on those attending groups rather than on longitudinal, randomised control trials that use appropriate outcome measures to assess effectiveness (Windle et al. 2014).

One to one interventions are often seen as an alternative to groups and are sometimes provided by charities via volunteers or professional staff who engage with identified clients to reduce loneliness. Befriending, where a volunteer visits an older person to 'befriend' them is the best-known approach (Kempton and Tomlin 2014). Another one to one intervention includes mentoring a person to achieve agreed objectives and community navigators who can support unconfident people to access their local communities. Other agencies, such as GPs, will identify lonely older people and refer to these services. Such approaches will involve identifying suitable activities and accompanying the person to attend, and improving social skills and building confidence to offer some protection against, or respite from, chronic loneliness (or reduce the risk of experiencing chronic loneliness) (Jopling and Sserwanja 2016).

However, little evidence exists for the superior efficacy of one-to-one individual support compared to groups, and the effectiveness of these traditional loneliness interventions overall, are mixed (Masi et al. 2011). Therapeutic psychological interventions, such as Cognitive Behavioural Therapy (CBT) however, although less prevalent than groups or befriending schemes in the UK, have been found to work best. CBT is a talking therapy that can help manage your problems by changing the way people think. Masi et al. (2011), conducted a systematic review and found that interventions based on CBT

yielded greater reductions in mean loneliness scores compared to other interventions. For older people, such interventions may enable the examination of social relationships to create a more realistic expectation of them (Burholt and Scharf 2013). As such, addressing the subjective nature of loneliness is seen to improve the individual's perception of current relationships (Cacioppo, S. et al. 2015).

The variety and diversity of different responses to loneliness of these 'traditional' interventions suggest the potential for utilising or incorporating new technologies. Damant and Knapp (2015) argued that to date the social care sector has largely ignored the 'connectivity needs' of the individual, particularly older adults. A recent report for Age UK and the Campaign to End Loneliness (Jopling 2015) argued that a broader framework of loneliness interventions was required which includes a focus on new technologies. This involves consideration of foundational services (aimed at reaching the lonely, understanding their loneliness and supporting personalised responses) and structural enablers that support community innovations such as neighbourhood and asset building approaches (Jopling 2015). Included in this framework is the view that new technologies are emerging as an enabler in terms of a gateway service that complements other forms of loneliness intervention. Technology may also be a way to make existing interventions more cost-effective when resources are limited, for example, the use of telephone befriending rather than face to face visits. In this respect, some studies have found that services like Silver Line (telephone befriending) helps people address loneliness and provides support for lonely older people. Moore and Preston (2015) found that older people who contact the Silver Line service lived alone, were housebound

and may have recently had a bereavement. They had little support from friends and family and calling the line led to a wide variety of interactions with staff and volunteers which are valued by the callers and saw the severity of loneliness, as measured using the UCLA Loneliness scale, reduced.

There are also other technological loneliness interventions beginning to emerge. Chen and Schulz (2016) identified the following interventions in their systemic review.

- General ICT interventions such as learning to use new technologies in group settings.
- Social networking interventions such as using Skype to make contact with other older people.
- Video game interventions such as using games for exercise, to keep well and maintain independence.
- Tele-care interventions such as apps that can monitor and promote social activities.
- Robotics interventions providing technological substitutes for companionship.

Many projects, however, are generally research-led, small-scale or tend to be short-lived services (Independent Age 2010).

Evidence to date on the extent to which new technologies improve loneliness is mixed (Damant and Knapp 2015). Uses of new technologies by older people have been found to bring joy, purpose, self-esteem and empowerment (Gatto and Tak, 2008; Hill et al. 2008; Independent Age, 2010). This includes older people with dementia (Astell et al. 2014). They can make older people feel more alert and in touch with the world (Sus-IT Project 2011) and more optimistic about the world (Cresci et al. 2010). New technologies have been found to support the ability to participate in voluntary work, hobbies and all kinds of associations, clubs and organisations (Choudrie et al. 2010; Harrold 2010; Independent Age

2010; McMurtrey et al. 2011). Where older people are found to engage with new technologies and particularly the Internet, the main benefit is keeping in contact with friends and family (Bakardjieva and Smith 2001; Age UK 2010a; Independent Age 2010; Blažun et al. 2012; Mason et al. 2012). This can be particularly important with minority communities whose friends and families have global spread (Bakardjieva and Smith 2001) and may lead to a greater perception of the support given from these friends and/or relatives living abroad (Woodward et al. 2011). Other benefits also included closer intergenerational relationships between younger and older people (Bailey and Ngwenyama 2011).

New technologies have meant that social relationships are no longer anchored in particular places but exist between particular persons (Geser 2004). Some evidence exists that adaptation to new technologies may shift from a narrow instrumental use in the short term, e.g. simply passing information, to a more expressive affectionate use such as expressing concerns, sympathy and love in the longer term. This may reinforce deep ties and can increasingly be used for the purpose of sociability and confirming relationships. In turn, this can create a sense of self and confirms identity (Geser 2004).

Focusing on loneliness, a recent systematic literature review of empirical studies of new technologies and their impact on social isolation found that technological interventions can be effective for social isolation, although they concluded that more research is needed (Khosravi et al. 2016). New technologies in this review included general ICT, video games, robotics, personal reminder information and social management systems, peer support

chat rooms, social network sites, Telecare and 3D virtual environments. Some studies have found that older people who do not use the Internet say they are lonely compared to other older users (Mason et al. 2012). Table 3.2 highlights how other studies have examined the mitigation of loneliness by uses of new technologies. Such studies normally examine participation before and after an intervention using new technologies, such as the Internet.

Some research has demonstrated that older people are also finding intimate romantic relationships on the Internet which may help avoid loneliness (Merkle and Richardson 2000). Other evidence demonstrates how the process of learning about new technologies has a secondary effect on alleviating loneliness (White et al. 1999). One study found that getting older people together to learn how to use technology created a sense of belonging and connection in terms of not feeling 'left out' or alienated from what was happening in society, particularly with the younger generations (Plant et al. 2012). In this context, in 2015, 81% of people over 55 who use computers said that being online made them feel part of modern society (Cabinet Office 2015a).

Other research on loneliness and new technologies has not been as positive. Baker et al (2013), for example, found that online participation of older people in community groups on social media/social networking platforms is low compared to younger groups. Some writers have suggested technology may actually lead to, rather than reduce loneliness (Kraut et al. 1998; Nie and Hillygus 2002). For example, using new technologies have been found to be a negative experience for older people when it is the only option for contact and they have no choice (Weaver et al. 2010).

Table 3.2: Findings from Studies Considering the Impact of New Technologies on Loneliness

Study	Finding	Sample and method	Loneliness scale (if used)
(Blažun et al. 2012)	Technologies have reduced levels of loneliness in residential care using email/online forums Existing social networks were found to be maintained and increased, particularly for less mobile and active older people Electronic communications such as email were found to reduce perceptions of loneliness	103 older participants in computer training courses Finland and Slovenia Quasi-experimental	Self-reported
(Cotton et al. 2013)	General use of the Internet was found to reduce loneliness in older people	205 older people living in assisted communities USA Survey	UCLA Loneliness Scale
(Fokkema and Knipsheer 2007)	Use of the Internet-enabled older people to keep in touch with family and friends Using computers and the Internet was found to help pass the time and distracted feelings of loneliness	15 older people on the Escape Programme (loan of computers) Netherlands Interviews	De Jong-Giervald Scale
(Lelkes 2013)	Use of the Internet saw older people less isolated and happier	11,000 sample Europe Survey	European Social Survey
(Loe 2010)	Use of new technologies by older women for social connections and self-efficacy were found to help with loneliness	10 older women USA Participant observation and interviews	Self-reported
(Sum et al. 2008)	Use of the Internet-enabled older people to keep in touch with family and friends	222 online participants Australia Survey	SELSA Loneliness Scale
(Sum et al. 2009)	Frequent use of the Internet was found to create a sense of 'online' community which is complementary to offline communities; enhancing rather than replacing existing social contacts	222 online participants Australia Survey	Self-reported
(Tsai et al. 2010)	Technologies have reduced levels of loneliness in residential care using video conferencing	57 older people living in nursing homes USA Experiential	UCLA Loneliness Scale

Using the Internet to communicate with new people and speaking to strangers online may increase anxiety rather than reduced feelings of loneliness for older people (Sum et al. 2008). In this context, Stivers (2004) has argued that a society dominated by technology induces an urge to loneliness because people become more lonely as they live in fear and anxiety. A negative effect of using new technologies on relationships is felt to be the opportunity costs of spending time on computers rather than on real-life contact (Slegers et al. 2008; Sum et al. 2008). Morahan-Martin and Schumacher (2003) sought to test the relationship between Internet use and loneliness and found lonely people, in general, do go online to deal with their loneliness, but excessive use may exacerbate real-life problems of loneliness and social isolation (Amichai-Hamburger and Ben-Artzi 2003). New technologies may, therefore, simply amplify a lack of social participation with existing personal networks.

In terms of systematic and evidence reviews of technological loneliness interventions; Masi et al. (2013) found loneliness reduction interventions had yet to harness the power of technology; Chen and Schulz (2016) found that the results from loneliness interventions using information communication technologies were inconclusive; and Damant and Knapp (2015) in their evidence review, drew on a wide range of studies that reported on the benefits of older people using new technologies for social networking, and found that new technologies at best, reinforced existing relationships rather than expand social networks for older people.

As Brynin and Kraut (2006) argue, there is an assumption underlying the celebration of new technologies that everyone prefers certain socially desirable

outcomes or shares the same outcomes as others. For example, many popular forms of new technology are based on the idea of utility and a fast and cheap way to stay in touch. New technologies, therefore, may not just be a substitute for face to face contact but also another channel which enables weak ties to be maintained. Thus, it may be that people increasingly have lots of minimum contacts at a distance and often fewer stronger bonds of traditional relationships (Geser, 2004). New technologies tend to facilitate the former not the latter. For those who seek only minimal levels of closeness and want to 'chit-chat' rather than seeking deeper support, this may be fine (Geser, 2004). However, for others, this may lead to some situations where social relationships are increasingly lacking depth, meaning and any social presence (Cummings et al. 2006). Some studies have found that older people prefer traditional methods of making new friends and feel safer than using new technologies such as email (Sayago and Blat 2010).

Whether changes in the nature of new technologies and the development of newer 'richer' types of new technologies can substitute for face to face contact for older people remains open. One can think of Skype as an example which arguably enables visual interpretative cues and so emulates social presence. This type of richer media may or may not be better suited for maintaining close relationships than text-based media. Tufecki (2011) and Tufecki and Brashears (2014) identified a group in their research with students who may experience a sort of *'cyberasociality'* which existed regardless of social identity. Cyberasociality is the inability or unwillingness of some people to relate to others via new technologies as they do when physically present. Accordingly, those who wish to make contact and meet new friends online will do so, but

some people simply cannot relate to people online in the same ways as when in their physical presence. From this perspective, despite all the changes and developments in new technologies such as the use of smartphones and Skype, which enable greater accessibility, there is still another 'digital divide' or barrier for utilising new technologies in respect of mitigating loneliness; namely the inability of some people to relate to others socially using new technologies.

Clearly, some, if not most people are able to overcome the barrier posed by the lack of a physically present person. This does not, however, mean that this is possible for everyone. As such, this is not about technological ability or ability to learn and use new technologies, but rather a psychological aspect that may lead to disadvantages in a technological world if communication and contact increasingly move to the use of new technologies. This translates into a situation where some parts of the population simply are unable or unwilling to relate to others using new technologies as they would with face to face situations (Tufekci 2011). Unlike other barriers which relate to age and socio-economic issues, this divide may exist across all groups; young and older, rich and poor, lonely and not lonely. This creates a technological 'social divide' which as social relationships increasingly move online may create disadvantage and loneliness. Furthermore, their lack of use may act symbolically as a 'social' status symbol for social participation. New technologies may signify how popular and socially embedded people are, for example, by creating an impression of being needed and reducing isolation by being contactable at any time and place (Geser 2004).

New technologies, therefore, appear to have the potential to both help and harm loneliness. Like traditional loneliness interventions, those based on technology share difficulties of evaluation. Issues of loneliness experienced by a person, or the factors that give rise to their situation may not be properly investigated (De Jong Gieveld et al. 2011). Few technological studies specifically deal with particular expressions of loneliness. Loneliness and social isolation are often used interchangeably to cover experiences that vary and are diverse. Different concepts may merge into each other and so neglect different aspects of loneliness. Although one might expect that different interventions may reflect different feelings of loneliness, in practice, technological solutions are often based on 'common-sense' notions of loneliness; the phenomenon is reduced to a unidimensional idea that having greater contact with other people achieves better outcomes. Such unidimensional perspectives, however, may not be able to explain the different experiences and inconsistencies of loneliness, which also explains why traditional interventions are not always effective or are difficult to assess (Jones 1987). It is therefore important to avoid these limitations when considering the use of new technologies to help with loneliness.

3.4 Difficulties of researching the impact of new technologies

This literature review has found that problems exist in respect of research on the impact of new technologies on social relationships. The effects of new technologies may be found to be limited, with small and incremental changes on the one hand, but on the other hand, behaviours may aggregate into wider personal and social consequences over time (Brynin and Kraut 2006). Benefits are self-reported and so deal with subjective rather than objective outcome

measures (Horrigan 2006) and often take place with people already engaged and convinced of its benefits. Brynin and Kraut (2006) have also argued that what motivates people is assumed in studies as relatively stable, and where technology is relevant and becomes available, it is assumed people will exploit it. It is then simplistic to take a deterministic view of the impact of technologies on social life, and there is an ambiguous link between new technologies and changes in social behaviour. Kraut et al. (2006) have suggested that many factors may come to influence outcomes, which may include ones that are:

- Internal to the participants (i.e. changes that affect an experience like education).
- External to participants (i.e. changes in social attitudes or culture).
- Influenced by their social location and social structures (i.e. lower incomes).

This suggests that the relationship individuals have with new technologies will be complex and involve both agency and structural aspects. Any discussion of the social impact of new technologies including on loneliness, therefore, needs to consider all aspects of the everyday lives of older people and their perspective, to appreciate what is happening. Arguably, research into new technologies can operate on a 'naive empiricism' which evaluates the uses and success of new technologies in often 'artificial' environments rather than these wider everyday contexts of the lives of older people.

Participation in the design of ICT systems and the application of human factors, which includes the design of new technologies within real-life contexts, has been limited (Damodaran 2001; Olphert and Damodaran 2007). Research into the use of new technologies is often framed in a narrow way with respect to understanding the resistance to using new technologies where the perceived

usefulness and ease of use is the prime reason for sustained uptake of technology. Such ideas inform the Technological Acceptance Model (Davis et al. 1989), based on the theory of reasoned action, where new technologies are viewed as complex systems which create uncertainty in the minds of those using them, and so a barrier to use. This model has been extended to the Senior Technological Acceptance Model (Chen and Chan 2014) which has found that individual attributes such as age, gender and education can be better predictors of technological acceptance than simply usefulness and ease of use of the technology.

Many studies still tend to emphasise group level behaviour and static generalisations, where findings support explanations and predictions about 'average' changes in outcomes for a group rather than for specific individuals. Quantitative methods are often used, but it is argued that qualitative methods may be particularly useful for understanding how people incorporate new technologies into their daily life and assessing what this means in terms of outcomes for that person (Brynin and Kraut 2006). Arguably, research into technologies needs to use mixed methods to develop good theories (Hekler et al. 2016).

However, research strategies in studies on loneliness and new technologies often involve taking groups of potentially lonely older people, 'exposing' them to some technology and then comparing responses and outcomes between a 'control' and 'exposed' group (White et al. 1999). Such approaches risk homogenising and naturalising experiences rather than fully addressing the diverse range of experiences amongst older people. Little empirical evidence

regarding the experience of subgroups based on gender or income are found in these types of study (Berry 2011; Damant and Knapp, 2015).

The main focus of this type of research is often on the usability of technological devices or platforms, rather than meanings that older people give to their experiences and any underlying structural constraints they may face. New technologies designed for older people, such as monitoring systems and wearable devices, therefore, often continue to imply frailty, disability, and dependency with which only a minority of older people might identify (Independent Age 2010; Damant and Knapp 2015). Such research, therefore, does not necessarily take into account the full impact of the context and power relations within which older people live. Older people are often seen as the objects and not subjects in studies, and so there is a risk of reinforcing stereotypes of ageing and older people in terms of preconceived needs and capacities (Brittain et al. 2010). This results in a possible tendency to blame older people for non-use, and a view that sees them needing to adapt to new technologies rather than new technologies adapting to their needs through better design for example (Hernandez-Encuentra et al. 2009).

Some have argued that it is hard to quantify the social outcomes of using new technologies, particularly where research needs to capture complex emotional experiences of older people including depression, anxiety or indeed loneliness (Hirani et al. 2014; Damant and Knapp 2015). How older people adapt to and use new technologies, and the outcomes they gain will differ, and this, along with the pace of change, means there are limits to current research and 'traditional' methods such as surveys. As such, how older people adapt to and

use new technologies needs continually revisiting (Kelly 2016; Murray et al. 2016). Geser (2004) argued that surveys of usage of new technologies like mobile phones are rather limited for theory building. Some commentators have suggested 'Agile Science' as a framework for creating a rapid iterative framework to deal which such issues (Patrick et al. 2016). Yardely et al. (2016) argue that research on new technologies needs to focus on 'effective engagement' rather than simply 'more engagement' by adopting multidimensional models. Importantly this should include social-contextual factors of use and uncoupling of the idea that use will simply equal outcomes. Instead, it is recognising that other aspects of using new technologies mediate behaviour and impact on the outcome. Thus, a dynamic relationship between user experiences and the social context exists which also requires qualitative methods to gain subjective experiences. Therefore, for these authors, adopting a mixed methods approach will create a more comprehensive picture of how users engage with new technologies and support a more person-based approach to digital health interventions being developed (Yardely et al. 2016).

From a sociological perspective, technology cannot just be analysed in terms of its function because a focus on functionality is unable to grasp how people invest in objects and give meaning to them. The relationship between older people and technology is therefore complex, and ethnographic research methods may be more suitable for establishing the causes and effects of using new technologies (Damant and Knapp 2015). Bakardjieva and Smith (2001) argue that people should be seen as active rather than passive in shaping new technologies. Although technological systems may constrain what people can and cannot do, they also change through a process of use. Social and

biographical situations may lead to particular behaviours, and so what is required is to understand how people integrate new technologies and the Internet into their everyday lives (Bakardjieva and Smith 2001). Forms of objects like technologies are not necessarily related to function but are also about fantasy and imagination (Baudrillard, 2005 discussed in Lane 2002 p.27). Many new technologies can be personalised for use and so have both 'use value' and 'symbolic value' for people. We therefore need both quantitative and qualitative methods of investigation (Geser 2004).

Bakardjieva (2011) identified the different types of methodological approaches used to research the Internet in everyday life which has relevance to the uses of new technologies more generally. One approach concerns a common-sense use of the Internet in everyday life based on the routine activities that people undertake such as shopping and socialising. This approach normally involves quantification, statistical analysis and surveys in order to get the 'big picture'. One aspect of this analysis is measuring the differences in access and opportunities to use new technologies, and another may be to examine whether using new technologies leads to the development of new relationships and behaviours or simply replicates existing patterns. Other approaches involve a more complex notion of everyday life, and challenge the epistemology underpinning a quantitative approach. Interpretive and constructivist approaches are concerned with the meaning people give to using new technologies and the qualitative aspects of this experience. More critical interpretive approaches emphasise the normative aspects of using new technologies, which may include both empowering and alienating forces that impact on people. For Bakardjieva (2011), all these approaches are of use,

whether using statistics for understanding the 'surface' of everyday life and the inventory of technological activities, or using ethnography for the 'deeper' aspects of a user experiences and the transformations that happen for people both in terms of the empowering and oppressive aspects of using new technologies.

Bakardjieva (2006) previously highlighted how new technologies are adopted or 'taken into the life-world' in different ways using ethnographical methods. For example, she found that the relationship between new technologies and people varies. Relationships can be instrumental; an extension of the body to achieve existing goals. Accordingly, the world exists on the other side of technology. For others, new technologies mediate and allow people to relate to the world. They are part of a 'digital age' that participants needed to know and control, and in doing so to reinvent themselves as technical beings. Other participants see human qualities and emotions given to technology as the 'other', and so create a different sense of self from using them.

How a person engages with and relates to new technologies is therefore found to vary, and understanding depends on biography, history and situation (Bakardjieva, 2006). Using new technologies is found to create both amplification and reduction/limitation to experience. For example, we can easily navigate the world using Google Maps but at the same time, we are limited to the route planned for us by Google. Awareness of such amplifications and limitations arguably leads to a critical relationship for individuals with new technologies, one where they are continuing to question and critically evaluate the place of new technologies in their lives (Bakardjieva 2006). Any analysis,

therefore, needs to include both agency and structural determinants. No assumptions should be made about the social impact of new technologies at only an individual level, as for example, some current approaches in computer science do, by constructing specific 'personas' as able to represent a population (Cooper 2004). Rather, a 'richer' assessment based on 'difference' and diversity of engagement is required (Kraut et al. 2006).

The use of new technologies will produce differential effects for different people. Some theorists are interested in the subjective experiences people have of technology, and how it forms part of everyday life in the present situation (Baudrillard, 2005 discussed in Lane 2002 p.27). Others argue that new technologies relativistically transform the world of individuals by the knowledge discovered through the acts of using them (Brey 2000; Brittain et al. 2010). As such, new technologies are potentially amplifying or limiting certain dimensions of the environment or sense of embodied self (Ihde 1997). They can transform ideas of place and space and reconfigure everyday life (Poster 2002). For example, there is an increasing technological embodiment as we get older, through innovations like hearing aids and pacemakers. Thus, the idea of 'greying the cyborg' (Ihde 2008; Brittain et al. 2010) and 'technogenarians' (Joyce and Loe 2010) to describe those older people who are active in using new technologies in everyday life. Such issues mean placing the meanings older people give to new technologies as important and central, rather than simply evaluating their effectiveness for creating wellbeing (Joyce and Loe 2010). As such, what is required is to study in detail the impact of technologies on experience. It is an exploration of experiences of older people in this respect which is important to this study.

3.5 Conclusion

This chapter has focused on the research literature that considers the impact of new technologies on older people. Central to the focus of the present study is the role technology may play in the future for mitigating loneliness for older people. New technologies are often assumed to shape and change the social lives of individuals and reconfigure society. Digital exclusion is, therefore, an important issue to consider. However, although there is some evidence that it is difficult for older people to access and use new technologies, the extent and pace of change in new technologies mean this requires continuous assessment. There also appears to be no consensus about how new technologies currently impact on social relationships or help to mitigate loneliness. Traditional interventions to mitigate loneliness differ in terms of approach and resources, but at a general level, have tended to focus on either individual or group solutions with social contact as the element that will mitigate loneliness. This provides the background to ideas about the 'loneliness paradox'; that interventions tend to involve actions to enhance opportunities for people to have social contact to stop loneliness (Andersson 2010).

In this respect, some previous research has found loneliness may be helped by using new technologies, but the findings are mixed. Research undertaken with older people often treats them as a homogenised group rather than a group divided by characteristics of age, gender, ethnicity, class or sexuality. More understanding is therefore required about how a diverse range of older people feel about using new technology and whether it makes a difference to their experiences of loneliness. New technologies may be part of this broader focus on supporting older people to help themselves to mitigate loneliness. Their rapid

pace of development is seen as one of the (unknown) major challenges for the future (Damant and Knapp 2015). It is therefore important to document and understand how new technologies are being used and integrated into daily lives and the effect it may be having on aspects such as establishing and maintaining social relationships (Kraut et al. 2006). The next chapter will focus on the methodology used in this study in an attempt to gain this understanding.

Chapter Four: Methodology and Methods

No social study that does not come back to the problems of biography, of history, and their intersect within society, has completed its intellectual journey (Wright-Mills 1970, p.12).

4.1 Introduction

This chapter outlines the methodological approach that has informed this study and the specific methods used. The methodology considers the issues highlighted from the literature review with respect to the challenges of researching loneliness and the impact of new technologies on the lives of older people. Thus, it has been suggested that the methodology of the study needs to include a diverse range of older people who may be at risk of loneliness due to their social position, which may be absent in previous studies with a technological focus. Furthermore, given that different perspectives on loneliness exist and the dominance of utilising quantitative approaches in research on both loneliness and technological studies, there is a need to rebalance these approaches with qualitative research. This is required in order to consider the meanings older people give to loneliness and their use of new technologies, which is missing from quantitative research.

A starting point of this chapter is to describe the ontological perspective of this study and the position taken towards the relationship between agency and structure. The position taken in this research is that both the structural and agency aspects of later life need to be considered with respect to the experiences of loneliness for older people, their use of new technologies and the impact this has if any, on their experience of loneliness. Second, the chapter

will consider the epistemological orientation that has informed the research and supports a multi-methods approach felt necessary to consider both agency and structural aspects. The figure below summarises the main aspects of the research methodology.

Figure 4.1: Research Methodology
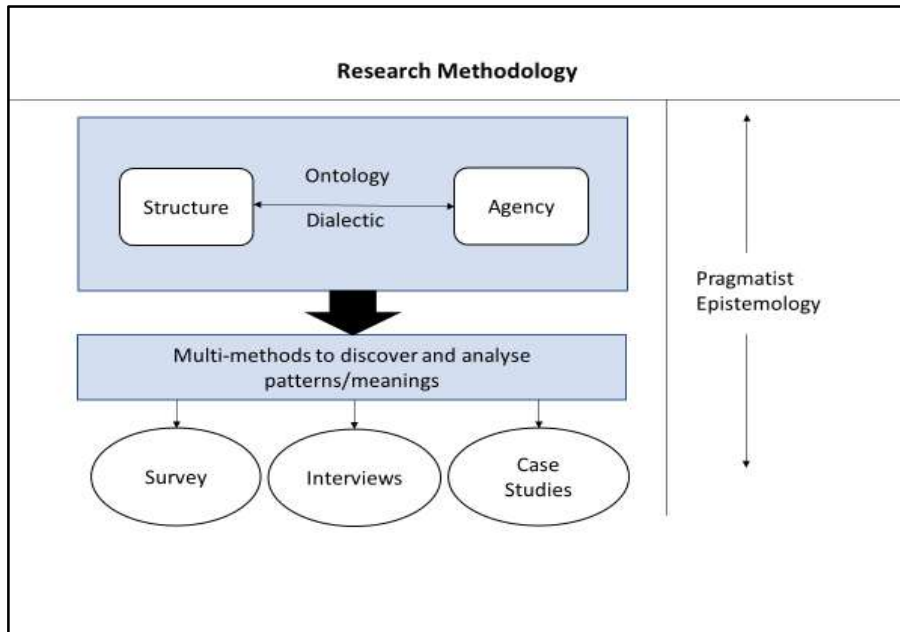
Third, the chapter outlines the strategy used for data collection, and the sampling procedure to recruit participants to obtain an appropriate sample of older people. This includes details of how the survey and an interview schedule were designed, and how the survey and interviews were conducted. Finally, the chapter outlines the grounded theory stance towards analysing the data and the specific ways the data were analysed.

4.2 Ontological perspective

A particular ontological view about the nature of social reality and view of human experience informed this research. The approach comprehends social reality

and human experience both in terms of social structure (the significance of social divisions and aspects of social organisation) and in terms of agency (the individual exercise of choice or freedom). A focus on just one aspect would fail to capture the totality of experience and the multidimensionality of everyday life (Mason 2006b). This therefore requires a theoretical framework that goes beyond the tendency to focus on just the individual and so neglect wider social factors, and the focus on wider social structures which loses sight of the individual (Thompson 2011).

The difficulty of synthesising these aspects is a long-standing concern for social theory and there have been several approaches in sociological theory, including those of Bourdieu, Habermas and Giddens (Cuff et al. 1990). Thompson's (2006 and 2011) Personal, Cultural and Structural (PCS) model of discrimination is helpful in this respect. A key element in this theoretical work is to understand social reality both in terms of structure and agency (Thompson 2006). According to the PCS model, it is useful to understand discrimination by reference to three interacting levels: personal, cultural and structural. These three levels, Thompson argues, are closely inter-linked and interact with one another. The P level represents the individual level of thoughts, feelings, attitudes and action. The C level represents shared ways of seeing, thinking, doing, and the shared commonalities between individuals; in a word, culture. The S level represents social divisions; the structural level of oppression and discrimination. It follows that for Thompson, the P level is embedded within the C level and the C level embedded in the S level. Thus, as individuals, we are in many ways unique, but we also need to recognise the role of culture in constructing our identities, and how this culture is rooted in the social structure;

the interlocking matrix of social divisions and power relations (Thompson 2006).

Although Thompson's focus was on discrimination, this approach has a wider application to psychological/social phenomena such as loneliness.

Thompson (2011) drew upon the work of Giddens and structuration theory to support his views. Although Thompson (2011) suggested that structuration theory neglects his cultural level, he felt it provided a coherent way of understanding the interplay between personal factors and social, economic and political factors. The theory is able to negotiate the two sets of factors and the relationship between them by seeing social structures as continually reproduced through the routine practices and taken for granted thoughts and feeling of individuals, which reflects and reinforces existing social relations. Thus, the theory refers to the processes whereby human actions reproduce the social structure and the system of social relations but also considers how human action is influenced and constrained by these relations. The social structure is therefore both the outcome and context of human action. This is the idea of the 'duality of structure'.

> *The rules and resources drawn upon in the production and reproduction of social action are at the same time the means of system reproduction (Giddens quoted Thompson, 2011 p.47).*

It is a position, therefore, that seeks to avoid determinism and the assertion that one layer of analysis, structure or agency, is the cause or determines the other. Rather, the interaction of structure and agency is dialectic (Thompson 2011). Thus, social reality entails the 'perpetual interaction of subjective and objective factors' (Thompson 2011, p.45) but where these factors are not 'given', natural or absolute, but are socially constructed from social processes and interactions

between structure and agency. Thompson's reading of Giddens theory was influential for considering the methodology of this research.

It is recognised that this approach is not without difficulties, not least as it involves a high level of abstraction, and there are often different interpretations of structuration theory (Pozzebon and Pinsonneault 2005). For some, Giddens synthesis just reproduces and confirms dualism, and one side, either agency or structure, is inevitably favoured over the other (Cuff et al. 1990). Further, rather than a synthesis, it is argued that it is simply a collection of ideas that produces a 'bland' approach contributing no significant solutions to sociological problems (Cuff et al. 1990, p321). While acknowledging these difficulties, however, along with Thompson (2011), this interaction between structure and agency is believed to have much in common with perspectives like existentialism and social constructionism, which it has been suggested are important perspectives for the study of loneliness and technology in later life.

Structuration theory suggests the use of both qualitative and quantitative research methods to document and describe social relationships both in terms of agency and structure. As Jones (1993) highlights, applying structuration theory to research practice is often concerned with triangulation of methods and combining structural and agency aspects in research, rather than seeing a genuine synthesis of the two types of methods. The theoretical justification for combining qualitative and quantitative methods can stem from Giddens' idea of the duality of structure, where the difference between agency and structure suggests different levels of analysis and so a need for different methods of research (Brennen 1992). The qualitative aspects can aim at predominantly

understanding how people feel and how they interpret their social world. It requires the researcher to engage in an interpretative and hermeneutic enterprise; to penetrate the individual's subjective understanding because their own ideas and explanations are intrinsic to accounting for their behaviours. The quantitative aspects of the study can aim for knowledge of a social world that exists outside of the individual's perspective. The role of a researcher is to identify empirical patterns as evidence for 'underlying processes' not explicitly found in the subjective experiences of individuals themselves and thus, potentially, to identify underlying mechanisms that may not be observable in themselves (Sayer 1992). Therefore, ontologically, there is the need to appreciate the multidimensionality of everyday life (Mason 2006b) and so both agency and structural aspects for understanding social life.

4.3 Pragmatism and epistemology

The methodological position outlined above sees epistemology as informing rather than dictating research methods (Philips 1998). Social research is unique in that it is always removed from an 'actual' social reality because it interprets the interpretation of that social reality. In this respect, all social research data are at once valid and invalid because the 'interpretation of the interpretation' means there is always a level of subjectivity from the researcher (Daly 1992). An implication of these reflections is that the validity of the data produced by research is one of degree, not certainty. Rorty (1979) has argued that the whole history of epistemology can be interpreted as hinging on the quest for certainty in our way of knowing and that this quest has been unable to find an independent point of reference from which to judge knowledge and avoid

the problem of self-justifying claims. This is why Morgan (1983), for example, is so concerned to move the debate away from this fixing of certainty, and why he believed there is a good reason to abandon the search for foundational knowledge. Instead, he suggested that we should see this search for knowledge as a specific kind of human practice amongst other human practices. Research is, therefore, a particular and partial means of expressing ourselves and our relationship with the world (Morgan 1983).

In this sense, when we engage in research, we engage in a process where we make and remake ourselves as human beings. This is as significant as the 'knowledge' that research generates:

> *Viewed from this perspective, we are encouraged to see the pursuit of formal knowledge as but a particular form of human action which because of its essential social nature must be understood as being as much an ethical, moral, ideological and political activity as it is an epistemological one. If there are evaluative criteria that can be brought to bear on the nature of knowledge, they relate as much to the way knowledge serves to guide and shape ourselves as human beings - to the consequences of knowledge in the sense of what knowledge does to and for humans - as to the idea that there are fixed points of reference against which knowledge can be judged 'right', 'wrong' or unambiguously 'better than' (Morgan 1983, p.373).*

Research, therefore, needs to be judged through the contribution it has made to the objectives of a study, by being open about the way the study is conducted and by engaging in a dialogue over the usefulness of its findings. Willmott (1985), for example, outlines the original methodological approaches of the Institute of Community Studies, from which the work of Townsend (1957) first emerged. He argues there is a pragmatism where the value of knowledge is its usefulness for changing the world rather than simply describing it.

Mason (2005) argues for a sense of reflexivity – thinking critically about what you are doing and why, confronting and often challenging your own assumptions, and recognizing the extent to which your thoughts, actions and decisions shape how you research and what you see. She wishes to avoid a 'self-defeating debate', rather;

> *The kind of active reflexivity which I have advocated, in contrast to unquestioning or evangelical adherence to any one doctrine (even a supposed anti-doctrine like postmodernism), is the best way I can think to take up that challenge while getting on with the task in hand – undertaking good quality qualitative research (Mason 2005, p.7).*

This 'reflexive' approach to research methodologies is adopted here and seen as being required when undertaking research with older people. According to Morgan (1983), this type of reflexive approach has several merits. First, it recognises that a research process is a form of social interaction where the researcher converses with his/her subject matter and consequently gains a greater depth of understanding. Second, it recognises that different research strategies are 'voices' in a conversation about the nature and status of knowledge. In this sense, we can accept that different 'voices' may say different things to different listeners and that their views are 'claims' rather than foundations of knowledge. Knowledge, therefore, becomes tentative rather than absolute, opening the space for diverse critical discussions such as the practical consequences of knowledge, its ethical implications and its political effects. Finally, by engaging in a 'reflexive' conversation about knowledge, we can avoid the dogmatism that is associated with a particular view. This does not necessarily mean that we have to regard all 'voices' as having equal worth but

that they should have an equal chance to be heard and contribute to the conversation. Such a conversation is, therefore, a way of avoiding the hegemony of a fixed evaluative stance or an addition to a 'true' or 'right' knowledge. What exists, therefore, is an 'edifying' exchange that thrives on self-conscious criticism and diversity. The idea that there is an ultimate 'truth' to be discovered is replaced by 'uncertainty' and a tolerance for different 'voices' to be heard.

Accordingly, the epistemological position taken in this study is that research is never fully objective or free from value judgements, even when researchers strive to be objective (Mason 2005). As such, the research is led by values and purpose (Hammersley 2012). It is not about capturing a universal truth but seeking factors that are relevant to the purpose of the study. The aim is to resonate with the experiences of older people and highlight lessons for other contexts (Mason 2005). In this respect, a reflexive approach requires honesty and transparency in the research process, recognising there are biases and limits whilst attempting to make these explicit through self-awareness and self-reflexivity. Political and critical elements can complement this pragmatist position; perhaps a concern for social justice, human rights, and dignity. The original community studies of older people (Sheldon 1948; Townsend 1957; Tunstall 1966), for example, tried to convey a sense of the lives and concerns of older people in a style that was accessible to them and policymakers. This meant both capturing vivid accounts from interviews, widely using quotations and using basic statistical information which avoided jargon and explained technical terms in an accessible way. In this sense, the methodology was concerned with the empowerment of individuals to understand their own and

others' situations and to take action to change these situations. It is this ethos which this study aims for, but it must be acknowledged that this represents a direction of travel rather than an endpoint achieved.

4.4 Combining methods

Following on from the discussion above, the research strategy outlined below was designed to uncover details of how social structures may impact on the lives of older people, along with how older people, in their everyday social practices, shape and create their social worlds. This approach is found in the old community studies which were influential to this research. A particular reference point is the work of Townsend (1957) as one of the founders of the sociology of later life and social gerontology (Walker 2010). He utilised both quantitative and qualitative approaches to research because there was a need to focus on individuals but also the wider social structures and so the totality of older people's lives. Townsend outlined the problem of capturing the diversity of experience with just one method, and the difficulty of using analysis in creating order from what are chaotic social lives. The methods adopted by this study are influenced by his work in two ways. First, by borrowing from the methods for gathering and analysing data on loneliness in later life and second, as a point of comparison and contrast for analysis of the contemporary social worlds of older people. Following Townsend, therefore, the methods of primary research included in this study were a survey and semi-structured interviews.

The divide between qualitative and quantitative approaches is not viewed as 'hard', in this study, as some discussions of methodology suggest (Bryman 2004). The idea that a questionnaire is more or less positivist, and semi-

structured interviews are interpretivist, are seen as tendencies rather than absolutes in this respect. This view is informed by a number of factors and arguments outlined by Bryman (2004 and 2006, p.105-107). He suggests that research methods can be more 'free-floating' than presented in some textbooks, and this idea is taken forward in this study where different methods do not have to be dictated by particular methodological positions, a set view on the nature of knowledge or a particular version of social reality (Bryman 2004). In practice, the choice of methods often does not conform to set ideas or paradigms (Guba and Lincoln 2005) and practical considerations, such as resources, time and the requirement of funders influence research strategies.

4.5 The design of the survey questionnaire

There was no ready-made questionnaire or interview schedule that was totally suitable for this study. Given time and resource limits, a decision was made to gather together questions from other studies to begin to develop a questionnaire. Draft versions of the questionnaire and interview schedule could then be tested with a focus group of older people and their comments included to ensure that the research 'tools' were suitable and able to gather the data required for the study (see below for more details of the focus group).

The survey questionnaire (see Appendix Two for final version) was designed to gather data on patterns and regularities including information on demographics, frequencies of use and access to ICT, types of technology used to contact people, some opinions regarding the use of new technologies, information about social contacts, reported loneliness, and a measure of wellbeing. Questions on these topics were therefore sought and included in the

questionnaire. The format was a self-completion questionnaire which could be completed either online or as a paper version to be returned via the (free) post. Given the age group and issues of digital exclusion (Age UK, 2010a), the intention was always to produce both paper and electronic versions. As such, the questions needed to be clear and easy to understand and the questionnaire quick and simple to compete; using tick boxes rather than text boxes to fill in. These were the general principles that underlined the design of the questionnaire.

The first step in the design was to pull together various questions from different questionnaires to see how they looked and for consultation with a focus group (see Appendix Three for details of resources used). These various questions formed the basis for the questionnaire to start with but were then adapted, added to, and changed, either through the process of designing the final questionnaire, for example, because of formatting or from comments as part of the consultation process with the focus group. During this work, there were also conversations with other researchers, news items and readings of research papers that facilitated ideas and contributed to the eventual design of the questionnaire. Accordingly, the final survey questionnaire (and interview schedule for that matter) was a mixture of ideas from different sources. The overall aim was to create a set of simple questions that older people could easily self-complete and so provide useful data for the study.

The questionnaire was designed to be completed anonymously and to enabled participants not to answer if they preferred 'not to say'. However, the questionnaire was also used to help recruit potential participants for the

interviews, and a section was included to collect personal details for this purpose if a person wished to volunteer. The questionnaire was given to participants along with an information leaflet (see Appendix Four).

4.6 The design of the interview schedule

The design of the interview schedule (see Appendix Five for the final version) followed a similar approach to the questionnaire and drew on the same variety of resources. Of particular influence in designing the interview schedule was reading *The Family Life of Older People* by Peter Townsend (1957) and the approach to interviews, he used in this research. Over 200 participants were interviewed for his study, and Townsend saw the interviews as a way of highlighting the uniqueness of each individual and family. Interviews were undertaken at the person's home and an interview schedule was used, but the emphasis was placed on a guided conversation approach and so the interviews were semi-structured. Extensive notes were taken including a kinship diagram with details of the family and their contacts. After the interview both quantitative and qualitative data were put together in an interview record, with a report including perceptions and thoughts about those interviewed by Townsend himself.

An archive of this study can be found on the UK Data Service website (www.ukdataservice.ac.uk), including the scribbled notes of his original interview schedule. This, therefore, seemed a good place to start to consider how to design a schedule and it was able to help set the tone for designing the interview questions. Given the age of the study, however, it was less useful for specific questions in respect of technology, and so other resources described

in Appendix Three were also used for this purpose. In addition, a personal network diagram used by Philipson et al. (2001) was also incorporated into the interview schedule but was adapted to take account of new technologies. Another resource was the Person-Centred Thinking Tools used in social care practice and designed to help social care professionals work in a more person-centred way. Accordingly, tools such as 'working/not working' and 'hopes and fears' (www. helensandersonassociates.co.uk), were used in the interview schedule as a useful way of guiding conversations with interview participants. The use of photographs that reflected loneliness was also tried as part of the schedule, to facilitate discussions about the experience (Appendix Six).

Townsend (1957) was also influential regarding how to facilitate the interviews. He advocated a flexible type of interview, but not one that is necessarily 'vague or flabby' (p212). Questions should evolve and ones not working reconsidered. How questions are ordered was highlighted as important, and supplementary questions may be required for when people do not understand the original meaning or take some issues as given. Such an approach if not followed may fail to discover certain crucial facts. These ideas were utilised in the design of the interview schedule.

The interview questions were divided into three areas based on the uses and views of new technologies, social relationships and personal networks, and loneliness feelings and life experiences. When designing the interview schedule, a balance was struck between questions that could produce distressing outcomes and ones that may provoke more positive feelings. The schedule was designed so that any potential distressing questions were asked

later after some trust had been built between the researcher and participant. The first question, for example, was in the form of an 'ice-breaker' which helped to start the interviews on a positive note. More questions were included than needed to enable flexibility, supplementary prompts, and to ask about the main issues in various ways.

4.7 The focus group

As part of the design of the survey questionnaire and interview schedule, a consultation was undertaken with older people. This involved engagement with volunteers from an older person's peer group which agreed to take part in a small focus group on the initial designs of the research tools. This was arranged in October 2015, and four older people over 65 attended. Described as a 'critical friends' meeting, the aim was to go through the research tools, ask for comments, discuss their views and ask for volunteers for piloting of the questionnaires/interview.

At the group, some additional questions were suggested, such as including a question on voluntary work. Other questions were discussed and slightly amended, and some questions problematised for further reflection and changes. A question on significant life events was moved to later in the interview schedule based on the discussion. There was also a view that the original self-completion questionnaire was too long and would put older people off. The survey questionnaire was therefore changed in response to this and reformatted based on the comments made.

One of the attendees of the focus group agreed to participate in the study and be the first person to be interviewed and use the survey questionnaire (electronic version). This acted as a 'pilot' study for the research and ensured that the tools provided useful data towards the aims of the study. This was undertaken in late October 2015; there was positive feedback about the process and the data provided were useful, so it seemed reasonable to proceed with the amended tools.

4.8 The sampling rationale and procedure

The view taken in this study was that a rigid approach to sampling is not necessary with respect to small scale quantitative and qualitative approaches. Although the research design in this study included two methods of collecting primary data; a self-completion questionnaire and semi-structured interviews, the approach of recruiting volunteers to participate in the study was basically the same. Procedures to obtain a random sample were not used in this study as it was felt it may be harder to include the views of those most lonely and at risk of loneliness, given the stigma associated with admitting loneliness. Accordingly, it was felt that proactively engaging with organisations and charities who encountered and could identify lonely older people offered the best way of recruiting participants. This involved a 'purposive' sampling approach where local knowledge and judgements were used to select organisations, groups, charities and agencies to assist in the recruitment of the different participants for the study, in light of the theoretical decisions outlined in the literature review in Chapter Two and below.

Sandelowski et al. (1992) identified two types of sampling decisions. First, there is 'selective' sampling, which refers to decisions about who to include prior to the beginning of the study. Second, and with respect to a grounded theory approach (see below), there is 'theoretical' sampling, where sampling decisions are made on analytical grounds that develop during the study. Both were made in this study. With respect to the first decision, the funding for this research was through a Ph.D. Scholarship which aimed to look at Technology for Health and Wellbeing of Older People. As such, the target population was older people to start with. As highlighted in the introduction, in line with an administrative definition of older age, older people were defined as 65 and over in this study. The aim of the original data collection was to capture data from a cross-section of older people in terms of ageing, gender, ethnicity, class and sexuality, broadly in line with those groups in the older population most at risk of loneliness.

A decision was made to undertake a sampling procedure working with organisations, charities and groups who supported older people in just one particular region (including both urban and rural areas). This decision was based on a number of factors and influences. First, the classic community studies of older people undertaken by Townsend (1957) and others (Tunstall 1966; Sheldon 1948) had been influential in shaping this study and it seemed reasonable to undertake the sampling procedures in a particular area or region, as was done in those studies. Second, an advantage of focusing on one area was to be able to utilise and develop local knowledge which would assist in the objective to engage a diverse cross-section of older people. Finally, restricting the approach to one local area would help reduce transport costs and time in undertaking the interviews.

In terms of the second 'theoretical' sampling decision, the aim was to try to attract the representation of older people who experienced loneliness. This would include, for example, older people who may be at risk of loneliness such as those who were from LGBT and BAME communities, carers, disabled and/or living alone. It was noticed that as the recruitment progressed, the characteristics of the participants volunteering for the study were tending not to be a cross-section of older people but younger, more socially active and regular users of new technologies. A loose 'sampling frame' was therefore applied to recruit older people who were older, more isolated and made less use of new technologies. In this respect, the category 'older people' was split into two groups, often described as the 'young old '(65-74) and the 'old old' (75 and over). This was a strategy influenced by the classic study of older people by Rowntree (1946) who observed a difference between younger and older older people. The assumption underlying this split is that those under 75 are active and generally independent and those over 75 often have reduced physical and mental functions and abilities, which reduce independent lives. Such categories contain many ideological assumptions in respect of chronological age (Hoban et al. 2013) but were useful in terms of thinking about who may or may not be recruited into the study when working with specific organisations, charity groups and agencies in a local region. In addition, working with particular service providers who worked with the older old age group enabled access to those who could not attend recruitment events without substantial resources to support attendance.

Accordingly, a 'theoretical' strategy was to contact local organisations and charities (through local and insider contacts), particularly service providers working with older people who may be in need of social care and support. These contacts included services providing information and advice, day services and social groups, home care services and befriending support for older people at risk of loneliness and social isolation. The aim was to include physically frail and disabled older old people (75 and over) who may be lonely and isolated and would be excluded from the other channels of recruitment due to their physical frailty and need for support. They were also potentially digitally excluded.

A further 'theoretical' strategy was the recruitment of older people who lived alone and/or identified as lonely. Previous research with older people on loneliness has suggested that living alone entails a risk of becoming lonely (Tunstall 1966; De Jong-Gierveld at al. 2011) and so as participants volunteered to take part in the study, the self-completion survey was used to identify older people living alone and/or experiencing loneliness. As such, in some cases, there was a 'two-stage' sampling approach where the survey was followed by an interview. In this context, the survey data facilitated or supported the interview process by gathering information on demographic data, use of new technology and the extent of loneliness amongst the participants. As the data collection progressed, the sampling procedure was designed to ensure that those older people falling into the above categories could be successfully involved in the research and their views heard. However, it is also acknowledged that some older people, particularly those most lonely and from

LGBT communities (due to disclosure of sexuality) were always going to be difficult to engage with any strategy.

The data collection, therefore, also involved some elements of convenience and quota sampling. The convenience aspects were about ease of selection. Participants, organisations, charities and agencies could distribute details of the study using emails and social media, at meetings and at events relevant to their social networks. Such approaches are believed to work well with social networks in local geographical areas (Battaglia 2011). Accordingly, a degree of respondent-driven sampling or snowball sampling was also encouraged to recruit older people to the study. Although this was not the most systematic way of recruiting participants, the safeguard existed in respect of the loose 'sampling framework' described above to assist in the selection of participants as the research progressed.

4.9 Data collection channels and responses

The aim of the initial sampling procedure was to recruit up to 30 older people for interviews and to collect around 100 questionnaires for the survey. This was based on a pragmatic assessment of what could minimally be achieved given the time and resources governing the research. Such numbers, however, were not seen as absolute, and could vary depending on the numbers of older people volunteering and the point at which useful knowledge diminished and 'saturation' began with respect to the grounded theory approach outlined below.

In total 288 questionnaires were printed and distributed. This was undertaken between November 2015 and May 2016. Table 4.1 provides a chronological

account and details of how the paper questionnaires were distributed in the first instance. The low returns from the first round of distribution were assumed to be associated with a limited commitment to support the study from local contacts who had become 'gatekeepers'. For example, the 50 questionnaires given to a well-known national older person's charity to reach potential participants were through a service manager who agreed to distribute them to the older people who attended his day centres and friendship groups. When no questionnaires were returned through this channel, the service manager was contacted to clarify that the questionnaires had been distributed and asked to feed back any issues and reasons for non-response rate. Unfortunately, the manager was not responsive to this request and the query was left unresolved.

Table 4.1: First Round of Survey Distribution (paper questionnaire)

No of surveys given	Type of organisation	Returns
6	Evangelist church social group.	4
50	National Charity for older people.	0
58	Older People's Conference.	3
21	Charity delivering computer support for older people in sheltered housing.	6
16	University of the 3rd Age (group 1) – educational/social group for older people.	13

A change in approach was therefore undertaken and older people's groups were approached directly and visited in person. Support was given to older people who wished to participate in the survey but needed help to complete the questionnaire. In this context, the support provided was limited to functional support such as reading questions and filling in the questionnaires based on answers, rather than interpreting and explaining the questions. A number of

groups were contacted and visited based on the approach described above, and the response rate improved (Table 4.2).

Table 4.2: Second Round of Survey Distribution (paper questionnaire)

No of surveys given	Type of organisation	Returns
3	Methodist church social group.	2
51	6 local friendship groups of BAME older people.	19
10	Loneliness Prescription service (Befriending service based in GP surgeries)	3
2	Stroke Club.	1
39	5 luncheon groups and day services of national charity including a Men's group and Muslim Women's group.	23
39	University of the 3rd Age – (group 2) educational/social group for older people.	21

For the electronic questionnaire, a number of links were created that could be added to publicity material such as leaflets and newsletter articles, used on social media and sent via email contacts. The hope was to create a snowball effect where people receiving the link would share this with others. Table 4.3 outlines the distribution of the links to the online questionnaire.

It is difficult to assess why the online survey did not get a bigger response. It may be that the links were not distributed as promised and so again 'gatekeepers' may have been a problem. There may have also been technical difficulties with the format. On one occasion, for example, the links were reported to not be working. There were also concerns expressed about phishing emails and online fraud, which meant professionals and organisations were unwilling to distribute electronic links. For those receiving email links, they may also have been suspicious of where the information was being used and

recorded, and how secure this data was. This is despite an information section about the study being included on the electronic form. Suspicion of the Internet and fraud were concerns raised in the interviews (Chapter Five).

Table 4.3: Links Sent for Survey Distribution (online questionnaire)

Type of organisation	Returns
A link attached to a newsletter and 'grapevine' of a local authority online service for disabled and older people.	0
A link was sent to the secretary of another local University of the Third Age.	28
A link was sent to contacts of a local charity that worked with the visually impaired.	1
A link was sent via managers and social media of a nationally recognised local charity. This also included a local computer group.	0
A link was sent to a project officer of a local charity working with lonely and isolated people to use computers.	0
A link was sent to a group coordinator of a luncheon club for Asian elders.	0
A link was sent to a branch manager of a local charity who provided a personal assistant service for older and disabled people.	0
A link was given in an article for a newsletter for a carers organisation and also to the manager of the service.	0

Another channel used to collect data for the survey was during the interviews of those who had not already completed a questionnaire. Of those who were interviewed, 24 also completed a survey questionnaire either before their interview or during the interview.

4.10 Characteristics of participants in the survey

In total 145 responses were received from either the online or paper survey. Seven of these were blank and so not used, leaving 138. Of the 138 responses, 12 more were removed because they were under 65 or chronological age could

not be established. Thus, 126 returns were eventually included. Of these, more than 74 of the responses were paper surveys and were all self-completed. A further 38 were self-completed online. Fourteen required some support to complete the questionnaires. Table 4.4 summarises the main characteristics of the older people who participated in the survey, and compares these with Census data found about older groups in the UK in 2011 (Age UK 2016) who are at risk of loneliness.

Table 4.4: Characteristics of Survey Participants Compared to 2011 Census

	My Survey	Census 2011
Age 65-74	53%	52%
Age 75 and over	47%	48%
Men over 65	34%	44%
Women over 65	66%	56%
Non-white	11%	8%
Gay/Lesbian/Bisexual	2%	1.6%
Living alone	45%	49%

Source: Age UK 2016

4.11 Recruitment to Interviews

The recruitment of interview participants was undertaken from November 2015 and ended in May 2016. There were a number of ways that participants were recruited for the interviews (Table 4.5).

4.12 Characteristics of the interview participants

A total of 29 interviews were completed which included 30 participants. This discrepancy was because two Asian women preferred to undertake a joint

interview. The two women were related and so knew each other very well and said they felt comfortable being interviewed together.

Table 4.5: Interview Recruitment

Number	Place of recruitment
11	Recruited from completed surveys (both online and paper).
8	Recruited from groups or events visited.
9	Recruited from a charity offering befriending support who agreed to support the study.
1	Recruited via a friend of a friend.
1	Recruited through one of the interview participants (snowball).

The mean age of participants was 74 with a range of 65-90 years. Eight older people who initially agreed to be interviewed later declined because they became unwell and withdrew or didn't respond to further contact. Table 4.6 below gives a breakdown of the main characteristics of those that were interviewed. Names have been changed to pseudonyms to maintain confidentiality.

4.13 Conducting the interviews

Most interviews were undertaken in the participant's home but at their request, four participants were interviewed at the group they attended and one at a café. The aim was to interview participants in their own homes to enable some 'naturalistic' observations of their home environment. An observation sheet (Appendix Seven) was used to capture these observations. Information sheets and consent forms (Appendix Eight and Nine) were provided on the day. Interviews lasted between 50 minutes to one hour and 45 minutes, depending on what the participant wanted to say.

Table 4.6: Characteristics of Individual Interview Participants

	65-69	70-79	80-89	90 plus	Women	BAME	Manual / Clerical	Gay/ Bisexual	Married	Widowed	Divorced	Single	No Children	Disabled	Lives alone	Reports loneliness	Uses ICT Daily
Philip		X							X							X	X
Samuel	X							X		X			X	X	X		X
Matthew			X						X					X		X	X
Esthel			X		X				X						X		X
Andrew			X						X								X
Anthony	X								X				X			X	X
Roy		X					X		X							X	X
Melissa	X				X			X			X				X	X	X
Amish			X			X	X		X					X			
Doreen		X			X		X				X				X		X
Florence			X		X		X			X					X		
Hazel		X			X		X			X				X	X	X	
Aashi	X				X	X	X			X							
Gloria		X			X						X				X	X	X
Latitha		X			X	X	X		X								X
Ajay		X					X			X					X	X	X
Joshita	X				X	X	X		X								X
Claudia		X			X		X			X					X	X	
Nancy		X			X		X			X				X	X	X	
Betty			X		X				X						X	X	
Mandy	X				X					X			X	X	X	X	X
Iris		X			X		X		X					X		X	
Jenny	X				X				X							X	X
Albert		X					X					X	X	X	X		
Kim		X			X		X		X						X		X
Fredrick				X					X					X	X		X
Lydia		X			X				X						X		X
Deepak		X				X	X		X								X
Hemal	X					X	X		X							X	X
Lottie			X		X				X						x	x	x
Total	8	14	7	1	18	7	15	2	14	12	3	1	5	10	15	17	21

All interviews were recorded and participants were asked if they wanted a transcription of the interview. Where the survey questionnaire had not been completed prior to the interview, participants were asked if they wished to take part and either given a copy or supported to complete the questionnaire at the interview if they agreed.

4.14 Transcriptions

The aim of the transcription process was to create a document that captured the narrative of the conversation with participants. The approach did not try to capture all the dynamics of the conversation and where the conversation could not be heard or was not relevant to the study, this was left out. The final transcriptions were sent to participants, if requested, along with a covering letter which gave an additional opportunity for the participant to withdraw from the study if they wished. Eighteen participants requested and were sent transcripts of their interviews.

4.15 The approach to analysis: A 'pragmatic' grounded theory

The approach to analysis and theory generation in this study was based on grounded theory rather than a commitment to one particular theoretical source of hypothesis generation. Most uses of grounded theory are 'pragmatic' and see a general stance towards developing ideas, concepts and theories in studies of any form, both qualitative and quantitative (Barbour 2001; Chapman et al. 2015). Bryman (2004) identifies two features of grounded theory; theoretical sampling (which was described above) and the development of theory out of data. Grounded theory is an approach that draws its conclusions from data and

then feeds these conclusions into the development of theory or modification of existing theory (Grix 2010). Theories, or modification to other theories, are therefore derived from the dataset rather than prior theoretical points of view. The stress is upon 'grounding' research in the reality of the participants (Chapman et al. 2015). Controversy exists about what this entails (Bryman 2004; Gilbert 2005). The approach here was sympathetic to a social constructionist approach to grounded theory, where categories or themes emerge from the researcher's interaction within the field and interpretations of the data (Charmaz 2008). This rejects the 'positivist' view of grounded theory that wishes to impose a set of rigid procedures as the 'method' and an 'objectivist' view that assumes there is a 'reality' that is just waiting to be found (Hammersley and Atkinson 2003).

Thus, for example, aspects of the research tools changed as this study progressed. Earlier interviews informed subsequent interviews as insights emerged from the early analysis. Some amendments were made to the interview schedule following the first interview with an older person who did not use any new technology. These were based on the interaction from earlier interviews (See Appendix Five - for the final interview schedule with alternative questions in red). Furthermore, some features of the first few interviews were subsequently not used. For example, the use of photos was dropped in the later interviews when it became clear that it was not helping to discuss loneliness. The interviews were used to explore understandings and feelings with participants through guided conversations. Saturation, the point at which new data no longer illuminates what is being found (Benton 1996), was used for restricting the sample size to 30 interviews.

The method of analysis used with the semi-structured interviews was thematic analysis (Braun and Clarke 2006; Clarke and Braun 2013). Chapman et al. (2015) have argued that the most frequently used analytical approach with grounded theory is thematic analysis. At the core of this analysis is the identification and progressive refinement of important themes from the data. Thematic analysis could, therefore, be used as a method for identifying and analysing patterns from the interviews consistent with grounded theory. The method is also suited to a wide range of research interests and theoretical perspectives and is useful as a `basic' method for new researchers (Braun and Clarke 2006). The thematic method used in this study was based on the different phases of analysis suggested by Braun and Clarke (2006):

Phase One: Familiarisation with the data. This was primarily undertaken with transcription. Transcribing the interviews (see above for details) included preparing transcriptions to be sent to participants. This provided the opportunity to become immersed and familiar with the data as it included reading and re-reading the transcripts. Some initial thoughts were captured from all the interviews. With respect to grounded theory, the aim is to suspend pre-existing knowledge about the topic and keep an open mind. However, it is acknowledged this is difficult given a review of the literature was required as part of the Ph.D. process.

Phase Two: Coding. This involves generating useful labels for important features of the data relevant to the research questions (Braun and Clarke 2006). Coding is critically important to the whole analysis in grounded theory since codes will form the building blocks of further analysis (Chapman et al. 2015).

The process has a high degree of subjectivity and involves reviewing transcripts and giving labels to parts that emerge as theoretically significant and/or salient. In order to facilitate this aspect, data were coded into topics based on the questions asked in the interviews. This created a number of 'topics' related to the research questions of the study (see Table 4.7 for an example). Topics could then be coded further in more detail.

Phases Three and Four: This is searching for themes relevant to the research question (Phase Three) and reflecting on whether these themes tell a convincing and compelling story about the data (Phase Four). These phases involved reading, re-reading and reflecting on codes and deciding what themes were emerging from the 'topics' in phase two.

Table 4.7: Example of Creating a Topic for Coding from Interview Questions

Research Question - How were the participants in this study adapting to and using new technologies?		
Questions from Interview schedule (or variations of)	Code given	Topic from merged codes
Q1. Please say any words that describe how you feel about computers and the Internet.	ICT Words	
Q2. How long have you been using computers and the Internet and what motivated you to start using them? If you do not use them, what are the main reasons?	Using ICT Motivation	ICT Use and Feeling
Q3. What do you feel is important that helps you successfully use computers and the Internet? Or inhibits you from using them?	Success Using ICT	

Charmaz (2006) calls this selective coding, where data are broken down and then grouped together and turned into core categories or core themes. Others

speak of 'constant comparison' (Bryman 2004). Ideas are generated from reading and re-reading the data, codes are combined and contrasted to develop themes or categories that group similar codes together, thereby generating a network of associations (Chapman et al. 2015). The computer software Nvivo (version 10) was used to carry out this analysis.

An important aspect of this process was the use of 'after interview rituals' to enhance analysis. Following the completion of the interview, some interview reflections were recorded. The observation sheet was also developed to aid reflections (Appendix Seven). Such reflections, along with memos, notes and reminders were used to facilitate thinking on the topics and 'crystallise' ideas during these two phases. These fieldwork notes were also another resource that helped inform the process of coding the experiences of participants and developing themes from the study. An example of a theme that emerged with respect to ICT Use and Feeling was 'trust'. Codes identified during transcription included risk and fear of scamming, hacking and grooming online, danger, anxiety and privacy issues. Accordingly, a theme emerged with 'trust' at its core and a narrative developed in the findings that 'participants found it hard to trust new technologies'.

Phase Five: Writing up. As the above process developed, emerging themes were sense-checked against new raw data. Making connections between the themes integrated other theories to 'test' what was the same, interesting and/or different. In this respect, the existing literature was treated as another data source, such that themes emerged from the literature that contributed to the analysis and helped crystallise findings. The written outputs were read and re-

read with the aim of getting the main themes together into a descriptive narrative. Once the writing process began, supervision was used to sense check what was being written.

Central to this phase of thematic analysis in this study was the process of documenting and describing experiences. Description contributes to theory building and has an intrinsic value in itself (Hammersley 1990). For example, this phase was central to the development of the idea-type loneliness modes described in Chapter Eight. Documenting and describing experiences was therefore essential to this study for understanding the experiences of loneliness from the perspective of the participant.

The phases described above were not linear. Rather, as Braun and Clarke (2006) have suggested, thematic analysis is a recursive process. Most research, whether qualitative or quantitative, moves from ideas to data and data to ideas. It is an iterative process which moves backwards and forwards. This can be referred to as an abductive approach (Mason 2005). This process is not purely inductive or deductive, as new or surprising events found in data may prompt a researcher to create potential hypotheses (Chapman et al. 2015). Accordingly, data generation, data analysis and theory in this study developed simultaneously in a dialectical process – a method for moving back and forth between data and the process of analysis and writing up. Research practice (in practice) is made up of a combination of these approaches (Mason 2005).

As a first-time researcher, this process of analysis was one of trial and error, intuition and iteration. As Bazeley and Jackson (2013) highlighted, research analysis means reading and reflecting, exploring and playing, coding and

connecting, reviewing and refining, describing, comparing and relating, extracting and explaining and contending, and defending and extending. Throughout the process, we should 'wonder and ponder' (Bazeley and Jackson 2013, p.14). To paraphrase Hammersley (2012, p.28) understanding other people is necessarily an uncertain process that relies upon openness to the world and on the exercise of personal capacities, especially imagination rather than on any one particular method. This was the spirit of analysis underlying the findings in this study.

4.16 Quantitative analysis and the triangulation of methods

This study draws heavily on non-statistical data. However, the approach described above, although associated with qualitative research strategies, does not have to be exclusively so (Grix 2010). Given an important aspect of this study was capturing and understanding the meanings of older people, of their experiences, situations and actions, including understanding the particular context within which they act, there was always the potential to generate new perspectives or 'grounded' theories in respect of the survey data as well as the interview data.

The quantitative method of analysis used in the survey was designed to be simple and largely descriptive because of the explorative and non-random nature of the survey. However, as themes emerged, variables were sometimes compared to note any associations (the variable coding book for the survey questionnaire can be seen in Appendix Ten). These were done through bivariate analysis and using cross-tabulations (Zelditch 1959; Friesen 2010, p.179-191).   Two variables of the survey were compared using a 2x2 table. In

each comparison, the dependent variable was placed in the column of the table and the other variable, the independent variable, placed on the row of the table. A visual inspection of the cross-tabulation was then undertaken to determine any likely associations based on the percentages found in the tables. One or two relationships, for example, loneliness and social contact, were also considered using Pearson's correlation where interval data enabled this technique to be utilised and it seemed useful to do so to illustrate a theme. The computer software SPSS (Version 21) was used to undertake these techniques. The single-item measure was the focus of the findings for the survey because it has been used in similar academic studies with older people (see Table 6.1 in Chapter Six). Accordingly, it means that the findings can be compared with these studies. The single item question asked participants directly about feelings of loneliness; 'Do you feel Lonely?' To which they could respond, 'hardly ever or never', 'some of the time', or 'often or all of the time'. The questionnaire, however, also incorporated two other measures of loneliness; The Campaign to End Loneliness (CTEL) Scale, a new scale produced by the Campaign, and the UCLA three-point loneliness scale (See Campaign to End Loneliness 2015 for more details).

The CTEL Scale makes a number of statements:

- I am content with my friendships and relationships.
- I have enough people I feel comfortable asking for help at any time.
- My relationships are as satisfying as I would want them to be.

The scale asks participants to rank their answers from strongly agree (score 0), agree (score 1), neutral (score 2), disagree (score 3) and strongly disagree (score 4). A score of 0-3 is classified as a person unlikely to be experiencing

loneliness; a score of 10-12 as likely to experience an intense degree of loneliness. The other scores lie somewhere in between these two experiences.

The UCLA three-point loneliness scale asks a number of questions:

- How often do you feel that you lack companionship?
- How often do you feel left out?
- How often do you feel isolated from others?

Respondents can answer 'hardly ever' (score 1), 'some of the time' (score two) and 'often' (score 3). This produces a loneliness score of between 3 (least lonely) through to 9 (most lonely).

These questions were included because they measure loneliness without asking about loneliness directly. This arguably avoids any under-reporting of loneliness given the stigma associated with directly asking about loneliness as in the single item question[1]. The scales also have composite elements that make up the scale which is of interest in itself. The UCLA three-point loneliness scale, in particular, is widely used in research as an interval variable. As such, it was used in this study as the loneliness measure that could be used for statistical testing using Pearson's correlation associations as described above. The approach, therefore, aimed to quantify and summarise the findings from the survey into a simple and convenient form. The quantifying aspects of the study were to complement the qualitative approach, possibly showing

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[1] It has been suggested that various scales are similar in reporting loneliness (Pearlman 1987). In this survey, directly asking participants about loneliness using the single item question did not appear to be under-reporting it. The single-item question and CTEL scale produced similar levels of reported loneliness; 49.2% and 47.3% respectively. In comparison to the other questions, the UCLA scale appeared to underrepresent the extent of loneliness; 31.3%, if all the composite elements were used. However, a similar level; 50%, reported they lacked companionship in the scale, a figure broadly in line with the other loneliness measures.

contradictions and highlighting conceptual issues, for example where the data were at odds and required interpretation of contradictions and inconsistencies. As such, data from the survey were used to 'explore' the research questions of the study as well as to produce a statistical analysis that *'embellished'* the findings of the interviews (Mason 2006a). This triangulation was felt to add further credibility to the analysis. As Grix (2010) notes, triangulation is basically the idea that different methods can be used for an inquiry which improves the chances of getting more comprehensive data. Farmer et al. (2006) also suggest the primary purpose of triangulation is to explore convergence and dissonance, and so enhance the findings of the research. Different methods are believed to complement each other and the combining of sources can help to illuminate findings (Bulmer 1977; Grix 2010; Farmer et al. 2006).

4.17 Individual case studies

This combining of sources to illustrate findings is further utilised in this study with respect to the two individual case studies provided in Chapter Eight. These cases, who also participated in the interviews and survey, were selected as particularly illuminating examples of the experiences of loneliness and the use of new technologies to mitigate it by older people. The aim was to highlight how the findings might translate into professional practice and service development. As Bazeley and Jackson (2013) suggest, giving agency to 'cases' rather than simply variables sees an approach to research that is more person-focused and about 'real' people. This case study analysis was mainly intuitive (Farmer et al. 2006). A synthesis was presented through the case study, bringing together themes and survey results into a descriptive narrative in an attempt to create

new insights or challenge previous assumptions. Although an individual instance, these case studies were felt to illustrate a wider set of social experiences and social processes. Case studies were therefore used to help take the findings from the specific to a broader context (Yin 2012).

4.18 Conclusion

This chapter, along with the Appendices, has outlined how the research was conducted and the data analysed from design to practice. This included the influences and rationale behind decisions and the various aspects of the practice of conducting this research. The design was also underpinned by a value which sees older people as active participants and contributors and, following in the tradition of the classic sociological studies, it attempted to conduct the study in a 'careful and business-like way' (Wilmott 1966, p.192). A comprehensive description of the research strategy, design of the research tools, sampling procedure, and data collection mechanism were therefore included in this chapter. It is hoped that this transparency supports any judgment about the 'usefulness' of the findings of the study, but it is inevitably a study of personal interpretation. The discussion will now turn to the findings of the study and explore the impact of new technologies on loneliness in the lives of older people.

Chapter Five: Adaption to and Use of New Technologies

"The world, the Internet world, is so much more rapid, immediate and widespread. We are going to have a generation of people who have lost the skills of handwriting and that is a pity. In a way, it trivialises things. You know, sometimes I will sit here, maybe most days at some stage, I will sit here and read my newspaper. Then I will look up and I will see someone walking up or down that path. It is quite a little thoroughfare because we have a language school down the road and we have a secondary school and we have a small housing estate up that way. So, at certain times of the day, there is quite a lot of traffic along that, pedestrian traffic. One day I thought I will do a little bit of homemade social research. I will count how many people go by using a mobile phone. Do you know what I found? Two out of every three people walking along had a mobile phone clamped to one ear. I am pretty sure that they were not discussing philosophy or literature. They were saying things like, 'I am just walking down into the town' or 'where are you going to be tonight?' or that sort of thing. In a way, we are told that many people become addicted. I am talking now mobile phones, but it is also true of other devices. I mean to be honest, I am a bit, even now, bewildered by all the succession of, follow on from laptops. I mean I thought I was up to date with the laptop. Now if you think Blackberrys and iPad. As soon as you get one of these devices and learn how to use it, it is obsolete. So, I think it all contributes in a way to the sort of non-static. That isn't a very good word but the very ever-changing life" (Fredrick over 90 years old).

5.1 Introduction

The impact of new technologies on older people was not something new but as Fredrick observed, newer forms of technologies were accelerating the pace of change leading to new experiences for older people. The focus of this chapter is on these experiences, and so on the findings of the first research question of how participants were adapting to and using new technologies. Technological studies have often taken groups of older people and 'tested' new technologies with them rather than seeking to understand how people feel about using them

in everyday life. As described in the methodology chapter, this study took a multi-method approach by using a survey and involving older people, asking them about how they used new technology and how it featured in their everyday lives. Six main themes (Table 5.1) emerged when analysing the uses of new technologies by participants in this respect, which are discussed in the chapter.

Table 5.1: Summary of Main Themes in Adapting to and Using New Technologies

Themes
There was a diverse range of ways participants were using new technologies
New technologies did help to keep in touch with family and other people
Material and non-material barriers existed for participants using new technologies
Participants found it hard to trust new technologies
Working and learning experiences shaped current and future use of new technologies
Support from children and grandchildren was important to use new technologies

5.2 There was a diverse range of ways participants were using new technologies

Despite a perception that older people may not be using new technologies, the first theme identified was that there existed a diverse range of ways in which they were using new technologies. Most participants in this research were using new technologies in some way. For example, 87.6% of the respondents taking part in the survey reported using computers and the Internet, and 21 out of the 30 interview participants also said they used new technologies regularly. Although there were often strong responses from participants when discussing new technologies, some participants saw them as an enabler and providing

opportunities for them. For Deepak, it was something older people must accept and adapt with the times:

"*We have to accept and we have lived with the time and take it as it comes. We cannot imagine the future sometimes. The circumstances will fall and you have to live in those circumstances. We can't change time or circumstances. We cannot change, we have to accept it …and you have to update yourself. It is important*".

The kinds of new technologies used varied. Figure 5.1 shows the extent to which particular types of new technologies were used daily by respondents in the survey. Mobile phones and laptop computers were used daily by 55.8% and 48% respectively. Tablet and desktop computers were also used daily by nearly 40% of respondents. Although mobile phones were popular, the main place for respondents to access computing and the Internet was at home, although about a quarter did use their mobile phones to access the Internet.

Figure 5.1: Daily Uses of New Technologies
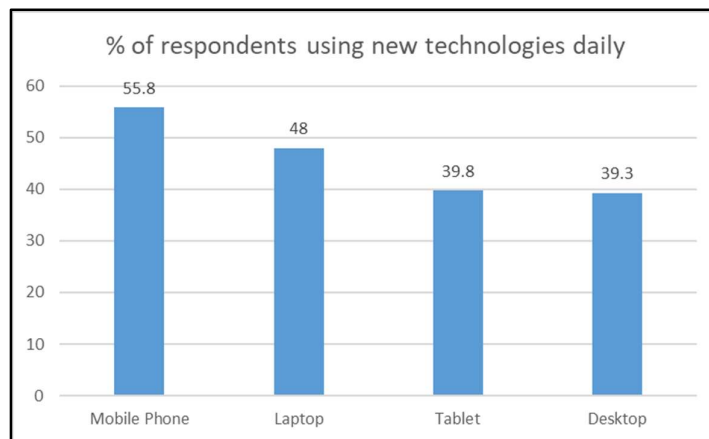
Participants, therefore, appeared to be using new technologies and adapting these to their everyday life. As Hazel said;

"*I think now I have got that tablet it fascinates me. That you can talk to it, tell them the website you want and it comes up. I suppose that is so modern technology, isn't it? That is really modern. I suppose the more modern things like that are, they are a positive thing in life. It is easier to switch that on most days. I switch it on most days and see what emails I have got*".

In general, five positive outcomes of using new technologies were found across all participants in the study. Table 5.2 summarises these outcomes and the most common individual examples of using new technologies to meet these outcomes.

Table 5.2: Outcomes and Examples of Using New Technologies

General Outcome	Individual Examples
Saving or spending money	Shopping online Checking out deals Booking holidays online Banking
Finding useful information	Reading newspapers Looking at websites Gathering health and care information
Arranging or contacting services	Making housing applications Making complaints Arranging volunteer work
Having fun and passing the time	Completing crosswords Listening to music Getting educated Watching sport
Keeping in touch and social contacts	Using Email Participating in Social Media Using Whatsapp Using Skype

Using the Internet for shopping was just one way in which participants were using new technologies. Some of those with mobility problems found them useful to get groceries; for others, like Claudia, it meant easy access to buying everything. Gloria, who had recently moved into a new property and bought a bathroom sink online, talked about the benefits of shopping online, booking holidays and banking online. For Deepak, being able to do financial actions

online could save valuable time; time that he could spend with his family. Access to the Internet was also an important and valuable resource for information. Philip talked about how it helped him when he was unwell with cancer and found a book that was useful. Ajay found information about his sister's vasculitis. For Hemal, finding information over the Internet had helped him to care for his wife when she had a migraine.

Some participants were active in voluntary work and found using new technologies an efficient and valuable tool for organising activities and managing their time. Deepak, for example, was a member of a peer support group and used his computer daily to confirm and arrange meetings. Some participants contacted services or completed applications online. Doreen, who had recently had an accident, used email to keep contacting her solicitors, and Anthony found he had more direct contact with individuals in large organisations by finding their email address online. New technologies were also becoming integral to daily routines and leisure time. Melissa, for example, read her newspaper online every morning. For Albert, it was an important leisure tool. As a keen football supporter, he was able to follow his team online despite living in a residential care home. Aashi was able to watch TV on the computer in her native language of Gujarati, and Matthew found the Internet facilitated a favourite pastime of completing the daily crossword;

> "*I will look at Wikipedia and probably go to the Oxford Dictionary. If we are looking for things, certainly for the answers to crossword clues we'll use the web unashamedly*".

5.3 New technologies did help to keep in touch with family and other people

Positive views of using new technologies were often expressed about the ease of contacting other people. When asked if new technologies allowed people to keep in touch or connect with friends and family, overwhelmingly most respondents in the survey (90.3%) agreed, with only 2.4% disagreeing. Findings from the survey saw how new technologies were increasingly being used to keep in touch and make contact. Respondents were asked about the ways they used new technologies to communicate and contact other people. Many new technologies were being used daily. Email was the most popular with 64.8%; 18.6% used social networks like Facebook, and 2% used Skype.

Keeping in touch was an important outcome. New forms of technology offered a variety of ways to engage in relationships and activities beyond simply face to face contact. These included leaving texts for children at work, directly using mobile phones for emergency contact, or monitoring the lives and activities of grandchildren using social media. New technologies were seen to enable contact across time and place and thus sustain social networks. Lydia described how email had been important for contact with other acquaintances when a friend had died, so she could ensure those who wanted to could attend the funeral. Old relationships could also be regained by Internet searches. Lydia describes how she could trace an older friend using new technologies.

> "*Interestingly, I traced one friend through the IT, through the computer. She moved to a new house and it was coming up to her birthday and I knew she was moving but she had never sent me her new address. So, I thought how the hell I am going to get in touch with her. I could send a card and say please send it on but that doesn't guarantee anything. Then I thought of her son. Her son is surely online somewhere because he was a*

musical bloke. He did things with young people and stuff and so I googled his name and I got an email which was his work email. So, I emailed his work email and said that I don't know if you remember me, you haven't seen me since you were 11 but blah, blah blah. The next thing I knew he got back to me with her address and so I wrote to her".

The nature of the type of contact wanted and expected, and how this is changing was important to participants. In some situations, new technologies provided a substitute to face to face contact with family and other social contacts that would otherwise be lost or limited, especially where families and friends were dispersed nationally or globally. New technologies could, therefore, play an important role in maintaining contact over distance geographically and instantaneously. For those whose family did not live locally, newer technologies may be the only opportunity to have any family life. The context was important in accepting these new forms of contact. For example, if there was no prospect of face to face contact or limited time, new technologies could be positive. One woman attending a social group mentioned all her relatives lived abroad and she was mainly in contact with them using Facebook. For Kim, whose two sons and grandchild lived abroad, Facetime enabled her to be a grandparent. As Mandy said in terms of keeping in touch with her family;

> *"My main way is Skype. I use Skype a lot. We do sometimes have groups, up to eight but there are usually three of us, my two brothers and me. My brother was in Australia for a while, so we were able to link up as a family which was always helpful".*

New forms of contact, like Whatsapp, were increasingly used. This has a relatively limited cost and was used on mobile equipment. Whatsapp' global reach and ability to use different languages make it particularly accessible to

participants from ethnic minority communities who were either previous migrants or whose families had migrated elsewhere, and so enabled global contact to be sustained. As Lalitha said;

> "*It is much better. When I send Whatsapp it is so quick. In Singapore, in India, in Nairobi, within a second it goes there. That's the technology and I like it. I like doing it and I get something back as well. If I haven't used it, they would all be saying 'you haven't sent anything today' "*.

For family members outside of the nuclear family; brothers, sisters, and cousins, the '*distance*' of using these new technologies could suit some participants while still feeling they were maintaining contact. For Ajay, for example, new technologies like WhatsApp were helping contact with his extended family. These textual forms of contact provided an important way of being in contact with family and friends with minimum effort. As Andrew observed;

> "*Emails are used to give people options about how much distance and detachment they want, not just intimacy. That is kind of interesting. It gives them these different options which can be very very useful. There are moments when I use the computer because I know if I ring them up, it takes a tremendous effort to do and so I send an email which is easier. It's kind of more detached or distant. So, there are particular advantages of using the computer*".

For Esthel, these new text technologies enabled an emotional contact with her grandchildren who she felt would not necessarily respond to her with a telephone call. Samuel reflected on how they had helped him as a carer, by giving him access to other carers and providing an important complement to other connections. When he lost his dog, for example, he turned to social media in the first instance, and the '*spotted*' pages on Facebook to look for any sightings. Gloria felt there was potential to support people through counselling

online and the instant response reassured her support was available. For Mandy, making contact by email and getting a response gave her meaning, a sense of identity and made her feel that she was not completely alone. Equally, for Deepak, embracing these new technologies made him feel 'present' in the world and brought him happiness and a sense of self-esteem.

New technologies, in this respect, also offered reassurance, particularly for those who lived alone and were anxious. They felt connected, it made them feel relevant, valued and 'alive'. It appeared to give some greater self-esteem and sense of being in the world. Simply sending and receiving an email could mean a presence in the world rather than feeling a sense of nothingness associated with loneliness. Where participants were perhaps unwell or disabled, there was also the reassurance that help was nearby. In contrast, other older and slower forms of contact, such as letters, were being used much less. The relatively limited cost and ready availability on mobile equipment meant these forms of new technology were often replacing other means of contact like telephone calls for some participants.

5.4 Material and non-material barriers existed for participants using new technologies

These positive views and experiences of using new technologies, however, were often mediated by the barriers that participants face when using them. Barriers consisted of both material issues like costs and accessibility, and non-material issues such as having the right skills and a positive attitude to engaging with newer technologies. There were some differences amongst individuals.

Age did seem to make a small difference in how new technologies were being used. Those respondents in the survey who were 75 and over were less likely to use computers than those younger (aged 65-74), as such,12.8% of participants 75 and over did not use computers compared to 7.8% in the 65-74 age group. This was also the case with newer forms of technology like smartphones where 17.5% of those respondents 75 or over used a smartphone compared to 43.1% of those 65-74 years old. Furthermore, other newer forms of technology like laptops and tablets were used more by those under 75 (Graph 5.2).

Figure 5.2: Multiple Device Used by Age Group
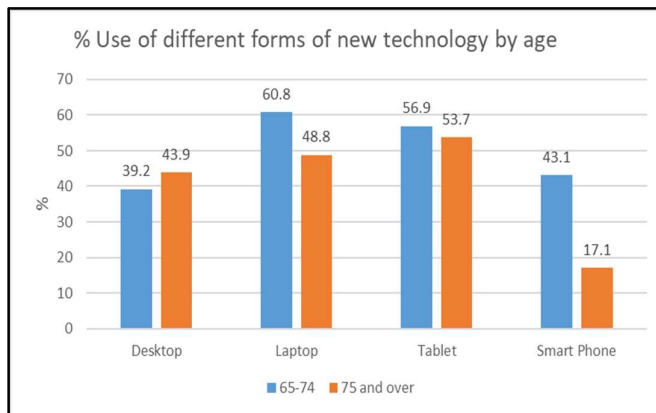
Findings in the study also suggested this was particularly the case if the older person was experiencing poor health. Only 50% of respondents 75 and over with poor health used the computers and the Internet, compared to 100% of 65-74 year olds with poor health. Poor health may result in physical disability and less dexterity which features as a barrier to using newer technologies. For example, 'having the wrong sort of thumbs' was mentioned as making the use of new technologies difficult by one participant. The survey asked respondents what difficulties they had with accessing new technologies. These included a

diverse set of physical needs. Just over 50% of participants using new technologies reported problems with their neck and/or back, about a third with arms/hands and hearing, and 27.1% had difficulties with seeing. For example, Betty and her husband Jim found difficulties finding the cursor on the computer, and Iris needed large fonts but always forgot how to change them on the computer. Mental health was also an issue, with about a quarter of respondents identifying anxiety and/or depression as creating difficulties for them when using computers and the Internet. Amish had memory problems, for example, which he felt meant he was unable to use a computer.

> *"No, I cannot operate it at all. Even to start with. It is very difficult to remember all this and to operate it. Sometimes I do feel frustrated that I cannot do it because there is a lot of things you can use it for, a lot of information you can get on the computer which I am not able to. That is the reason. I am losing my memory. Short of memory but there is nothing we can do".*

Considering gender, there was a small difference in the survey between men and women when it came to using computers and the Internet. Slightly fewer (87.3%) of women used computers compared to 88.1% of men. During visits to social groups, including all or predominantly groups of women, it was observed there was less interest in talking about new technologies and their use. Traditional gender roles appeared to mean that some older women were not as exposed to computer technologies as men, for example through work. As such, some women appeared not to have developed confidence and skills to use newer technologies. Being busy with family life and bringing up children were given as reasons why some women participants found it difficult to previously make time to engage with new technologies. As Claudia stated;

"*I think for a long long time, I was just too busy. You know just too busy with family life, full-time job and all the rest of it. It just didn't really occur to me to get into it*".

When considering ethnic identity, those respondents in the survey from BAME groups revealed 25% who did not use the computers or the Internet compared to 10.5% of the 'white' group. Again, there appeared particular barriers for this group. For example, 30% of BAME whose main language was not English did not use computers and the Internet compared to 10.9% whose main language was English. Language was often described as a barrier by Asian participants. This was expressed as potentially contributing to exclusion and disadvantage for this group, as most computer software was in English. A visit to a group of Muslim women, for example, saw this concern made by several members of the group. Other Asian participants also voiced the same concerns. Amish, for example, felt it was a barrier for his generation of Asian older people who didn't read or speak English, and Ajay felt language was the barrier for the very old Asian group.

Generally, the language used with new technology was difficult for some participants to understand. It often involved jargon or new terms not often used before. *'Gobbledygook'* technology was one phrase used by a participant. As Jenny found;

"*There is so much jargon attached to when you make a mistake you seem to have to have someone looking over your shoulder to help you all the time*".

Education levels, for example, appeared to make a difference to those that were using computers and the Internet. Only 3.4% in the survey who had a graduate

qualification did not use computers or the Internet compared to 14.6% non-graduates. Furthermore, 86.2% of those with previous manual occupations were using computers and the Internet compared to 91.4% for professionals. Cost appeared to be an issue for some participants, which may include both the cost of equipment but also ongoing contracts from providers for access to the Internet and mobile phone networks. Anthony feared that the costs were too much for many older people;

> "*There are people who can't afford computers or laptops or whatever. I think they really suffer because of the nature of the way things are. They are suffering in silence because people aren't aware of it*".

Accordingly, social positions could support or hinder older people adapting to and using newer technologies. These barriers were often complemented or exacerbated by other individual barriers such as not feeling confident, not being 'computer minded' and not being interested in or seeing the significance of using new technologies. Such attitudes appeared linked to the degree of technical skills possessed by the participant. This lack of digital skill and understanding of new technologies placed limits on what some participants could achieve using newer forms of technology, and so may add to a 'loneliness paradox'. For example, comparing and contrasting responses from the survey suggested respondents continue to use older technologies over newer ones. The TV was used on a daily basis by 95.2% compared to 9.7% for a games console. More than 90% of the respondents had never used a games console but everyone used their TV at some time. Also, 51.8% of respondents used their record player or cassette daily compared to 6.3% who used MP3 technology. Cross-referencing these two technologies found that no participants used both

records, cassettes, and MP3 players. Thus, participants who used these technologies either used the older or newer forms of technology to listen to music, not both. The two findings suggest that respondents favoured older technologies, that were familiar and still worked, rather than changing to newer ones with respect to these entertainment and leisure activities.

Claudia found that her confidence in using new technology was reducing as she was getting older, which impacted on her incentive to engage with the newer forms of technology. For Jenny also;

> "*The fact that technology is moving so fast. You have dipped your foot in it and then they move the goal posts*".

This *'moving of the goal posts'* could create a concern for being left behind, not being in control or keeping up. Time was a factor for some participants like Anthony who felt you needed eight days a week to keep up. Andrew talked about feeling left behind and Kim talked about the frustrations and mishaps as key services, such as banking, increasingly moved online.

This channel shift was an issue for those not using new technology, as face to face contact was diminishing in these services. Some suggested new technologies *'depersonalised'* the support they could get by forcing them online rather than focusing on personal contact. The implications of this change were often mentioned by participants where anxieties were expressed about being disadvantaged. For Iris, there was a clear discriminatory aspect to this channel shift for disabled people unable to use computers. For Amish, who did not use computers, it was highlighted when needing to use an online service for housing support;

"To tell you, I made an application to the Council for sheltered housing...the Council said 'look where there is a vacancy using a computer'. They do not always speak to us. I am not complaining but that is the way they are doing it. I send my application in writing and they said alright you do this, this and this. Find all the information on the computer. So, I am stuck".

5.5 Participants found it hard to trust new technologies

A major barrier for participants using new technologies, and a main theme that emerged in the study, was trust in using new technologies. This manifested itself in several ways. To begin with, there was a preoccupation with technology going wrong. There was a fear of doing something wrong or that the technology would break. As Samuel, an experienced computer user, observed, the computer often *'got stuck'* with updates which he found difficult to work out and resolve. For Mandy, a caution in using new technologies was the lack of understanding surrounding the legitimacy and reliability of websites and whether it was safe to download things. This was often underpinned by the lack of knowledge about digital systems and/or conflating the concepts of older technologies with newer ones. For example, the idea that emails may get stuck or computers had to *'warm up'*. This indicated the pace of technological change and the difficulties in *'keeping up'*. Roy, for example, compared technology to his old Ford car and had difficulties in understanding what was happening *'under the bonnet'*.

The fear of things going wrong translated into situations of low trust in new technologies, particularly towards areas important to participants, like finances, security, and privacy. For some participants, this meant not doing Internet

banking or shopping. Lottie when asked about the reasons for not shopping online said;

> "*I don't trust them. I know it is ridiculous because they have got my details. I just don't*".

Some participants had experienced or were aware of crime on the Internet; scamming was mentioned a lot. Doreen highlighted how getting scammed twice had made her feel foolish. Lalitha talked about a negative experience with emails that led to a virus and 'telling off' from her son. Hemel mentioned how the appearance of adverts and junk mail on his computer disturbed him. Anthony had to change his email address three times due to hacking. Such experiences and/or stories of Internet problems led many participants to be overly cautious with respect to the *'risks'* they would take with new technologies. These concerns extended to disclosing digital information which was viewed as not private. Not being 'shared with others' or not having control over the information disclosed and shared with others was a concern. Anxiety was often fuelled by media stories of young people being groomed online or of providers being hacked and personal data falling into criminal hands. A recent report in the media of a young girl murdered by a man she had met on Facebook was fresh in the mind of Doreen when she observed;

> "*I think as far as Facebook and all those, I would not join any of those. I think they are the worst thing that has ever been made up because of all these awful things. People getting bullied. You know it is dreadful and they don't seem to be willing to do anything about it. Facebook. I mean there was a case just recently, I am trying to think what it was, two or three weeks ago. Facebook say they can't do anything about it so I think there are some really negative things and I don't think old people can cope with it. In fact, they don't want to cope with computers, do they?*".

Doreen was not the only participant to express such concerns about bullying online.

5.6 Working and learning experiences shaped current and future use of new technologies

Given the barriers to using new technologies highlighted during the study, the ways in which new technologies were learned also appeared to influence their use. Positive or negative perceptions of newer technologies were often informed by previous experiences. Work was often where the first experiences were found. In some cases, these work experiences appeared to help. For example, typewriters had featured in the working lives of some participants, and these were perceived to be an advantage when learning about computers by becoming familiar with the QWERTY keyboard. Florence, who was a typist, felt these skills were a benefit, and Gloria mentioned she simply progressed from typewriter to word processor to computer. Skills like these were often transferred from work into the home/leisure and could be a predictor for successfully engaging with newer technologies post-retirement. Some participants, for example, used their technological skills to undertake and enhance their voluntary work.

Some work experiences, however, were a barrier, particularly if a computer had been used for one set function or aspect of work. Claudia had been a bookkeeper but only used bookkeeping software:

> "*I do cringe a bit, yes. It is not something that draws me, which I feel ashamed about really. I think I ought to be considering I was in an office environment for 30 years. I was working on a computer but I did accounts and so it was all based on that*

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package, the Sage package, so no sort of emails or whatever.
That's it, I am trying but I am struggling".

Learning about new technologies took many forms, and this experience could have an important impact on participants. Some mentioned using books but the most popular way of learning about new technologies was to go on a computer course or attend computer classes. This could be at a college, group or local library. In fact, the support offered by local libraries was often mentioned by participants. The quality of the course appeared to make a difference in how participants learned. For example, if the pace of the course was too quick or the instructor had too many in the class, the experience may not be positive. *'Keep using it'*, *'practice'*, *'trial and error'*, *'fumbling around'* were also mentioned as ways of learning about new technologies. For Deepak, it was important to practice and keep using it every day.

"*You have to practice. What is important to me is to send emails and that it is easy for me because I am practicing it every day. If I did not, I would lose it...it doesn't remain with you".*

Participants not confident in using new technologies often had poor experiences of learning it. This may include feelings of not being able to get their mind around using it, and not having enough support or time and so losing confidence. The time and energy required to learn could lead to giving up. Sometimes more help and support were needed but often the additional time to learn newer technology may not seem worthwhile; the pace of change in technology required ongoing effort to ensure use. For some participants, unlike younger generations, new technologies were *'add-ons'* to existing life, rather than essential and integral to it. As such, learning new technologies could appear as

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wasted time. The cost of learning and using new technologies could mean neglecting other activities. As Amish reasoned;

"*How much are you going to use it because the thing is people like me, I am quite active in other things as well*".

The findings in this study suggest success in using of new technologies may stretch back to early uses of technologies. For participants who did not use computers at work, there appeared a disadvantage in using them later. Those in previous manual occupations, or the oldest participants whose working lives predated the introduction of new computer technologies, might struggle more to adapt to using new digital technologies in this respect. Using the latest technologies for work could shape later uses, but did not guarantee competence or confidence going forward with using the latest new technology; it depended on whether this experience provided an opportunity to transfer skills from work to leisure. As previously suggested, reliance on older technologies, including older computer technologies, may create inertia towards using newer ones and so a barrier to their use.

As reported above, many participants in the study had attended some formal learning, perhaps at night school or in a library. How a person learned about new technologies was important to success. Other research has found many third sector organisations offer support to older people whether by raising awareness, providing information, advice and/or access to computers and the Internet, or assisting older people to develop skills (Age UK 2010b; Independent Age 2010; Soubati 2011; Damant and Knapp 2015). This study found, however, that the success of such learning depended on the quality, with participants

complaining that computer courses and classes were often run with too many people and allowed too little time for the tutors to provide the necessary support to use new technologies effectively.

5.7 Support from children and grandchildren was important in enabling use of new technologies

Formal learning experiences may therefore not guarantee engagement with new technologies. For some, learning new technologies may not feel like a good use of their time. A positive motivation in this respect was family support. There were two aspects to this support. First, practical support, particularly from children and grandchildren, who acted like a panic button when things went wrong. As Deepak commented about living with his family;

> "*Another important thing for me is that if I am stuck with my computer then my son or grandson will help me. I do not have to go outside all the time, the support is there*".

Some participants would look to family and often young grandchildren as *'experts'* to help them overcome problems. Thus, sometimes, grandchildren or children acted as mediators between newer technologies and their relatives by setting it up and using it for them. For example, one participant from a social group, who had a stroke, described how her 12-year-old grandson set up Skype for her and helped her go on the Internet. Amish also found he was very dependent on his son to use the laptop. For Nancy, her sons needed to be present before she would use her computer.

Secondly, families often provided the motivation to learn and use new technologies by example. Seeing children and grandchildren exposed

participants to the opportunities newer technologies provided. Esthel, for example, was persuaded by her family to adopt new ways to stay in contact using Skype and a *'chat app'*. Ajay was persuaded to buy a more technically advanced smartphone by his daughter and son:

> *"...my daughter and son said to me, 'dad you are far behind you must try and update your telephone'. So, they actually dragged me there and now I have a telephone that I use quite often. In fact, since I started using this telephone, I now use it for my emails. I have now started in the last two days. I have started using it to send my emails as well and so I don't actually have to switch on my laptop".*

There was also a recognition from some participants that they did not want to get left behind by their families, and that engaging with newer technology meant staying modern, current and perhaps 'youthful'; being part of a wider world.

Family support and motivation were generally positive, but there was also a potential downside. One participant in a social group talked about feeling pressured to use new technologies by their family, but they struggled to grasp using newer technologies which made them feel inadequate and useless. Kim described the experience of one of her neighbours. Kim felt she was being bullied by her family to use new technology despite struggling to grasp using it. Although not intentional, families could contribute to a form of ageism by laughing or mocking their older members. While visiting another social group, one woman who played Scrabble on her computer talked about how her family would laugh at her. For another participant, the fact that very young grandchildren had more of a command of newer technologies than them, contributed to a feeling of losing touch, losing control and so the loss of identity. As younger people were more likely to be competent than older people with new

technologies, this represented a reversal of the idea that the old were wise and young children/people should seek wisdom from them. As Aashi found;

> "*My 12-year-old grandchildren, they know more than me. Even the Teletext. I don't know how to still do Teletext but they come and just pick their programme and tick, tick, tick, tick and they do it. I can't do it that well. They are brought up that way. We weren't brought up that way. We didn't have a phone or nothing like that*".

5.8 Discussion of findings

There is some evidence to suggest that lack of use is not the reason loneliness persists despite the opportunities provided by new technologies for greater social contact. New technologies were increasingly a feature in the lives of older people. This has included accessing information (Olson et al. 2011; Robertson-Lang et al. 2011), making travel arrangements, doing hobbies and playing games (Choudrie et al. 2010). Some research has considered the extent to which older people are digitally excluded (Berry 2011; Damant and Knapp 2015a), and how they experience a form of ICT poverty (Anderson, 2006). A correlation between age, digital exclusion and disadvantage have also been found to exist (Wagner et al. 2010; Damant and Knapp 2015). As a result, digital exclusion is often viewed as a feature of older age (Raban and Brynin 2006; Age UK 2014; Cabinet Office 2015) and some have suggested a digital divide between older people and other groups (Olphert et al. 2005). The findings in this study, however, did not support the view that older people were digitally excluded. Technologies like mobile phones, laptops, tablets and desktop computers were being used daily by older people. Discussing new technologies also found a positive view even amongst those who did not use them.

New technologies were also being used to contact family and other people, which can potentially help with loneliness. The next chapter will consider if these remote forms of contact not involving face to face interaction made a difference to loneliness. However, the ease with which new technologies could connect across distances freed older people from the constraints of physical proximity for maintaining and developing their social relationships. Their varied use of communication channels (text and videos) highlighted the way new technologies extend the functionality of other technologies like the telephone. New technologies could mean older people were in contact with their families and friends regularly and easily, in a moment, even when they were at great distances. It made a difference being able to be instantaneously in contact with others. This study offers new findings in this respect; that some participants had moved to use texting or online applications like Whatsapp to make contact. They provided popular and efficient contact with friends and families who may be scattered across the globe, for example, due to migration histories. This aspect was also found in other research regarding ethnic minority communities (Bakardjieva and Smith 2001) but went further in this study by highlighting the newer technologies like Whatsapp.

However, although in this study only a minority of participants did not use computers and the Internet, a similar pattern of disadvantage was found compared to other studies. These studies include White et al. 1999; Cabinet Office 2004; Raban and Brynin 2006: Lai et al. 2010; Loe 2010; Wagner at al. 2010; ONS 2013b; Age UK 2014; Damant and Knapp 2015; Yardely et al. 2016). Such patterns saw the older old participants in poor health, women who

had been busy bringing up families, participants from ethnic minority communities who did not speak English, and those with lower educational levels finding it harder to engage with new technologies. Accordingly, this showed there were still structural barriers to adapting to and using new technology. Research has revealed barriers such as access and having the right skills to use them (Berry 2011; Cabinet Office 2015b). This study, like other research (Eastman and Lyer 2004; Carpenter and Buday 2007; Hill et al. 2008; Leora 2008: Tse et al. 2008; Independent Age, 2010; Sayago and Blat 2010; Williams et al. 2010; Hardhill and Olphert 2012) also highlighted that when participants experience poor health or disability, for example, they are less likely to use new technologies. Costs were also raised as a potential barrier for using new technologies, in line with other studies (Independent Age 2010; Berry 2011; Mason et al. 2012; Plant et al. 2012).

Older technologies, like TV, remained central to the lives of older people and some older technologies, such as listening to records or cassettes, remained the preferred choice for entertainment. Some research suggests not using new technologies and the lack of skills required to use new technology are strongly correlated with age (Wagner et al. 2010; Damant and Knapp 2015). Other research, that time and effort required to gain skills to get the benefits of using new technologies diminishes with age (Raban and Brynin 2006; Dutton and Blank 2011). The findings in this study support that view but also suggest a kind of inertia attached to using older forms of new technology rather than progressing to newer ones. This may contribute to aspects of a 'loneliness paradox' suggesting a distinction between those that are 'digitally excluded' and 'digitally dismissive' (Plant et al. 2012). This is, therefore, more complex than

either an unwillingness to engage with new technologies or an inability to use them (Cabinet Office 2015a; Damant and Knapp 2015). Individuals may become 'locked' into pre-existing forms of technology that they find difficult to change. This is also compounded by real concerns about becoming excluded or disadvantage by new technologies without the right support, as more services move online.

Trust and confidence become major factors in the use of new technologies by older people. Although a positive attitude towards new technologies may help to overcome concerns (Raban & Brynin 2006; Sinclair and Creighton 2015), anxiety about things going wrong and fear of crime and being scammed featured highly here, as with other research (Hill et al. 2008; Independent Age 2010; Wright and Wadhaw 2010; Mason et al. 2012). This study adds the observation that such concerns are reinforced by media stories of criminal activities creating a 'moral panic' (Cohen 1972) among older people, and so a general feeling that using new technology could result in the loss of control. Social media particularly, although a popular route to social contact for younger people was felt to support bullying and a level of disclosure not welcomed by participants. Such concerns were found even amongst those who appeared less risk-averse in other aspects of their lives. This finding contributes to the understanding of why despite richer newer types of digital connection emerging, such as social media, they were less popular among older people than older and more trusted ways to communicate and make contact with other people.

Previous experience and support from family were therefore found to be influential in supporting older people to use new technologies (Morris et al.

2007; Helsper 2008). Getting support from families, particularly children and grandchildren, was important. This support, however, could be counterproductive if sometimes family support was perceived as mockery or 'bullying'. Furthermore, as the support was often provided by children and particularly grandchildren, acceptance of this support could amplify feelings of loss of value, control, social role and intensify the frustration that the world was changing too quickly. Participants talked of being left behind. In some situations, using new technologies was mediated by families who may 'do it for' their relative in order that they could access and gain benefits from using new technologies.

In this respect, those most isolated from families could be disadvantaged. For those who lacked support, engagement with new technology has consistently been found to be more difficult (Olphert et al. 2005; Raban and Brynin 2005). The family was also important in helping to motivate participants, whether directly by encouragement and support, or indirectly as a channel for increased communication when a family was absent. The relationship between family support and using new technologies, although not an easy one, therefore, did appear to contribute to the success of using newer technologies for participants. One positive aspect of this support was that new technologies increasingly offered opportunities to keep in touch with family and other people and so potentially help with loneliness.

5.9 Conclusion

Various agency and structural factors influence the use of new technologies (Ihde 1997; Kraut et al. 2006; Ihde 2008; Brittain et al. 2010) and the meanings

people gave to new technologies (Bakardjieva and Smith 2001; Baudrillard, 2005 discussed in Lane, 2002; Bakardjieva 2006; Joyce and Loe 2010; Bakardjieva 2011). In the present study, some participants were harnessing the potential of new technology and using it positively and across a range of activities. This included social contact, which is often assumed to help with issues of loneliness. Experiences of adapting to and using new technologies, however, were still mediated by both material and non-material barriers that older people could face, like physical dexterity or trust. Social positions like gender, ethnicity and social class also still appear to hinder older people adapting to and using newer technologies, with some groups using them more than others.

It appeared some older people tend to use the older forms of new technology they have become familiar with, such as TV, rather than newer forms such as Skype and social media, although these newer forms of social contact are emerging particularly amongst the younger cohort of older people and among ethnic minorities. Family support to encourage use and to resolve difficulties when things go wrong was a vital ingredient for older people in adapting to and using new technologies successfully. Formal training appeared less effective, particularly as classes did not always meet the needs of older people. This, therefore, raises the issue of how to provide support to those older people who lack family support to fulfill this role.

Accordingly, with certain qualifications, digital exclusion and lack of engagement in adapting to and using new technologies is not the main reason for the 'loneliness paradox'. New technologies are increasingly being used by

older people and particularly for social contact with family, friends and other people. As such, there may be issues about the use of new technologies which may mean they are not making a difference to loneliness for older people. The next chapter, therefore, seeks to explore the second research question and considers what difference the use of new technologies was making to social relationships and the mitigation of loneliness for older people.

Chapter Six: Were New Technologies Making a Difference to Mitigating Loneliness?

"You cannot hug a computer and sometimes you need a hug. You need to actually look into someone's eyes and be able to touch and reach out and touch them" (Jenny 60-69 years old).

6.1 Introduction

The previous chapter highlighted how participants were adapting to and using new technologies in their everyday lives. Older people were using new technologies positively and across a range of activities. This included social contact, which is often assumed to help with issues of loneliness. This chapter considers whether new technologies were specifically making a difference to social relationships and experiences of loneliness. New technologies may or may not provide an effective mechanism for helping with loneliness or a satisfactory way for older people to curb loneliness. An indicator of this is the extent to which reported levels of chronic loneliness (being lonely often or all the time) may have either decreased or increased. The first part of the chapter, therefore, highlights findings from the study about the extent of loneliness in the context of changes to new technologies. Second and subsequently, the chapter outlines four themes that emerged from talking with participants about the impact of new technologies on their social relationships and loneliness (Table 6.1).

Table 6.1: Summary of Main Themes for whether New Technologies were Making a Difference to Loneliness

Themes
Satisfaction with the quality of contact shaped the view of using new technologies
New technologies were increasingly disrupting other social time
It was not easy to meet new people using new technology
Participants had alternatives to new technologies that helped with loneliness

6.2 The extent of loneliness in the context of changes to new technologies

Those who report chronic loneliness are often the main focus of surveys as they experience poorer outcomes and increased problems associated with loneliness in later life (Victor et al. 2009). Knowledge of these older people is therefore useful for social care organisations, social workers and commissioners, for understanding those most at risk of loneliness and where interventions could be focused and targeted. These are the people who also may benefit the most from using new technologies to mitigate loneliness.

This study found that there is not a simple correlation between the uses of new technology and loneliness. When cross-tabulating participants who used computers and the Internet with reported chronic loneliness, there appeared to be an association in their use and reduction of reported loneliness. The numbers of respondents who used computers and the internet in the survey were 104 compared to 15 who did not. Figure 6.1 shows that 52.9% of participants who used computers said that they hardly ever or never felt lonely.

This compared to 40% who did not use computers. Furthermore, 20% of participants who did not use computers reported they felt lonely often or all of the time. This compared with only 5.8% of those participants who did use computers.

Figure 6.1: Participants Feeling Lonely and the Use of Computers and the Internet
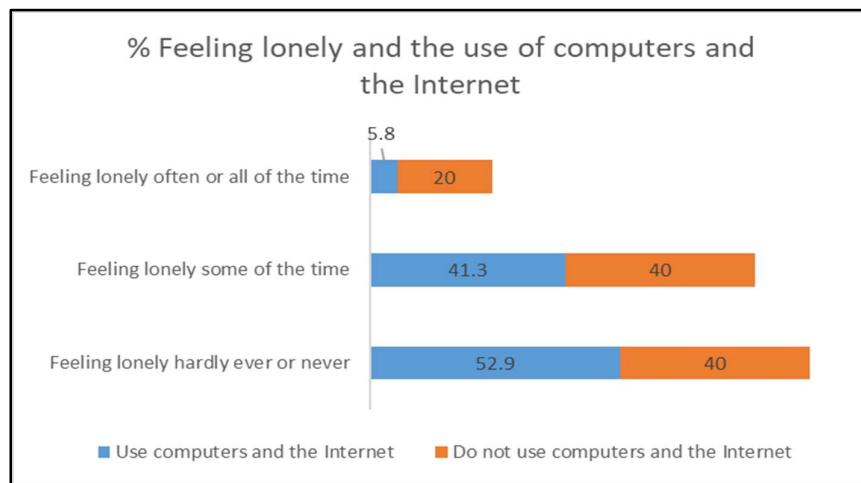
To explore this relationship further, a composite scale was developed from the survey using the question, 'If you use computers and the Internet to communicate and contact other people - do you use…'. This question asked respondents to quantify the extent they used different channels of new technologies for social contacts, and taken together, they provided a score to measure how much participants used new technologies for social contact. Scores were given for how often different forms of technological contact were used, which ranged from zero for never to three when used daily. Scores of two and one were given when used in the last week/month and in the last six months respectively. This was applied to the eight digital forms of contact contained in this question (email, skype/video conferencing, social networking, online-chat,

reading/writing blogs, forums, dating websites and sharing photos) (see Appendix One). A score of 24 was possible, indicating a high use of technology for social contact; a low score of 0 indicated no contact at all using new technologies. This scale was then correlated with the UCLA loneliness scale to establish whether a relationship existed between them. Pearson's correlation was carried out to look for this relationship, and there was evidence of a moderate relationship between the two ($r = -0.264$, $p < 0.050$). The scores are given in Table 6.2. Thus, greater use of different new technologies for social contact meant less likelihood of reported loneliness. This finding was based on the aggregated scores from the question, and detailed analysis of the different channels of social contact on loneliness was not undertaken. However, this finding suggested that using new technologies to help contact other people may help to mitigate loneliness, and this was an important finding in the study.

When considering if there has been a general population change in chronic loneliness during the increasing prevalence of use of new technologies over the last seven decades, there was no evidence this was the case. Using the single-item measure of loneliness, the survey found 7.3% reported chronic loneliness. This was comparable to previous studies of loneliness and older people (Table 6.3). Chronic loneliness has tended to be reported in between 7-10% of the sample of these studies. Since 1948, therefore, chronic loneliness for older people has remained stable, a minority but a significant feature of older age (Victor et al. 2002). Accordingly, the extent of chronic loneliness overall appears not to have changed.

Table 6.2: Scores from the Composite Scale on Using New Technology for Social Contact and UCLA Scores

	Composite Score on Using New Technology for Social Contact	UCLA Score		Composite Score on Using New Technology for Social Contact	UCLA Score		Composite Score on Using New Technology for Social Contact	UCLA Score
1	18	3	43	3	3	85	3	3
2	5	7	44	6	3	86	1	6
3	6	4	45	Missing	5	87	Missing	9
4	4	3	46	3	Missing	88	Missing	6
5	8	4	47	15	3	89	Missing	Missing
6	Missing	5	48	7	3	90	Missing	6
7	9	3	49	Missing	3	91	Missing	9
8	11	4	50	2	7	92	Missing	3
9	9	3	51		6	93	Missing	6
10	Missing	6	52	6	6	94	13	3
11	8	4	53	5	3	95	Missing	Missing
12	Missing	6	54	Missing	Missing	96	Missing	Missing
13	5	5	55	Missing	6	97	Missing	Missing
14	4	5	56	6	3	98	Missing	3
15	5	3	57	0	9	99	Missing	6
16	5	6	58	Missing	9	100	7	3
17	3	3	59	Missing	5	101	9	4
18	3	9	60	Missing	3	102	3	6
19	6	3	61	7	3	103	8	3
20	Missing	Missing	62	Missing	5	104	5	3
21	2	4	63	3	5	105	Missing	4
22	5	3	64	3	7	106	6	3
23	Missing	6	65	Missing	Missing	107	2	6
24	2	3	66	11	6	108	Missing	3
25	9	3	67	5	3	109	9	5
26	5	6	68	3	3	110	5	3
27	8	3	69	3	3	111	11	9
28	Missing	5	70	7	3	112	4	3
29	3	Missing	71	Missing	Missing	113	Missing	6
30	5	8	72	8	3	114	4	5
31	Missing	3	73	Missing	3	115	Missing	4
32	5	3	74	2	Missing	116	6	4
33	3	9	75	3	5	117	7	3
34	9	4	76	1	6	118	5	3
35	9	4	77	5	4	119	3	6
36	3	3	78	3	3	120	7	5
37	2	3	79	9	5	121	Missing	3
38	6	9	80	5	Missing	122	10	3
39	11	3	81	Missing	Missing	123	0	3
40	Missing	8	82	2	9	124	Missing	5
41	5	4	83	8	8	125	6	3
42	Missing	Missing	84	3	3	126	0	9

Composite Score n=82. UCLA Score n=112.

Table 6.3: Comparing This Study with Previous Studies

Author	Study Area	Sample Size (%)	Very/ Often/ Always Lonely (%)
Sheldon 1948	Wolverhampton	400+	8
Townsend 1957	London	203	5
Tunstall 1966	4 Centres	526	9
Shabas et al. 1968	Great Britain	2483	7
Bond and Carstairs 1982	Clackmannan	1000+	7
Wenger 1984	North Wales	683	5
Jones et al. 1985	South Wales Mid Wales	654 628	5 2
Bowling et al. 1991	Hackney Essex	1053 288	16 8
Scharf et al. 2002	3 deprived inner-city areas	595	16
Harris et al. 2003	South London	1214	9
Victor et al. 2005	Great Britain	999	7
This study 2018	England urban and rural	126	7

Source: Table Adapted from Victor (2011)

This finding is surprising given new technologies wider use for social contact by older people as recorded above and leads one to question what difference new technologies have made to their experiences of loneliness. In other words, older people today appeared no more (or less) likely to report being chronically lonely than previous cohorts, despite using new technologies.

During the interviews, mixed views were often expressed about whether or not new technologies helped with loneliness. Participants were asked if they felt that new technologies, like computers and the Internet, could help people overcome loneliness. Several views emerged either drawing on their own experiences, the experience of others or perception of the opportunities/barriers

that new technologies could offer. These views were often contradictory given that participants could see both strengths and opportunities but also difficulties and threats for lonely older people. Esthel captured this contradiction:

> "*I think technology is very positive. I think if I was not aware and didn't use the technology and just kept the old-fashioned way, I think I could be very lonely. On the other hand, it perhaps would encourage me to go out and about more and make personal contacts. So, you know it is again positive and negative*".

When respondents in the survey were asked if they felt that new technologies made people feel more friendly, 27.9% agreed, 23.7% disagreed but the majority (48%) neither agreed nor disagreed. Accordingly, nearly half of the respondents were unsure. When asked if new technologies make people isolated and lonely, 11.3% agreed with this statement compared to 47% who disagreed. Again, there was some uncertainty and mixed views with 41.7% neither agreeing nor disagreeing.

Those in the survey who reported chronic loneliness were also more likely to see new technologies as less helpful for supporting their social relationships. Thus, 55.6% agreed that new technologies could help keep them in contact with other people, compared to 90.3% who were not chronically lonely. Furthermore, those reporting chronic loneliness were also more likely to agree that new technologies could make people lonelier; 50% compared to 11.3% who were not chronically lonely. Figure 6.2 compares those respondents who used new technologies and reported hardly ever or never feeling lonely with those reporting chronic loneliness.

Figure 6.2: Using New Technologies and Loneliness

% Using new technology regularly and daily and feeling lonely hardly ever/never and often/all of the time
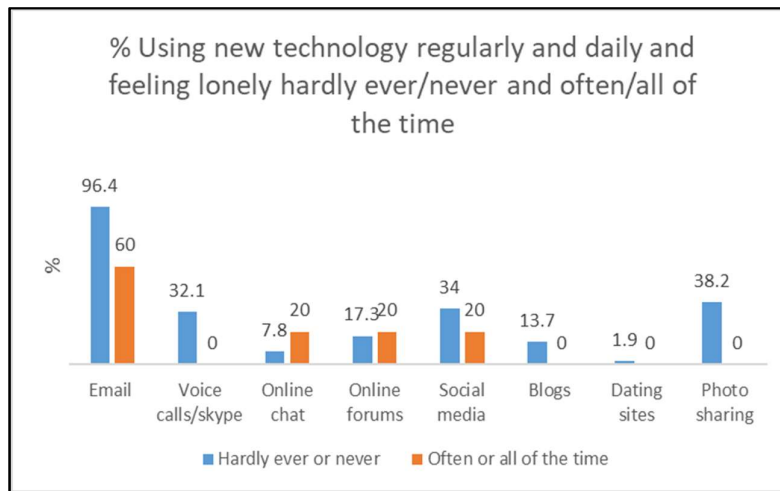
Those who did not report loneliness were more likely to use new technologies across a broader range of online contacts (Figure 6.2). The graph also highlights that those who reported chronic loneliness used email and social media less than those who were hardly ever or never lonely. Those with reported chronic loneliness were more likely to use new technologies like online chat or forums, which did not necessarily require existing personal relationships. This may be because chronically lonely people have fewer and possibly no other people to interact with, so may turn to anonymous online sites. This tends to suggest an association between using new technologies, existing networks, and loneliness, where lonely respondents may be more likely to use technological social connections that do not require a pre-existing social network. Older lonely participants who used new technologies, therefore, may have benefited from this particular online contact. Accordingly, those lonely and with limited social networks may use new technologies for social connection differently from those with existing networks. Despite this potential, however, chronic loneliness remains for some older people. Thus, how satisfying

technological social contacts are may depend on the context and situation of individuals. A theme that emerged during the interviews was that the quality of such contacts did shape a participants' views of using new technologies to help with loneliness.

6.3 Satisfaction with the quality of contact shaped the view of using new technologies

While many participants were using new technologies to keep in touch and make contact with others and so be *'nearer'* to them, this did not mean *'closer'* to them. For some interview participants, new technologies may be replacing existing face to face contacts, and these substitute forms of social contact did not satisfy them. Thus, the quality of contact was important. The *'personal touch'* was mentioned as important and the *'personal touch'* in this respect was seeing or speaking to a person - face to face. Hemal, who regularly used new technologies and reported loneliness observed his family were visiting less making them seem more distant:

> *"Sometimes even my children, my son, I see him after two weeks. They used to come down and say 'how's mum?' And 'how's dad?' You know but now with this mobile, if they have gone out, they will text me 'how's mum?' And so that personal touch has now gone which I feel is one negative point about this technology. It has taken over that personal touch".*

As Jenny, who also regularly used new technologies and reported loneliness observed (at the start of this chapter), you cannot hug a computer. Thus, although it may be easier and more convenient to have contact using newer forms of technologies, it was not necessarily positive for all participants.

Newer technologies created new ways of contact for older people but not necessarily effective interaction for them. Differences existed in how technologies mediated the experience for some participants. The intimacy of a voice on the phone rather than a text may be preferred. A text may hide expressions and not reveal sadness. As Doreen felt, the voice was able to indicate how a person was feeling, a text was not;

> "*I like to speak to them because I like to hear voices. You can tell whether a person is happy and not well from a voice. So I prefer it*".

Lottie, whose relatives lived abroad, preferred conversations by phone above other technological forms of contact and found the process of writing emails an effort. Gloria wanted to make a distinction between personal (a phone call) and general contact (a text); the former requiring greater intimacy. For some participants, like Deepak, there was a kind of unwritten hierarchy of contact with face to face first, then the phone, and lastly emails. Face to face was seen as more personal, with texting shallower. Nancy also wanted to make a distinction between the intimacy of emails, phone calls and letters, where the *'old fashioned'* letter was preferred by her:

> "*I like old fashioned letters. I keep up with college friends and we write to each other and ring each other up. I would much rather do that than email. I would rather have a letter every two or three months, a nice long letter than an hour's phone call or have an email every day*".

Social media came in for some criticism because it could be perceived as creating trivial rather than substantive and meaningful contacts. Some participants felt that it was about gossip and risked their loss of privacy. There

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was a concern that it was hard to 'take things back' and people used these platforms to artificially compare themselves to others. Although these are valid criticisms of social media across all ages, for older people, there was a disbelief that social media was so popular. Esthel, for example, could not comprehend why people would want to share personal information that others could see.

> "*Quite honestly, from what I read about Facebook, I know it gives you information but some of the stuff. Why would people put personal stuff like that? For the rest of the world to see? I just can't understand. It is incomprehensible and I think a lot of older people may still think like that. Younger ones, I don't know. They don't think anything of it, do they? I mean some of the stuff that you read that supposedly has gone on Facebook is absolutely ludicrous. I don't get it. Are they stupid?*".

Some technological contacts, therefore, could be perceived to offer an emotionless and trivial experience for some participants. Talking '*to*' or through computers, even using video or images did not necessarily substitute for personal contact when desired. Nancy, for example, had grandchildren living abroad and did not like the way Skype was mediating interactions and shaping her relationship with them.

> "*I have four but three are in America. I don't like this seeing them on the screen. It is great talking to them and they see grandma sitting there and you talk to them but I don't like it. That little square sitting like this. You don't see a moving person. Mind you they are only young. I don't like it. I do Skype when my son is coming around. I don't like myself being photographed. You see this picture of you. With adults, we can talk. With the children, I just don't feel they get the right impression. Grandma is the one that sits in the corner of the screen whereas the grandkids over here they know me and what I can do with them. In America, they just think grandma is that bit on the screen. It might be the modern thing with all the kids doing Skyping but I don't like it*".

For Kim also, the quality of her contact using Facetime was not always satisfactory. For both women, the interaction with children using this technology was easily distracted and the level of intimacy lacking. Accordingly, how contact and interaction were experienced was important for participants and made a difference to how satisfying it was. Intimate rather than shallower interaction was regarded as more important, particularly with significant others like children and grandchildren. Just *'keeping in touch'* using newer technologies was not always as meaningful in this respect.

This sense that new technologies could create a 'false consciousness' of social relationships, lacking authenticity, was also found in other respects. For example, whilst some were unhappy with the social contact new technologies provided, for others, they presented a new opportunity to give the impression of being socially connected or having family and friends. The motivation may be to avoid the perception of their loneliness among peers. This caused bewilderment for some participants. Florence, for example, talked about a woman in her social group who used her mobile phone to call people during the group and who she felt wanted to give the impression of having friends despite being lonely.

> *"A woman I sat next to the other day was on her phone. 'What are you doing? I am just phoning'… 'but you are in company'. So what are you doing that for? To show you have got someone? I can't do that. I know she is lonely because she often says things. They all do it. I am the one that doesn't do it. I think it is better for them because they feel they are friends with people when they are not really".*

For Hazel, also, she mentioned a friend using new technology to create a 'family tree' despite being alone.

"I have a friend who is into computers….She does a lot of family trees, looking up all these relatives. I find it dubious because she is totally on her own, bless her. She hasn't got any brothers or sisters or children or even married. I think she finds all these cousins and relatives for the sake of it. Whether they are her cousin and relatives, is anybody's guess. She goes off you know, looking for them and she'll say, 'I am seeing my cousin' and I think how can she have a cousin? I am not sure how that works because from what I understand, her parents didn't have any brothers or sisters and so how can you have cousins? I don' know".

Here new technologies appeared on the surface to be helping social relationships but underneath may be hiding loneliness.   As such, new technologies were perceived as potentially detracting from *'real'* relationships in favour of *'imagined'* or virtual ones. For those participants who witness these behaviours, this created frustration, and dissatisfaction. Although only found with respect to these few older people in this study, this use of new technologies may also apply to younger people.

6.4 New technologies were increasingly disrupting other social time

There were concerns that new technologies were interfering with and disrupting social occasions and manners. Several aspects of the ways in which new technologies interfered with social contexts and social occasions existed, which participants found difficult to understand and engage with. Iris, for example, felt it made people less social as they tended not to speak when *'fiddling'* on their mobile phones. Some participants saw younger people as being 'addicted' to their computers and mobile phones. This was seen to distract young people from personal contact and create an environment of interruptions and interference for some participants. Betty and her husband Jim, for example,

observed their great-grandchildren and how this meant less interaction with them.

> Jim: "They are very much into their iPads, aren't they?"
> Betty: "They are. They have all got little pads and will sit rumbling away with them".
> Jim: "In fact, most of the time when they come and see us they are sitting playing with the iPad. You don't get much interaction with them".
> Betty: "No, you don't. Like when you used to get the kids, they used to play and that. They don't do that these days".

As Florence also found during the social group she attended, younger attendees would be on their mobile phones rather than interacting. These examples seemed to represent a significant change in social values, norms, etiquette, and manners for these older people. Time spent on computers, mobile phones or tablets, was time not spent with them. Getting communication instantaneously meant that new technologies were increasingly disrupting everyday life. It was difficult for some participants when they had lived in an era before new technologies and family interaction was not affected in this way. These situations resulted in families no longer spending as much quality time together as before. It was quality time that participants wanted. For some participants, using new technology in company was perceived as anti-social and created less satisfying interactions, whereas, for younger generations, this was 'normal'. New technologies could, therefore, be seen as interrupting social life and getting in the way of face to face relationships. New technologies were also becoming integrated into face to face contacts helping to stimulate conversations. This meant that it was no longer easy to discern where technology and human contact differed. This led to fears about future interactions. As Hemel said:

> *"Only if the computer comes and there will be no face to face talking. We will just do through video. That is alright but I hope talking will not be just like that. Sometimes I talk to people and that fear is the worst thing".*

This penetration of new technologies in respect of these social occasions was increasingly becoming more common and perceived by participants to be mediating social experiences in a negative way. This behaviour appeared to leave participants unsettled and fearful that their social relationships were losing out to these new technologies.

6.5 It was not easy to meet new people using new technologies

Whether new technologies were helping to widen social networks and meet new people could be an indication of how new technologies may help older people with loneliness. For interview participants, new technologies had been important in establishing new contacts, groups, and friendships. For Samuel, this was by using email first but then face to face meetings. Ajay also talked about how an email friendship group had expanded and gone *'global'*. However, despite what appeared to be advantages of using new technologies to establish new friendships, most participants were still cautious. The issue of trust and the anxieties over *'who'* was in contact with them continued to be a concern when considering meeting new people online. As Esthel stated:

> *"No. I am a firm believer in personal contact because I feel that if people see you and get an idea of who and what you are and what you stand for. They are more trusting then of wanting to connect and so the Internet. I have had people sending me an email because they had heard about me from somewhere. There must have been some respect or something or they had seen me operate somewhere and they then contact me but I think the initial thing should be personal contact because that*

establishes some kind of trust. Computers and technology opens out and thereby could be a danger as well".

For Lalithia, *'knowing'* the person was important, and she was concerned about establishing contact with new people over the Internet before meeting them. Jenny raised the possibility of danger if people were not cautious about who they meet online and for Roy, making contact online was fine but establishing friendships went too far. A reluctance to use new technologies to make new friends may have indicated a lack of trust of new technologies but it was also associated with a particular view of how friendships were made. This prioritised the importance of physical contact or presence and the difficulty of getting to know a person online. As Claudia observed,

> "*I find that hard to understand. If you have not met the person how. I suppose it is a bit like this online dating thing. I mean I just don'tunderstand how that happens. I mean talking to each other over the computer".*

Lydia also remarked about a friend who had found love online but that it was not something she wanted to do. Roy thought that maybe younger people understood and were more comfortable with using new technologies to meet friends than older people were. Joshita also felt younger people found it easier to meet new people using new technologies; something she didn't want to do. For other participants, new technologies were perceived to make either no difference in extending their social networks or they were content and satisfied with what they had.

> *Doreen:* "*Oh no I wouldn't do any of these, whatever meeting things, no. I know so many people. I am not looking for a fellow, let's put it that way and so I would certainly not go on those*

sort of programmes. I don't need to. I have got all my friends. I have got loads of friends".

Florence: "It has not made much difference to me, to be honest. I like to go out and about and it is not very often I am in. I have got quite a wide range of friends".

Philip: "Not a lot of difference. Not really. I've got a wide circle of friends anyway".

Some participants, therefore, did not aspire to use new technologies to meet new people. However, for other participants, this limited the extent to which the Internet could be a space for them to meet other older people and make peer friendships. Mandy, for example, had struggled to get her peers from a stroke club to respond to her emails. If participants were members of particular communities, the Internet had great potential but was limited by this lack of participation from other older people. Melissa from the LGBT community, for example, found it limiting in respect of meeting a new partner, but important in bringing dispersed people together.

"I think the fact that I identify with the LGBT community, the Internet has been good. We are more geographically dispersed, so it goes back to that idea of intimacy in geographical and spatial separation. The Internet collapses space and time, doesn't it? That is helpful in terms of sparse populations such as LGBT".

6.6 Participants had alternatives to new technologies that helped with loneliness

In light of these issues, were there other ways in which participants in the study tried to tackle loneliness? For some participants, older forms of technology like the telephone, radio and TV could offer more satisfying distractions, breaking of silences or virtual contact in lieu of real human contact, compared to newer technologies. The telephone remained a particularly important way for social

contact amongst participants in the study. Both landline and mobile telephones were important in this respect by providing communication that was often described as more intimate than other forms of new technologies like social media. Over 99% of respondents in the survey used a telephone to contact friends and family compared to 37.9% using Skype and 33% using social media. When asked about contact on special occasions like birthdays, 72.8% made contact by the telephone and 51.8% by meeting in person (see figure 6.3).

Figure 6.3: Methods of Contact on Special Occasions
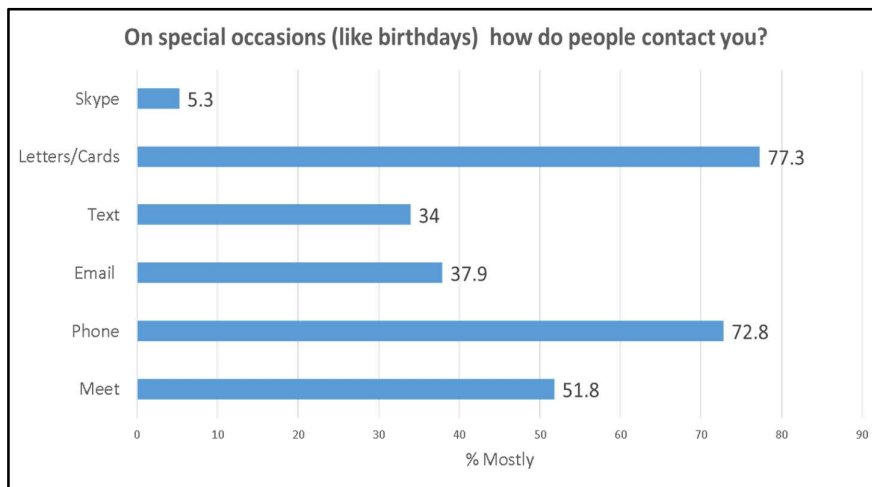
Although email was used on special occasions in respect of newer technologies by participants, overall the main forms of contact used were the older media. Newer technologies like email and Skype, therefore, may be emerging and could become important in the future, but at this time they may not be as satisfying for participants or have yet to '*catch on*'. Either way, older technologies still provided an important alternative to newer ones for participants.

Joshita and Aashi, for example, found listening to radios helped to mitigate loneliness, and equally for Nancy:

> "*I listen to Harry Potter. I can lose myself in a good book. I have always found this best if you are frustrated that you cannot get out and it is nice day. I have lots of talking books but the only trouble with those is you go to sleep. I have a radio in every room, even the bathroom. They are on Radio 4. It keeps you up to date with the news, general talk and other people's point of views. I have got it in every room. I could live without the television but not the radio. You go into some people's houses and it is so quiet, it is deadly quite all round*".

Solitary pursuits like these were often satisfying but preferences were often expressed for face to face contact. The context and nature of this contact were important but overall technology itself, as one participant stated, *'doesn't make life wonderful'*. Other *'non-technical'* social activities, therefore, remained very important to older people. For example, Nancy liked to play Bridge, Melissa was involved with a walking group, Doreen attended the University of the Third Age and Amish enjoyed a yoga group.

One concern sometimes expressed is that new technology may be displacing other social activities (Morahan-Martin and Schumacher 2003). Asking respondents in this survey revealed 86.9% reported membership of an organisation, social club or group. This may not be surprising given many respondents were recruited through social groups. However, respondents were also asked which activities they took part in. Figure 6.4 considers the percentage of respondents who said they never took part in certain activities. Approximately a third of respondents said at present, they never went to the cinema, to a museum or gallery, the theatre, a place of worship or the pub.

Figure 6.4: Activities Never undertaken by Respondents
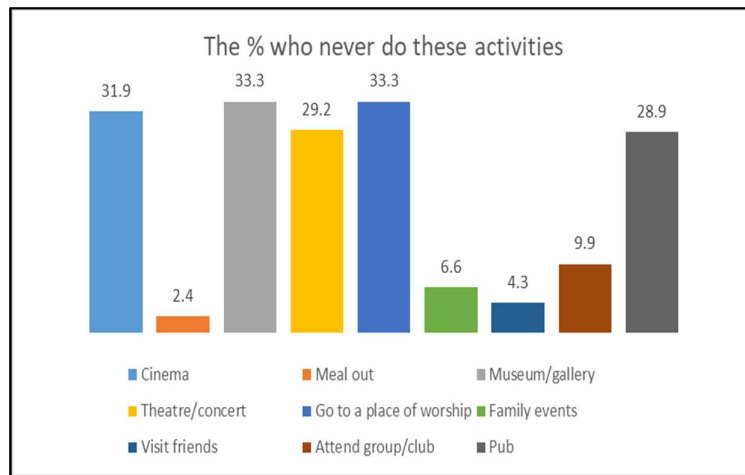
Thus, many respondents did not use certain mainstream social activities. However, going out for a meal, going to family events, visiting friends and groups were the most popular types of activities. A small number, 6.6% did not go to family events and 4.3% did not visit friends. Of those who never visited their family, 50% also did not visit any friends and these respondents might be described as very socially isolated.

Considering social activities and the use of computers and the Internet, new technologies were not found to be displacing other activities which involved face to face contact. As Figure 6.5 shows, comparing those that did not use computers with those that did, less involvement was seen in these face to face activities. For example, 94.1% of those that used computers also went to family events compared to 85.1% who did not use computers. Those that used new technologies were, therefore, somewhat more likely to be involved in social activities like family events, visiting friends and attending groups than those who did not use new technologies, alleviating fears that using new technologies meant less real contact.

Figure 6.5: Social Activities via Computers and the Internet
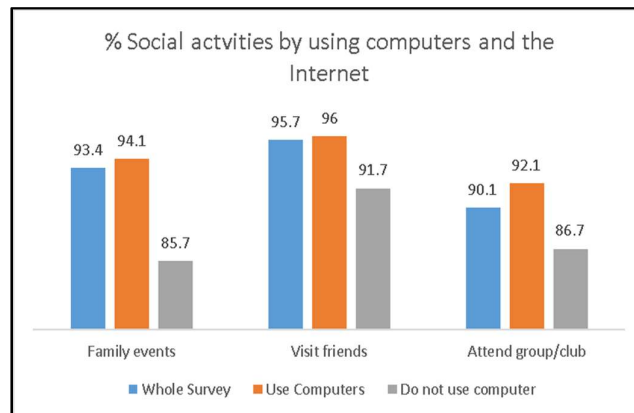
Disadvantage may exist which affects both real social activities and the use of new technologies. Those who are digitally excluded appear more likely to be socially excluded according to these findings. It is not the use of new technology, therefore, that threatens face to face contact *per se*.

For most participants in the interviews, physical contact and presence were still central to social relationships and social participation, even when using new technologies. Even shallower *'real'* contact; a walk to collect a paper, being able to say hello or observe *'real'* people outside walking past the home, might be more satisfying than contact by text and screen. For some participants, new technologies could neither replace nor create new social networks with any guarantee. As Jenny remarked:

> "*You can become too reliant on virtual reality rather than real reality, where you actually contact people where they are actually with you*".

Several participants in this respect felt that new technologies did not necessarily help with loneliness and may actually contribute to it in terms of facilitating isolation. Iris, for example, in the context of online shopping, felt it could mean

never having to socialise. Philip also expressed concerns that using new technology may displace face to face contact. For Matthew, the issues were more fundamental in that new technology provided communication but not *'presence'*, and Andrew didn't feel new technologies could facilitate emotional disclosure, and instead, encourage people to be more 'closed' to others. Samuel, who was an advocate of new technologies, felt that it was a mistake to put new technology before meeting people for real. Also, for Ajay, who was an active user of new technologies, anxieties existed about less human contact and technology even though he felt new technologies had been good rather than bad. For him, overcoming loneliness was essentially about *'opening up'* to people. He provided a stark reminder of the fragility of life and what might motivate older people to get involved more in social life and make contact with *'real'* people.

> "*Anybody who feels lonely should open up. That is the first thing I would advise. Get out of the house, do something that you enjoy. This guy, Don, I cannot remember his second name now, it is too long ago. He retired. The managing director came in and gave him a big wall clock and that was at 4.00pm on a Friday. He went home and at 5:15 pm his wife rings and says that he has passed away. So, his retirement was one and quarter hours from 4.00pm to 5.15pm. People do have a shock and loneliness can be one of the results of that. He had never known anything else… So, for me, if somebody says they are lonely, the first thing would be to get out and join the groups. There are groups running around, so many of them. Do voluntary work which I do. Then you meet up with the people who you would never probably meet in your life*".

6.7 Discussion of findings

Having access to new technologies and using them for social contact appeared to help and potentially mitigate loneliness, as found in other research

(Bakardjieva and Smith 2001; Age UK 2010b; Independent Age 2010; Blažun et al. 2012; Mason et al. 2012). For those with existing networks, the possibility of instant connection with family and friends using new technologies potentially helped to mitigate the risk of loneliness. For those without existing networks there may be the potential for anonymous contacts. Other research has found that anonymous technological contact can be beneficial for lonely people (Morahan-Martin and Schumacher 2003) and this might be extended to supporting chronically lonely older people to access online platforms for social contact that do not require existing social networks. Most participants, however, preferred face to face contact where possible.

Some participants felt computers created a less intimate form of contact. Being able to hear, touch, be close to or just be in the presence of the other person was often described as the most important aspect of the interaction for them. Telephone conversations, either using a landline or mobile phone, remained important because they appeared to offer a similar kind of intimacy to being in the presence of a person, particularly if geographically separated. The use of telephones is a form of technology which older people have now become accustomed to, despite earlier concerns that they trivialised and replaced face to face contact (Tufecki and Brashears 2014). Newer digital technology such as Skype appeared lacking, however, in respect of the quality of contact in comparison to real human contact.

Such issues may arguably be due to new technologies being new and the barriers that exist to their use. As Tufecki (2011) and Tufecki and Brashears (2014) suggest, there may also be a form of 'cyberasociality' connected to using

these new technologies. This sees online interactions as being 'hollow and less authentic' than face to face interactions or the telephone (Tufecki and Brashears 2014). This was the case for some participants in this study and thus extends this finding to older people beyond the college students of these original highlighted studies. Such ideas may also help to explain why loneliness persists even with greater social contact through the increasing use of new technologies.

For some older people, close relationships may not be formed without meeting the person. Having close personal relations mediated through new technologies appear mutually exclusive for them. Thus, for some participants in this study, technology-mediated social contact in a negative and unsatisfying way compared to being able to see or talk to the person, in person. Demographic issues like ethnicity and gender do not appear to determine this experience, nor do the density and intensity of existing offline social networks, as some participants had both aspects. Newer technologies simply did not appear to offer the level of intimacy wanted by some. Even media like Skype, where video existed, could not substitute for this intimacy. In some cases, this appeared to further add to a lack of satisfaction and even loneliness when it reinforced the distance between children and/or grandchildren. New technologies, therefore, risk making some older people feel that their relationships are becoming less rather than more meaningful. This potentially creates a kind of psychological 'digital divide' for some older people when using new technologies for social interaction, meaning it is unlikely to mitigate loneliness.

The use of new technologies for social contact also tended to be based on existing social relationships rather than making new ones. Taken together with

the other findings, it appeared that older people still preferred traditional methods for making friends and relationships (Sayago and Blat 2010). This was also found in other research where new technologies at best reinforced existing relationships but did not expand older people's social networks (Damant and Knapp 2015). Accordingly, although some participants said that new technologies enabled them to reach out to others and take part in online groups, for others, they were either fearful over disclosing information about themselves to others online, or reported that their existing relationships were adequate for them and so they did not feel the need to meet new people online. Again, this may contribute to the 'loneliness paradox'.

In addition, new technologies are also encroaching on time spent with other people. Other research has suggested that new technologies like mobile phones are disrupting social interaction at mealtimes and in social situations like eating out (Humphreys 2005). Furthermore, it suggests that the presence of new technologies during face-to-face conversations in these situations also negatively impacts on relationships (Prybylski and Weinstein 2013). This study extends this finding with respect to the views of older people. That new technologies were small, mobile, instantaneous and enabled constant connection meant distraction and lack of presence during face to face interactions. For many participants interviewed, this was unwelcomed and a sign of poor manners. In turn, it may contribute at least to unhappiness if not loneliness.

There was a general sense amongst most participants that new technologies could go too far, and reliance on them could become negative rather than

positive in respect of loneliness. Participants therefore looked for other ways to manage loneliness or were involved in a variety of other 'real world' activities which ranged from going shopping, voluntary work, attending groups to listening to the radio and meditation. Although some research has suggested that social contact is assumed to simply reduce loneliness (Peplau and Perlman 1982; Hogan et al. 2001; De Jong Gievald et al. 2011; Jopling and Sserwanja 2016), these findings support the view that traditional loneliness interventions and services aimed at facilitating face to face social contact may remain important for older people. In this respect, developing technological interventions to alleviate loneliness should complement and not replace real social contact to help with loneliness.

New technologies do not, therefore, help everyone in the same way. Thus, for example, the lack of participation with online social platforms such as social media (Baker et al. 2013), the fear of online strangers, the fear of disclosing information online (Sum et al. 2008) and the lack of satisfaction with the quality of online relationships (Cummings et al. 2006) are all negative aspects of using new technologies highlighted by participants in this study. They all indicate that new technologies do not necessarily help with experiences of loneliness. This supports other research which includes older people, where new technologies are less useful for mitigating loneliness (Kraut et al. 1998; Nie and Hillygus 2002). Some have asked whether technology can actually induce loneliness (Stivers 2004). This fear was often expressed by participants during interviews regardless of gender, ethnicity, disability, sexual orientation and experiences of loneliness; that as more social interaction moved online, there may become fewer opportunities for personal contact.

6.8 Conclusion

These themes contribute to a mixed picture of the impact of using new technologies to help with loneliness. Despite the increasing use of such technologies by older people for social contact, the extent of chronic loneliness did not appear to be changing. This study continues to support the finding that between 7-10% of the older population are chronically lonely regardless of the use of new technologies. This chapter has focused on what participants said about the difference new technologies were making to their social relationships and whether they helped to mitigate loneliness. It found that using new technologies was increasingly important in terms of keeping in touch and maintaining social contact. This can help with loneliness, supporting the view that the nature of new technologies does not contribute to a 'loneliness paradox' and can help with loneliness. However, this was not the same for all participants, even those that used new technologies for social interaction. For some, technological social contact is not satisfying and so will not help with loneliness. The quality of the social contact is different to personal contact; new technologies are disrupting social time (which is largely perceived as negative by older people), and using new technologies will not necessarily lead to meeting new people and enhancing social networks that are believed to help overcome loneliness.

There are therefore mixed views on whether new technologies can mitigate loneliness considering these issues. Some writers have suggested that new technologies may potentially both help and harm older people in respect to loneliness (Damant and Knapp 2015). This helps in part to understand why loneliness persists despite the increasing use of new technologies for social

contact. Furthermore, the themes that emerged in this chapter suggest that experiences of loneliness are not unidimensional and so cannot simply be reducible to social contact, an issue highlighted in the literature review. In this respect, there may not be a simple correlation between increasing social contact and a reduction in loneliness. To understand this further, the next chapter will explore the experiences of loneliness found in this study. The aim will be to explore how these experiences may help us understand loneliness, and so develop an alternative way to approach the question of how new technologies may help.

Chapter Seven: Experiences of Loneliness

> "*The answer to that to me is that if you have ever been lonely, then you know what it is like better than anyone else. You have got to experience these things to find out what happens*" (Albert 70-79 years old).

7.1 Introduction

This chapter explores older people's experiences of loneliness to understand what these experiences tell us about using new technologies to help with loneliness. The themes that emerged in the previous chapter suggest that the use of new technologies and experiences of loneliness cannot simply be reduced to one aspect, such as lack of social contact or social isolation. Some older people may continue to be lonely regardless of using new technologies for social contact. The complexities of the phenomenon make it hard for new technologies to help in all respects, suggesting that the 'loneliness paradox' may be explained by these complexities.

As outlined in Chapter Four, thirty semi-structured interviews were undertaken with older people to consider this and the qualitative aspects of loneliness. Observations from the fieldwork and reflections taken after interviews also inform these findings on loneliness. The aim is to explore how these experiences help us understand loneliness in more depth and suggest other ways that new technologies may help. Several themes are documented, described, and analysed. They are developed into a narrative to present the findings, drawing out relevant quotes from participants that may help us understand the nature of loneliness. There were five main themes which emerged in this respect, which are outlined in Table 7.1. The discussion starts

by considering how, like Albert, in order to understand loneliness, you have to feel it, and how loneliness is often triggered in the moment.

Table 7.1: Experiences of Loneliness – Summary of Key Themes

Themes
Loneliness had to be felt and was triggered in the moment
Changes to identity are important for loneliness
Loss and grief led to loneliness
Less choice and control facilitated loneliness
Poor health and disadvantage made loneliness worse

7.2 Loneliness had to be felt and was triggered in the moment

Dark nights, poor weather and cold winters could all make a difference 'in that moment' and trigger loneliness. Some participants, like Anthony, felt their experiences were unique and that to understand it, there needed to be some experience of it. Albert, a resident of a residential home, identified with this perspective as the quote at the start of this chapter shows. Loneliness may be triggered by different 'unique' personal moments. For Betty and her husband Jim, they reflected that Sunday was a particularly bad day for them because it was the day Betty used to go to the car boot sale.

> Betty: *"It is just an overwhelming feeling [loneliness]. It is honestly. No one can, I mean, I can't describe to you. You have got to actually feel it. It's, I mean, you know, I sit here and I watch people going out and about and I think, oh they are going out again over the road [to the car boot sale] and it sets me off sometimes"*.
> Jim: *"That is why Sunday is so bad isn't it? When you see people…"*.
> Betty: *"When you see them going to the car boot because they do a lot of car boots over the road and I watch them going over to the car boot"*.

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These 'in the moment' experiences could be profound and disturbing. They could happen suddenly or be a reaction to planned events. For Mandy, the trigger was after contact with her family. This was the moment loneliness felt most intense. Matthew recalled an occasion when on holiday where loneliness struck when he was not able to share his feelings with his wife who was at home. Not being able to see her triggered anxiety and feelings of loneliness in him. Anthony recounted a trip to London and how he experienced a feeling of alienation and loneliness on the bus.

Experiences of loneliness could also be triggered by symbolic events. This included particular times which reflect personal experiences or wider symbolic cultural events shared by all, for example, Christmas. Christmas time is generally seen as a time which is difficult for lonely older people. It is a time often associated with loneliness by charitable campaigns undertaken to highlight the issue of loneliness amongst older people. For Kim, who was living in sheltered accommodation and whose family were living abroad, spending Christmas alone prompted her into action to avoid loneliness and to fly out to see them.

Habits, such as couples socialising together, also reminded people of someone who had died and so could lead to further experiences of loneliness. Where these habits persisted, it appeared to lead to a greater intensity of loneliness, regardless of the passage of time from their loss. This involved cultural expectations such as being part of a couple, and it raised awareness of loneliness when compared to others around and resulted in distressing experiences of loneliness being triggered. Ajay found that the loneliness was

triggered by others who mistakenly invited him and his wife to special occasions after his wife had died:

> "*The only time I would feel lonely is where there is, for an example, an invitation with Mr and Mrs on it. That time it can sort of hit me hard that I am on my own. I mean because so many people don't know about your life, they usually sent Mr and Mrs, so and so. And so that is the only time when it hits me. Apart from that, I am OK*".

Coming home alone to an empty house was mentioned as a trigger to feelings of loneliness, and these were often linked to memories of loss. Roy described his feelings of loss when his son left home for university. Losing the daily routine of sharing things, the habits of the day and having someone around had a negative impact on him. Florence described why she preferred to change her habits and sit in her conservatory rather than her sitting room, as it reminded her of her husband. Fredrick often experienced this feeling when events triggered memories about his wife:

> "*I was married to my wife for 63 years. When that is suddenly chopped off, after the first bombshell, the feeling goes to a slightly lower level. You know it is not a physical injury but little things. For example, you are watching television and you see someone mentioned who was of interest to your partner and you suddenly find yourself saying, 'oh did you see that? Then you realise there is no one there*".

These triggers of loneliness appeared to be equally shared amongst both men and women. The findings from the survey, however, showed that women were nearly four times more likely to report they were often lonely or lonely all of the time. Equally, 73.8% of the men reported feeling hardly ever or never lonely compared to 39% of women. Participants were asked during the interviews whether they felt men and women experienced loneliness differently. Some felt

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that it is easier for men to 'go out' at night and meet new people, particularly when looking for intimate partners. Samuel, for example, felt there were 'obvious dangers' for women going out alone and Iris felt it was easier for men to go out to pubs, and that it carried a different message if women were going out on their own. Kim identified with this and described how she had felt brave going out for a glass of wine on her own. Despite these perceptions, some participants felt the reason was that men were not as open and social as women, and men were more likely to hide loneliness. Lottie felt that women had a greater intensity of emotion. Observations at interviews supported this notion, as women appeared more open to discussion or acknowledged their feelings and experiences of loneliness. Some men talked about how difficult it was to express their feelings. As Matthew suggested;

> "*Well, it is such a painful reaction that I don't think I have ever thought about it very much. That's my immediate reaction. I don't like thinking about it because I know that loneliness is painful*".

Andrew highlighted how difficult it is for men to be social or trusting of other men and that there were cultural barriers like homophobia, which may act as a barrier to men seeking each other's company. Men appeared not to always say they were lonely. A reflection from a group discussion at a visit to a men's group, which aimed to alleviate loneliness, noted that men may define loneliness as missing the 'crack' with other men. The co-coordinator of the group mentioned that men came to the group for some sort of peer support but talk of loneliness created stigma and denial, even though underneath the banter, feelings of loneliness may exist.

For this generation, men had 'traditional roles' and these roles had an impact on later life and shaped their experience of loneliness. This was particularly the case with respect to everyday practical tasks of taking care of themselves. As one woman said, 'men sit there stewing'. As Fredrick put it;

> "*The men are used to coming back to a welcoming wife, who puts a meal in front of them. When all that is gone, they come back to an empty house and no meal. So, there is that basic issue and of course, to put it another way, women are used to domesticity. It is something unusual for men*".

This is not to homogenise all men of this generation. Many were brought up having to care for themselves and so developed the skills of domesticity but where this was lacking, and men became reliant on their wives, loneliness appeared to have a practical as well as an emotional trigger. Women appeared more emotional and open to others, potentially creating a resource for dealing with loneliness that men lacked, and this raised gender identity as an important factor in loneliness.

7.3 Changes to identity are important for loneliness

The issue of identity more broadly emerged from the study and was discussed with respect to life changes. Loneliness, for example, was discussed as an issue in the younger lives of older people from the South Asian community and was talked about in the context of entering the country. For most, there was little choice but to move to the UK as a result of the policy of 'Africanisation' followed in Kenya and Uganda in the 1960s. This meant losing their homes and way of life. Ajay talked about the loneliness he experienced when first moving

to the UK as a result of changes in his family life. For Hemel, loneliness involved

him as an outsider adjusting to the realities of Britain:

> "*To be honest, I had a good childhood. The only loneliness time was when I came here and that time I was with my brother. Then I got married and it was alright. It was a new culture, not a new culture because in Kenya we had the same Cambridge GCE. We knew about the UK and everything. Only when we came, our English, we were told by our Reverend Father to do your grammar but grammar had gone here. You can speak whatever way you want to speak. There you had to be proper with pronunciations and everything. Even writing essays properly, spelling and everything. So, when I came here, I found it a bit confusing but then I got used to it*".

Such migrations were often made when people were younger and it was easier

to adapt to changes, and the challenges of older age were not a concern.

Having to establish a new life and adapt from a previous one, appeared to

create a stronger sense of self, which in turn could help with unwanted and

negative feelings like loneliness in later life. The survey found less loneliness

(35.7%) in BAME groups compared to 49.5% who were white. A significant

minority of BAME individuals (7.1%) still reported being lonely often or all of the

time, suggesting similar factors impact on chronic loneliness regardless of

ethnic identity.

Early migration histories, therefore, highlighted how loneliness emerged in

response to these experiences and challenged their identity. It also highlighted

how a sense of defiance towards loneliness could emerge and shape loneliness

experiences in later life. Previous research has found that ethnic identity may

make a difference to experiences of loneliness for older people and may be

more prevalent in this group (Victor 2014b). Specific issues that impact on

ethnic communities have included loss of multi-generational households

(Cattan 2011), fewer non-kin social networks due to migration, language barriers (Jopling and Barnett, 2013) and the impact of urban deprivation where ethnic communities live (Scharf 2011). The findings in this study extend these aspects to include how early experiences of loneliness can shape experience in later life. Migration histories are an important aspect of loneliness for people from BAME communities because they involve changes to identity through establishing a new life and adapting from a previous one.

For some older people, moving home and community later in life also presented particular challenges that impacted on identity. Gloria had just moved into a retirement community. She was spending time establishing new friendships and networks as well as travelling to maintain older ones. Kim, who was interviewed at her home in sheltered accommodation, had recently moved back to the UK after living abroad. Both women expressed views on the difficulty of effectively starting again and establishing a new life. Not being able to share things appeared to increase their feelings of isolation which could be expressed as alienation from others. Kim talked about the difficulties of establishing new friendships. Being younger than those where she lived, she felt little in common with them.

A person's strong sense of social identity was often found through these relationships but also can be seen with respect to activities. Accordingly, having responsibilities, a purpose and being valued were all discussed as helping to deal with loneliness. Lottie talked about how her voluntary work had given her a sense of purpose, but that her current lack of routine made it difficult to imagine how the future could be positive:

> *"When you are like I am, there is no structure to your life. It doesn't matter if you stay in bed all day. There is no structure and it is not going to get any different. It could get worse. That's it, you can't see anything positive in your life".*

Keeping busy appeared to be an antidote to loneliness. Keeping busy, not giving yourself time to get lonely, moving on and using your own resources and strengths to tackle any negative feelings were all mentioned as ways to address loneliness. It was presented as an ethic of life, whereby you must be or should be busy. Amish found keeping busy to be important, particularly reading and keeping well-informed. Joshita talked about helping to bring up her grandchildren after her husband died, and Lalith made clothes at home to keep busy. As Gloria, an active 70-year-old said;

> *"I have always been busy. I worked all my life until I retired. I have done part-time jobs and even when the children were small. So, I've not ever been lonely".*

Keeping busy, not giving yourself time to get lonely, moving on and using your own resources and strengths to tackle any negative feelings were expressions of having a purpose, being valued and creating a strong sense of identity. Involvement is important for older people and those with wide social activities and greater participation are less lonely (Cann and Joplin, 201; Hoban et al. 2013). However, this aspect goes beyond simply the activity of participation to being valued and feeling needed. Activities to help with loneliness, therefore, should not only provide social contact but also be meaningful in terms of strengthening identity.

Many participants talked about being needed as important to ward off feelings of loneliness in this respect. Looking after pets, for example, appeared to give

a sense of purpose. Pets were reliant on their owners and so this created an emotional bond extending to companionship and interaction with the animal. This could create a deep relationship and reinforce a sense of worth and identity which could not be found when alone. Anthony, who owned a cat, talked about the responsibilities and obligations which could make a real difference to loneliness. Gloria who lived on her own but looked after her daughter's dog when she went on holiday, exemplified this:

> "*She knows me and everything. She gets all excited when I am going to look after her. So, I go there and they have gone on holiday and there is an empty house. All I have got is the dog. So, I appreciate it. You know you have got a responsibility there to the animals. You have got to feed the cats and fish and the dog. They all get to know you because you are feeding them. They respond to you. I can see why if you were in an isolated existence, it's very necessary to have a pet because it is somebody to talk to*".

The benefits of pets for maintaining identity were not limited to dogs and cats but could be applied to other animals or living entities by participants. For Melissa, her fish and garden were important to her:

> "*I supposed the garden is also like a vegetable pet in that sense and demands a bit of attention. The hanging baskets in the summer need watering every day and I have a greenhouse with some plants. The garden is a good asset, a lovely asset because aesthetically in the summer it is beautiful*".

Being responsible for and being needed by other people, animals and plants appeared to offer protection against loneliness because it contributed to a strong sense of self. However, a change of social identity towards caregiving, despite these additional responsibilities, often led to feelings of disconnection and alienation. Carers retained an intimate relationship with those they cared for, but the quality of the relationship could decline, leading to loneliness. This

may turn to chronic loneliness and feeling lonely often or all of the time. This

caregiving identity, therefore, saw alienation from others who are not carers.

The survey revealed 21.1% of participants who identified themselves as carers

reported they were lonely often or all of the time. This compared to 5% who are

not carers (Figure 7.1).

Figure 7.1: Loneliness and Being a Carer
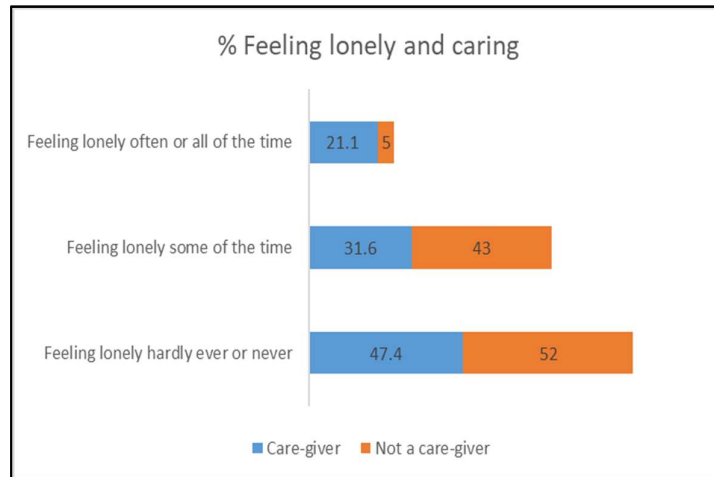
Lottie, for example, who cared for her husband when he was dying of cancer,

saw this as the beginning of her journey to loneliness. Samuel also found being

a carer for his wife had led to more loneliness than her eventual death. Betty

described the distress she felt as a carer and how this situation compounded

the intensity of her loneliness when her husband went to the day-centre:

> "*I know I feel very down about how lonely I am… they looked after him and they have got him in to day care with people of his kind you see. Whereas I was on my own and sometimes honestly, I used to walk around and if it was a miserable day, I have walked around the house literally clinging onto the walls, breaking my heart, sobbing my heart out because I had got no one to talk to. My husband was out. The quietness echoed. It wasn't a good time. The first few years. I can't tell you how long because I don't honestly know but it takes you a long while to*

adjust. It does because when you have got a busy life and everything and suddenly you come to nothingness".

This sense of 'nothingness' described by Betty appeared to highlight how becoming a carer could diminish a person's sense of identity leading to loneliness. We should, therefore, be particularly concerned about this group. Helping to maintain a strong sense of identity in the face of increasing alienation appears particularly important when focusing on the loneliness of carers. Caring has been found to be a risk for loneliness (Joplin and Barnett, 2013:10) and carers are a particularly vulnerable group of older people who feel lonely often or all of the time (Carers UK 2015). This study observed carers feeling disconnected from other people and experiencing a diminishing of their identity. It found that carers feel they are coping alone despite continued social contact and this revealed a particularly distressing form of loneliness. Caregiving is an example which often precedes bereavement or loss, which also can impact on social identity and the sense of self. This theme that loss and intimacy and grief led to loneliness emerged in this study.

7.4 Loss of intimacy and grief led to loneliness

Mostly associated with death and bereavement, loss of relationships can lead to a deep form of loneliness. Emotions of grief and loneliness can share common features, for example the feeling that life will never be the same again, particularly with the loss of an intimate partner where the connection is lost and cannot be regained. Bereavement, particularly of an intimate partner or close relative, is more common for older people and so an important risk factor to loneliness (Tunstall, 1966; De Jong-Gierveld et al. 2011; Beech and Bamford

2014; Kempton and Tomlin 2014). This can be referred to as emotional loneliness and is based on a social needs perspective (Weiss 1973). In this respect, intimate and close relationships offer protection against loneliness.

The inevitability of death sees these very close relationships disrupted and can leave the remaining partner isolated and lonely. Some couples only have each other. Perhaps where there are no children, given the uncertainties and insecurities in the world, the closeness has an intensity that may exclude others. People refer to each other not just as partners, lovers, husbands and wives but also as best friends. For Hazel, this was the case, and loneliness began with the death of her husband. Lottie lost her husband when she was in her 60s and had spent 20 years on her own.

This can also be the case where family relationships are lost. The family was still central and protective for many participants when asked about loneliness. Some participants from the South Asian community felt their families protected then against loneliness. Deepak, for example, when asked if he had ever felt lonely replied;

> "No. What's happened is that I live with my family and enjoy being with my family. Sometimes I might feel lonely if they go on holiday or that sort of thing and the house is empty. Otherwise, I can find ways to make myself integrate with other people and find something to keep myself with people".

However, events of the past often shaped present relationships within families, which may mean loss, estrangement or lack of closeness. Albert had been in residential care for several years. He had lost touch with his family. Samuel rarely saw his brother, his only living family member, a situation that dated from

his childhood. For some participants, families were dispersed and fragmented. Children were often described as busy and not able to spend time with parents. Children sometimes lived abroad or away from their parents' locality. Although contact was maintained using telephones and new technologies, relationships were sometimes distant, shallow and not necessarily satisfactory. For Philip, for example, there was resignation this was just another aspect of his later life and he was no longer central to his children's world. Kim, who had two sons, both of whom lived abroad, felt the lack of family was an important reason for loneliness. Esthel, who had two daughters, one living close to her and the other abroad, could empathise with other older people when their families did not live close by.

> "*I think the people I feel sorry for and who are lonely and isolated are the ones like I said before with disabilities, lack of family, particularly if their family is all over the country or somewhere else*".

One group in this respect, who appeared disadvantaged in terms of social contacts with family, were the participants from the LGBT community. Two interviews were undertaken with participants who identified as LGBT and, in both cases, they lived alone, were isolated from families and reported difficulties in meeting new people of their own age who shared their sexual identity. As a result, participants who are LGBT felt lonely and more alienated from their peers than those of other age groups. Very small numbers of participants took part in the survey from the LGBT community. Discussing sexuality among older people is seen as sensitive and so is often hidden. However, of those who did respond as gay, lesbian or bisexual, two-thirds were either 'sometimes', 'often' or 'lonely all of the time'. Again, this is in line with other research which suggests that this

group may face particular issues that contribute to experiencing increased loneliness (Joplin and Barnett 2013; Hughes 2016).

Childhood experiences of loss also appeared to shape loneliness in later life. Philip recognised that the death of his father when he was a young man had important consequences for him, his mother and own family. Bereavement had implications beyond his individual grief. Andrew also felt that the experience of losing his mother when a child had shaped his attitude towards loneliness in later life.

> "*I think I have had the element of loneliness within me, particularly because my mother died when I was 12. It was against my wishes I was sent to this crummy boarding school and I have never felt so lonely as from about late 12 to 17. So everything I feel in later life comes from that early experience*".

For Kim, losing her husband at a young age and bringing up two children on her own appeared to create a resilience towards loneliness. Early loss of an intimate partner could, therefore, create a resilience towards loneliness, as some participants appeared to have adjusted to a life without intimacy. The findings from the survey suggested that a relationship did exist between loneliness and having an intimate relationship. Those not married, divorced, separated or widowed were more likely to report being lonely often or all of the time (8.9%) compared to others at 5.9%. However, this was only a difference of 3%, suggesting intimate relationships may not offer as much mitigation to loneliness as might be expected. Accordingly, although loss or lack of intimacy is important, so is the quality of the relationship. Perhaps there is a tipping point where being in an unsatisfactory intimate relationship produces less loneliness when that relationship is lost; where a person doesn't feel satisfied with their

partner or the partner is unsupportive of them.

Experiences of bereavement leading to loneliness cannot therefore always be assumed to be universal, particularly where earlier loss has created resilience to loneliness. When close relationships changed or finished in later life loneliness may not be present for all. The CTEL loneliness scale used in the survey includes a statement on satisfaction with social relationships. Comparing respondents who reported loneliness often or all of the time with satisfaction in their relationships revealed that nearly twice as many respondents (50%) disagreed or strongly disagreed that their relationships were satisfying compared to 25% who agreed or agreed strongly. This compared to 75% of participants who were never lonely (Figure 7.2). Accordingly, 75% of those who were never lonely had satisfying relationships compared to 50% of those who were lonely. These findings could indicate that the quality of the relationship may be as important as the quantity or time spent together in the context of loneliness feelings.

Figure 7.2: Loneliness and Satisfaction with Relationships

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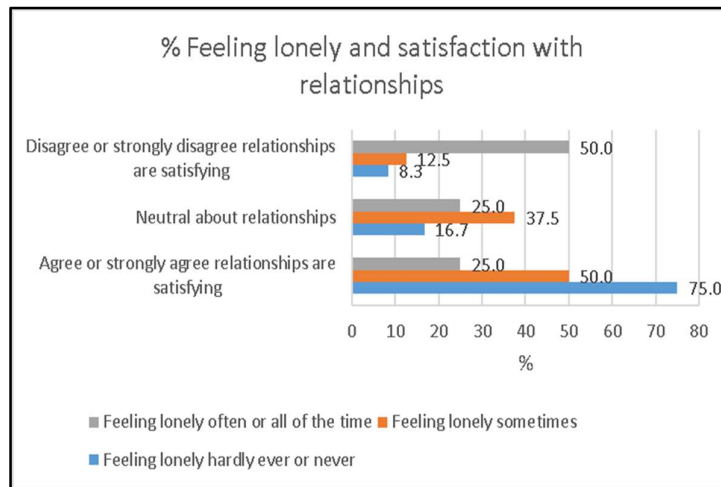
7.5 Less choice and control facilitated loneliness

Having a sense of agency appeared to be linked to a positive outlook and positive outcomes when it came to loneliness. For example, Anthony, who was a very active older person, was most vulnerable to feeling lonely when he felt out of control. Deciding not to participate socially was different from having no control over the nature and frequency of contact. As indicated above, having satisfying relationships appears important to the experience of loneliness. Choice and control over the type and nature of contact are central to this satisfaction. This is linked to the expectations that underlie these feelings of satisfaction. Relationships may exist on different levels, whether deeper or distant. For Jenny, it was the deeper relationship which was lacking and made her feel extremely lonely:

> "*I am quite a shy person potentially and so I can be lonely in a crowd of people. So, I tend to benefit from close relationships rather than superficial ones. I am not really good at small talk. The sensation of loneliness can get quite extreme in the sense that you would like to have a deep conversation about something not just pass the time of day. So, you can feel quite isolated if there is nobody to share anything of real value with. When I was at university you could have a deep conversation about things but sometimes in the trivia of every day you have no opportunity for that*".

In terms of social relationships and spending time alone, what appeared to make the difference between a positive sense of being alone and a negative feeling of loneliness was the control a person asserted over their circumstance. As discussed, bereavement can be one circumstance where loss of control is felt most acutely. Having choice and control over social contacts and knowing that social contacts were available was important for most participants. Those in the survey who lived alone were more likely to report loneliness. More than

70% of the participants who lived alone reported feeling lonely in some form. When considering those that experience chronic loneliness, the percentage of those living alone and not living alone was about the same. Slightly more participants living alone reported being lonely often or all of the time than those that do not live alone. The UCLA loneliness scale in the survey also asked directly about social isolation. As such, 12% of respondents reported they often felt isolated, and when comparing isolation to loneliness, 77.8% with chronic loneliness reported feeling isolated. Accordingly, there did appear to be an association between isolation and chronic loneliness. However, 26.1% of respondents hardly ever felt isolated but did report feeling lonely often or all of the time.

Accordingly, being socially isolated did not always equate to loneliness. Choice and control appeared to make the difference. Gloria, for example, tried to work out differences between being alone, isolation and loneliness:

> "*There are times when I have felt alone but I can't say that I have been lonely. It is hard to differentiate between the two, isn't it? Feeling alone when nobody is around. I suppose it is loneliness but I know that I can do something about loneliness. I don't have to be lonely because there are all kinds of things I can do, not to be lonely. There are times when I have just felt isolated and on my own. Usually, because I have felt inadequate or the fact that if I was not on my own, I wouldn't be able to speak out, you know, have some interaction with someone about it. I suppose it is loneliness when you feel like that - isn't it?*".

Terminological confusion about differences between loneliness and isolation, as we have seen, is not unusual and is found in academic and service discourse as well as personal narratives.   Some participants were clear about their feelings and able to express this, while some who lived alone, and had done so

for a long time, did not necessarily report loneliness. Some participants appeared to develop a kind of resilience to these feelings depending on how they compared what went before in their lives to what existed in the present and what choice and control they had. If loneliness was about expectations between actual and expected relationships, low expectation of contact may result in fewer experiences of loneliness. Where participants were constantly alone, they perhaps did not have high expectations of contact. Some participants enjoyed solitude or simply appeared to be used to being alone. This highlighted the complex nature of loneliness experiences, and that it was not just about being 'alone' or social isolation.

Making a positive choice to be alone, or knowing that support is available when needed or wanted, may protect people from intense loneliness. A sense of resilience means being confident in yourself, enjoying your own company, controlling what you like and when you like it. It is a particular 'world-view' or perspective towards living; being comfortable and at ease with yourself. Those who appeared particularly vulnerable to loneliness perceived having less choice and control over their social contact. Feelings of loneliness existed where there were high expectations of contact with other people, control was low, and differences existed regarding the level of and nature of contact given by those other people.

Deciding not to participate socially was therefore very different from having no choice and control over the nature and frequency of contact which is an existential form of loneliness. This may explain why some of those who live alone and isolated do not report feeling lonely because they feel in control of

their situation. Many older people prefer to live independently from their families, even if located close to them, and so living alone and being alone may be a positive choice (Townsend 1957; Victor et al. 2009). Thus, although those who lived alone experience loneliness, in this study, little difference was found to exist between these people and those who did not live alone with respect to chronic loneliness. Social isolation or being alone should therefore not be conflated with loneliness but seen as aspects or dimensions of it. It is neither fully separate nor the same.

7.6 Poor health and disadvantage made loneliness worse

That poor health made loneliness worse was an overarching theme that emerged in this study. Research has indicated a relationship between poor physical and mental health and experiences of loneliness (Andersson 1998; Valtora et al. 2016). This also includes the impact of disability on experiences of loneliness among those who have limited abilities to perform daily tasks (Kempton and Tomlin, 2014). The question of a symbiotic relationship between health and loneliness and how they influence and impact on each other also exists (Cacioppo and Patrick 2008). Comparing self-reported experiences of loneliness with self-reported views of health in the survey reveals an association between poor health and feeling lonely, particularly feeling lonely often or all of the time. Accordingly, 20% of those participants with poor or very poor health reported feeling lonely often or all of the time compared to only 2.7% who reported their health as good or very good. Mandy, for example, had recently had several serious health problems which had made her feel lonely and

worried about the future. She described the impact of her disability on daily life and loneliness:

> "*…because of the primary condition, I can't take anything for the stroke, I can't take any medication because it will set the bleed off. It becomes quite depressive because I have to watch everything. I have to watch my food; I have to watch everything. I have to make sure I don't do too much exercise. I try to get out and go out to the gym and things like that, swimming but it is very restrictive. The consequence, it is quite lonely because I can't get up and do things*".

Where poor health results in a long-standing condition or disability, participants were also more likely to experience chronic loneliness. One participant, Nancy, described how disability had been a feature of her life for 50 years and led to loneliness because she found it difficult to go outside without support. In the survey, 8.8% of the participants with long-standing conditions reported feeling lonely often or all of the time. Those without a long-standing condition did not report feeling lonely often or all of the time (Figure 7.3).

Figure 7.3: Loneliness and a Long-standing Condition
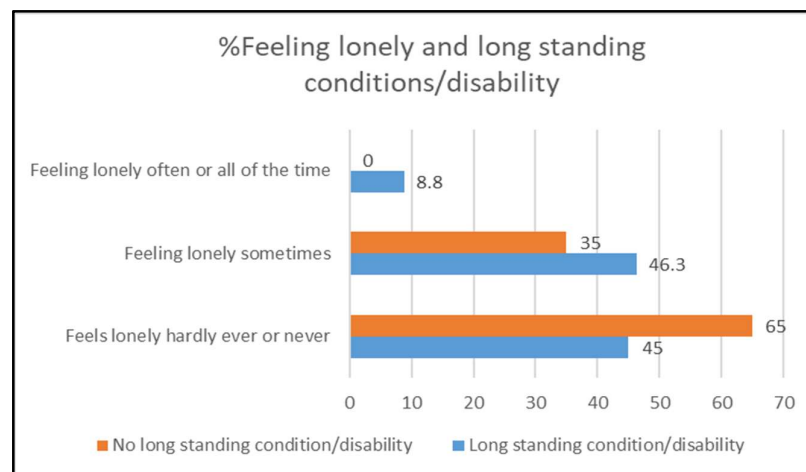
Furthermore, where this resulted in restricted abilities to undertake activities of daily living, 15.4% reported feeling lonely often or all of the time compared to 5% of those who did not have these limited abilities. The association between health and loneliness is well established in terms of physical and functional health, but a psychological aspect to poor health and wellbeing was found to impact on loneliness; not being able to escape from negative thoughts that contribute to poor wellbeing and the poor quality of life. Mandy again reflected on her feelings of loneliness:

> "*I think with some people, I can put myself in this category, I think what we tend to do when you are on your own…. It is not loneliness, loneliness. It is loneliness of having somebody around to make you think something different. So, you think about the condition, you think about the stroke, you think about the consequences. They may seem much more than what they are or may not be, or may be exactly what you think they are but it is the concentration of thought and that is the loneliness. You are thinking about things that you wouldn't otherwise be thinking about if there were people around. So, it is not so much human company in the sense of a relationship or something like that, it is the isolation of what is in your head, the psychological side*".

This isolation of 'what is in your head' and not being able to think otherwise may be particularly significant when it comes to feeling lonely often or all of the time. There appeared a 'negative loneliness loop' which provided a lens through which the present situation was understood. Coming to terms with life changes is an aspect of later life. Such events are more profound when declining health was at stake and the unexpected saw a situation not envisaged or wanted. Emotionally, this may mean readjusting to a very different lifestyle. Betty, for example, described the context of her loneliness in respect of the previous life she lived before her husband Jim became disabled and unwell. Jim had a dense

stroke 20 years ago. Since that time, their life had been shaped by the impact of this event and had led to loneliness. Anxiety, fear and pain were all negative expressions of loneliness that emerged in this context. The association of loneliness with other issues like depression was apparent, with some participants describing loneliness alongside depression. Lottie described her feelings:

> "*I have been on my own day after day after day after day and that's it. That's what I think makes loneliness. It is the fear and anxiety. With loneliness comes anxiety comes depression. It must do and I think the loneliness causes depression obviously. You get that when you realise it*".

A formal mental wellbeing scale was included in the survey to consider the mental wellbeing of those who reported being lonely often or all of the time (See Appendix Three for the choice of the Warwick–Edinburgh Mental Wellbeing Scale (WEMWBS). The WEMWBS comprises of 14 items that relate to an individual's state of mental wellbeing in the previous two weeks. It seeks to measure mental wellbeing itself and enables comparisons with UK population norms to show the level of mental wellbeing of participants. Although not a scale to screen for depression or mental illness, results have shown that those with a score of 40 could be at high risk of major depression, and those with scores between 41-45 can be considered at high risk of psychological distress and increased risk of depression. The WEMWBS Population Norms in Health Survey for England data (2011) saw a mean score of 51.6 and standard deviation of 8.7. Scores ranged from a minimum of 14 to a maximum of 70 (Taggart et al. 2015). Participants in this study had similar mental wellbeing scores with a mean score of 51.34 and standard deviation of 8.44. The lowest

score in the survey was 33 and the highest was 69. The scores are given in

Table 7.2.

Table 7.2. WEMBS and UCLA Scores

	WEMWBS Score	UCLA Score		WEMWB Score	UCLA Score		WEMWBS Score	UCLA Score
1	57	3	43	41	3	85	Missing	3
2	47	7	44	54	3	86	Missing	6
3	56	4	45	43	5	87	Missing	9
4	50	3	46	Missing	Missing	88	Missing	6
5	54	4	47	65	3	89	Missing	Missing
6	Missing	5	48	55	3	90	Missing	6
7	55	3	49	48	3	91	Missing	9
8	52	4	50	Missing	7	92	Missing	3
9	47	3	51	47	6	93	Missing	6
10	51	6	52	Missing	6	94	63	3
11	52	4	53	52	3	95	Missing	Missing
12	48	6	54	Missing	Missing	96	Missing	Missing
13	50	5	55	66	6	97	Missing	Missing
14	56	5	56	67	3	98	64	3
15	58	3	57	Missing	9	99	Missing	6
16	47	6	58	Missing	9	100	45	3
17	46	3	59	42	5	101	40	4
18	41	9	60	55	3	102	41	6
19	51	3	61	54	3	103	69	3
20	46	Missing	62	39	5	104	65	3
21	65	4	63	48	5	105	46	4
22	54	3	64	43	7	106	61	3
23	45	6	65	59	Missing	107	41	6
24	45	3	66	49	6	108	59	3
25	56	3	67	62	3	109	56	5
26	46	6	68	63	3	110	55	3
27	49	3	69	64	3	111	35	9
28	46	5	70	43	3	112	62	3
29	60	Missing	71	45	Missing	113	42	6
30	35	8	72	Missing	3	114	50	5
31	57	3	73	42	3	115	52	4
32	52	3	74	61	Missing	116	49	4
33	46	9	75	Missing	5	117	47	3
34	58	4	76	37	6	118	60	3
35	58	4	77	38	4	119	48	6
36	65	3	78	51	3	120	43	5
37	67	3	79	52	5	121	45	3
38	37	9	80	Missing	Missing	122	50	3
39	54	3	81	Missing	Missing	123	67	3
40	33	8	82	Missing	9	124	Missing	5
41	48	4	83	51	8	125	50	3
42	Missing	Missing	84	50	3	126	Missing	9

WEMWBS n=93. UCLA Scores n=112.

A Pearson's correlation was carried out to look for relationships between the WEMWBS and the UCLA three-point loneliness scale, and there was significant evidence of a strong relationship between the two (r = -0.558, p< 0.01). Accordingly, a finding was that those with high scores on the UCLA Loneliness Scale were more likely to have lower scores for mental wellbeing in this survey.

Loneliness, therefore, impacted on mental wellbeing and worrying about the future. Jenny again was an active and involved person with good support networks. However, she still felt that an active life did not detract from the anxieties that may exist for her in the future and that this was an aspect of loneliness for her. Fear of being alone, the fear of residential care, of the uncertainty of what will happen, appeared important anxieties in the lives of participants. These were linked to the feelings of inevitability that circumstances will change for the worse and thoughts of the difficulties of how people will cope if alone and isolated from others. Kim, for example, talked about her anxiety that she had no one she could call on to help her:

> "*I think it is a worry everybody has these days. You know when you have got nobody to help you. Nobody to help you with the shopping…It is a pity I am not closer to anyone who I could maybe ask for help but there isn't anyone. So, I tend to worry about what is going to happen as you get older*".

These anxieties were not simply about individual choice but raised social and economic concerns. Disadvantage featured in this study. Respondents in the survey who were of a lower social economic class and/or who lived in what might be described as urban and deprived areas (living within city limits), reported more chronic loneliness. Figure 7.4 shows that participants with lower educational attainment (non-graduates) were more than twice as likely to report

feeling loneliness often or all of the time (7.1% compared to 3.4% of graduates). Figure 7.5 shows those respondents with a work history of manual and routine work were four times more likely to report loneliness often or all of the time (9.6%) compared to those who had a previous professional and managerial job (2.9%).

Figure 7.4: Loneliness and Education
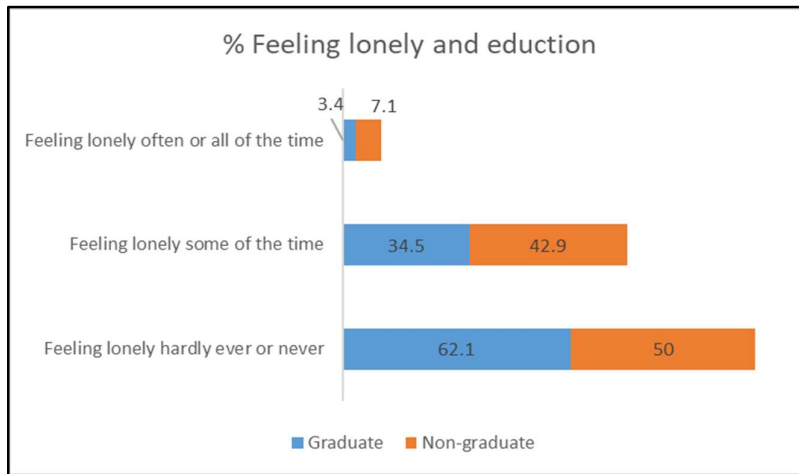
Figure 7.5: Loneliness and Previous Occupation
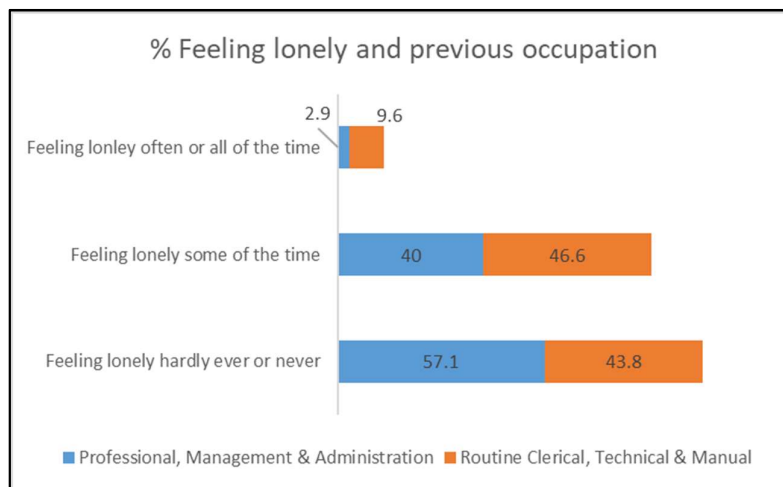
The survey also highlighted that those living within the city limits, potentially deprived areas, were more likely to feel lonely often or all of the time with 14.5%

feeling lonely often or all of the time compared to only 1.7% in the county or rural areas. The differences between those living in urban and rural areas highlighted how loneliness was experienced in different places. Different expectations amongst rural and urban populations may explain this, where living surrounded by others, as experienced in a city, could perhaps see the 'lonely in a crowd feeling', whereas for rural dwellers, where loneliness may be more existential and about not seeing or having contact with others. However, access to resources may also be an issue. Transport, for example, was often cited as important. For Lottie, her car was vital for getting out and helping her cope with loneliness. It provided access to the outside, kept her busy and made her feel part of the wider world. For others, public transport was important. Subsidised transport or what was described as the 'OAP bus pass' was highlighted by a number of participants as important to help with loneliness. As Esthel observed:

> "*Have you ever been to town and see the older people sit on the bench talking to one and another? They have gone on the bus because it is free and didn't cost them anything. They have found somebody to talk to out there. I know, you go on a bus and you see this*".

7.7 Discussion of findings

Loneliness is always a distressing experience suggesting a unidimensional concept often found and measured in research studies (Peplau and Perman 1982). However, the findings in this chapter suggest loneliness is difficult to quantify due to the many and varied experiences of participants. Thus, despite a variety of tools developed to measure loneliness (Russell 1982; Di Tommaso and Spinner 1992; Russell 1996; De Jong Gierveld and Van Tilburg 2006), there

remain difficulties in utilising predominantly quantitative 'unidimensional' approaches (Jones 1987). There is an assumption of a fundamental commonality in the experience of loneliness amongst individuals regardless of the reasons given by the person experiencing loneliness and the socio-economic or cultural context within which loneliness is experienced (Di Tommasco and Spinner 1993). Although this approach may be important to facilitate discussion about loneliness, it also has to be recognised that it has its limits.

Evaluations of the impact of new technologies on loneliness often utilise this unidimensional approach, seeing loneliness as mostly concerned with the lack of social contact. The findings of this study suggest this type of research on loneliness risks moving away from the phenomenon it seeks to address to focus on antecedents or consequences of loneliness such as social isolation (Wood 1987). This might be argued as the basis for the 'loneliness paradox' which has been highlighted in this research. The traditional unidimensional view of loneliness, therefore, risks reducing it to an intervening variable and creating an over-reliance on quantitative measures. The many and varied experiences in this study, however, show that loneliness can be triggered and mediated by events, times and habits and not just social isolation.

Individuals tend to see these experiences as unique because the triggers are connected to their life history. As such, triggers can reveal a comparative form of loneliness that connects the present to previous life events and times. For example, if certain habits associated with a loss continue to remind the person of their loss, this may lead to further experiences of loneliness, regardless of

the passage of time. Triggers also highlight that there can be both practical and emotional content to the loneliness experiences. This is seen with respect to the different ways loneliness appeared to exist for men and women respectively.

The experience, therefore, appears to be mediated by cultural norms, making it less emotional and more practical for men. For older men, when they become widowers, this finds expression in their inability to cope with domestic tasks without their wives. Traditional gender roles may see women develop a resilience to loneliness in this respect, due to their experiences of domesticity. Older women also tend to have more friends and be sociable than men (Arber and Davidson 2002; Cann and Joplin 2011; Beech and Bamford 2014). Men behave less socially (Bowling 2005; Hoban et al. 2013) and sociability, for older men, appears to be based on traditional notions of masculinity and male bonding such as 'work' or practical activities and tasks rather than emotional support. Women appear more open to discuss or directly acknowledge their feelings and experiences of loneliness and so report loneliness; a finding supported by the survey data. It, therefore, seems reasonable to be concerned about the underreporting of loneliness by men, who may find it difficult to identify their feelings or express loneliness (Beech and Bamford 2014). Measuring loneliness is, therefore, a complex and challenging issue with respect to the differences between men and women (Burholt and Scharf 2013).

Such issues indicate the importance of identity with respect to experiences of loneliness in later life. Although some perspectives on loneliness have suggested a biologically determined drive for social contact regardless of the individual's social and personal identity (Schultz and Moore 1987; Cacioppo et

al. 2014), the findings in this study suggest that identity is an important factor as any biological drive to the experience of loneliness. This study found that changes in social identity may lead to loneliness. This was linked to ideas about the expectations of others and feelings of doing something worthwhile. Loss of social identity can occur with changing life events which may result in lack of purpose, being undervalued and losing a positive sense of self. In extreme circumstances, this may lead to a sense of nothingness, which could be interpreted as creating alienation from other people and society.

Having satisfying relationships is also important, and where unsatisfactory relationships exist there is often reported loneliness despite being in an 'intimate' relationship. Some relationships for people may not offer the quality they would wish, creating a discrepancy and leading to persistent feelings of loneliness (Perlman and Peplau, 1981). An example may be where older people have expectations of seeing their family regularly and they do not see them as often as they want. Relationships such as family remain important for older people and only a minority have no family support at all (Victor et al. 2009; ILC 2015b). Resilience to loneliness can, therefore, depend on the participant's current situation and how they felt about the choice and control over the quality of relationships. This theme of less choice and control is therefore linked with discrepancy perspectives on loneliness (Perlman and Peplau, 1981). Accordingly, understanding the impact of new technologies on loneliness, as this study has found, should take account of how an experience may be informed by cognitive processes and a mismatch between desired and actual relationships. Such an approach is lacking in current research on the impact of new technology on loneliness. Furthermore, choice and control are important in

all respects, including the impact of sociological and structural issues older people face. Loss of choice and control, for example, may simply be associated with poor health and the inability to do the same tasks as before, or with lacking the resources to do the things older people wish to do, such as participate socially. This has also been neglected in previous research on the impact of new technologies on loneliness.

Being well and healthy are therefore important aspects to avoiding loneliness in later life along with financial and economic factors. Such issues can be framed in terms of disadvantage, and research has highlighted that those on lower incomes and with less access to economic and social resources experience higher levels of loneliness (Andersson 1998; Savikko et al. 2005; De Jong Gierveld et al. 2010; Niedzwiedz et al. 2016). Disadvantages were highlighted in this study, as the numbers of participants of lower social economic class or those who lived in urban areas who reported feelings of loneliness often or all of the time did so more frequently compared to other groups. Fewer financial resources and lower income are also linked to loneliness in older people (Andersson, 2010; Bowling, 2005). Incidents of loneliness, therefore, may differ due to different resources.

Some previous commentators have suggested taking an eclectic approach to loneliness. Drawing on work by the Campaign to End Loneliness, for example, Jopling & Sserwnaja (2016) define loneliness in a number of ways. Loneliness is an unwelcome subjective feeling of a lack or loss of companionship (Townsend 1957) and an unpleasant feeling that may motivate people to seek social contact (Cacippo and Patrick 2008). Loneliness can also be an

experience that happens due to a mismatch between the quantity and quality of social relationships (Perlman and Peplau 1981). Concepts of emotional and social loneliness (Weiss 1973), where loneliness results from missing types of relationships (intimate relationships and peer/family contacts respectively), are also seen as important in this eclectic view of loneliness.

The main perspectives on loneliness also bring existential, psychological and sociological insights to the experience (Sullivan, 1955; Townsend 1957; Tunstall, 1966; Weiss 1973; Peplau and Perlman, 1982) but not one perspective captures the diversity of the experiences shown in this study. For example, the social needs perspective (Weiss, 1973) does not take account of experience of choice of control found in this study, which is informed by cognitive processes and a mismatch between desired and actual relationships (Peplau and Perlman, 1982), which in turn do not take into account more relational and structural aspects, such as the impact of poor health, found in this study and often considered in the classic sociological studies (Townsend 1957 and 1973; Tunstall 1966). Pearlman and Peplau (1982) argue that loneliness theories offer a broad set of characteristics which are not necessarily mutually exclusive of each other. In this respect, perspectives on loneliness are fragmentary observations rather than complete systems. The data reported here support this view of loneliness theories and that no one approach can command a consensus regarding the nature, causes or characteristics of loneliness. Rather, as with other writers, the findings suggest different types of loneliness and distinct determinations to different subjective and individual experiences (De Jong-Grieveld and Raadschelder 1982 and 1987; Di Tommasco and Spinner 1993; Victor et al. 2009).

7.8 Conclusion

A diverse range of experiences of loneliness were found in this study, suggesting loneliness varies in nature and expression (Sønderby and Wagoner 2013). Loneliness appears to be a personal experience often felt difficult to express and for others to appreciate. A one-dimensional perspective on loneliness, for example one based on a lack of social contact or social isolation, fails to capture the diversity of experiences of loneliness and may explain why the 'loneliness paradox' persists. A challenge exists regarding how to make sense of these different and complex aspects of loneliness for older people and in the context of this study, how technological solutions reflect the variability of loneliness in later life, rather than reducing it to the lack of social contact which underlies ideas about a 'loneliness paradox'. Such undifferentiated approaches are neither appropriate nor effective in helping to understand how new technologies may help with loneliness (Victor et al. 2005). Perspectives on the nature of loneliness experiences with respect to new technologies cannot be just concerned with the absence of social connection. Separation and connection, in themselves, tell us little about the interactions between older people and new technologies, and how different technological interactions are given social and emotional value by the people involved in them (Blane et al. 2002; ILC 2015b). Different perspectives on loneliness, therefore, can provide important insights, but to assess how new technologies help with loneliness, there is a need to consider a different approach to that which has constructed the 'loneliness paradox'; one that highlights different journeys and experiences of loneliness, along with biographical and historical uses of new technologies by individuals. The next chapter constructs this approach and illustrates this as

a way of considering how new technologies help with loneliness utilising two case studies of participants who took part in the study.

Chapter Eight: Modes of Loneliness, a New Approach to Understand Loneliness and the Use of New Technologies

> We feel that even if all possible scientific questions be answered, the problems of life have still not been touched at all (Wittgenstein 1921 p.6).

8.1 Introduction

This chapter is an attempt to incorporate a person-centred framework within which the different experiences of loneliness can be considered, drawing on multidimensional perspectives of loneliness and so enabling different ways to consider if new technologies can help with loneliness. Case studies of two individual participants will be used drawing on both quantitative and qualitative data from the study to illustrate this approach. The particular case studies were selected because they help illustrate different aspects of loneliness and the complexities of assessing how new technologies may help with loneliness. The participant's journey will be described, highlighting a dominant 'mode' of loneliness drawing on information from their survey, interview, and reflections and field notes. A number of aspects of the participant's situation will be considered such as previous life history, social position, existing social relationships, ability to use, and attitude towards using new technologies. The chapter begins, however, by setting the scene for the case studies and describing what is necessary to analyse these journeys. It begins by describing what is meant by the 'Modes' of Loneliness and the main ways new technologies appear to help with loneliness found in this study. This will

hopefully provide a framework that may be of use to others when attempting to consider when new technologies may help with loneliness in later life.

8.2 Modes of Loneliness

The previous chapter recognises that there is not a single experience or reality of loneliness but a plurality of 'truths', interpretations and experiences. This, therefore, undermines a notion of loneliness that is built upon a unidimensional approach about the lack of social contact. Loneliness is a multi-dimensional and multifaceted phenomenon (Sønderby and Wagoner 2013). Loneliness, therefore, cannot be assumed when investigating the lack of contact from other people and that simply providing social contact via new technologies will mitigate loneliness. Loneliness and social isolation are sides of the same coin but there is no simple 'fit' between the two concepts (Townsend 1957). The journey towards loneliness is diverse incorporating personal histories, biographies and life events that may trigger or amplify the problem.

Different theoretical approaches to loneliness, therefore, may help to understand different aspects of the unique experience of loneliness for the person. However, when considering if new technologies make a difference to loneliness, we need to understand loneliness. This is not to manipulate people in an experimental setting but to actively engage and involve them to understand their experiences. Whereas some approaches may seek to understand loneliness by applying rigid scientific techniques, this study attempted to understand loneliness grounded in the experience itself and the interplay of both social structure and individual factors that shape the experience of loneliness in later life. As discussed in Chapter Four, a 'pragmatic'

grounded theory was used to develop insights emerging from the data, enabling

loneliness as a phenomenon to be understood through a broad epistemological,

ontological and methodological lens (Victor et al. 2009).

Drawing on the findings from this study on loneliness and utilising insights from

other research literature and perspectives, four Modes of Loneliness have been

identified as a new and alternative way to consider loneliness. Victor (2014a)

has argued that the *prevalence* of loneliness in old age is more studied than the

relationship of loneliness to old age. It is the latter that Modes of Loneliness aim

to explore. The idea of a mode of loneliness draws on the meaning of the word

as 'a way or manner in which something occurs or is experienced, expressed,

or done' (Oxford English Dictionary 2017). This idea of modes is similar to the

idea found in Marxism with the mode of production, or in Weber (1962) as ideal

types. Ideal types are a synthesis of different concrete individual experiences

arranged to create an analytical construction (Weber 1962; Rex 1973; Grix

2010). Different modes of loneliness are distinguished by the types of

experiences found in the themes of Chapter Seven of this study. They are

therefore inclusive of different events, social forces and social relationships.

Such modes also incorporate the different perspectives and theories of

loneliness found in the literature review. Table 8.1 provides a matrix of the four

modes of loneliness and a more detailed description is provided below:

1. **Loss Loneliness** includes loss or changes to intimate and social relationships or loss of control. There are different types of loneliness connected to different social relationships affected by loss/change. For older people the loss of intimate relationships is found to be particularly important given difficulties in recovering from such losses and finding companionship (Townsend 1957 and 1973). Life events that see loss and cause changes to actual relationships, therefore, are important for

understanding loneliness for older people within the context of these social relationships.

Table 8:1: Matrix of Four Modes of Loneliness in Later Life

Mode	Loss Loneliness	Comparison Loneliness	Existential Loneliness	Alienation Loneliness
Description	Loss or changes to intimate and social relationships or loss of control	A mismatch between wanted and real social situations and /or relationships across time and place	Being alone and socially isolated, having limited social contact	Disadvantage, discrimination, and lack of resources impact on loneliness and result in a lack of connection with other people in society
Connected theme from Chapter Seven	Loss and grief led to loneliness	Loneliness had to be felt and was triggered 'in the moment'	Less choice and control facilitated loneliness	Changes in identity led to loneliness
	Poor health and disadvantage made loneliness worse			
The contribution of perspectives from the literature review (Chapter Two)	Social needs (Emotional Loneliness) Psychodynamic Biological	Discrepancy Theory Sociological	Existential Social needs (Social Loneliness) Sociological Biological	Sociological Psychodynamic

2. **Comparison Loneliness** includes a mismatch between wanted and real social situations and/or relationships across time and place. The opportunity to participate in social life is not just about physical barriers but also identity (Goll et al. 2014). It is therefore important to consider the subjective as well as objective aspects of loneliness, and what a person desires from their relationships; both the quality and quantity. The degree of mutual choice involved in social relationships is important for older people and so the desire for available contact may be more important than actual contacts achieved (Schutz and Moore 1987; Mullin et al. 1987). The meaning and value attached by individuals to specific forms of contac, therefore, may vary, questioning, for example, the centrality of face to face meetings. Accordingly, there is a need to understand the meanings older people give to their relationships along with the context of their contacts (Victor et al. 2009). These may be important in shaping loneliness in a technological age where contact may take various forms.

3. **Existential Loneliness** includes being alone and socially isolated, having limited social contact. Loneliness is not the same as being alone, aloneness or social isolation. This should not mean losing sight of the

association between social isolation and loneliness in later life. The social support older people derive from their social networks, or the disadvantage and social exclusion older people face if not having access to such networks, remains important to loneliness.

4. **Alienation Loneliness** includes disadvantage, discrimination, and lack of resources. This results in a feeling of lack of connection with other people in society. Loneliness among older people is not just a lack of social relationships, social networks, and support, but is also about feelings of contentment and social connectedness with society. Growing older creates the interplay of structural and agency factors that contribute to the construction of old age (Philipson 1997). Therefore, simply seeing loneliness in terms of psychological and individual feelings may ignore social structural and situational issues, lead to self-blame and stigma, and solutions that seek to change the individual or their situation rather than challenging the wider social structures, discrimination and social disadvantages of older age. Vulnerability to loneliness in later life is therefore found to exist due to lack of cultural, social and economic resources (Pettigrew and Roberts 2008).

These modes are intended as abstractions; heuristic and explanatory devices which help emphasise particular aspects of experiences of loneliness and aid understanding of the phenomena in later life. They are used to aid understanding of what shapes the present for the individual with respect to both agency and structural features in later life. These modes are therefore multifaceted and overlapping. No linear connection is implied in the presentation of the modes even if some modes appear to lead into others. These modes are not mutually exclusive, as each person will have a journey that will shape their experience of loneliness and which may include more than one mode (see Figure 8.1). Identifying a 'dominant' Mode of Loneliness may be useful for identifying potential solutions and interventions which may help older people; including considering whether new technologies are able to help. Utilising these modes is different from more mainstream methods of analysis of loneliness with respect to new technologies that tend to emphasise social contact as the main determinant. Using these modes involves moving beyond quantitative methods

of research to evaluate the impact of new technologies on loneliness by exploring a person's loneliness *journeys*. Case studies are beneficial and useful in this respect, and are therefore used below to illustrate the modes.

Figure 8.1 Overlapping Modes of Loneliness
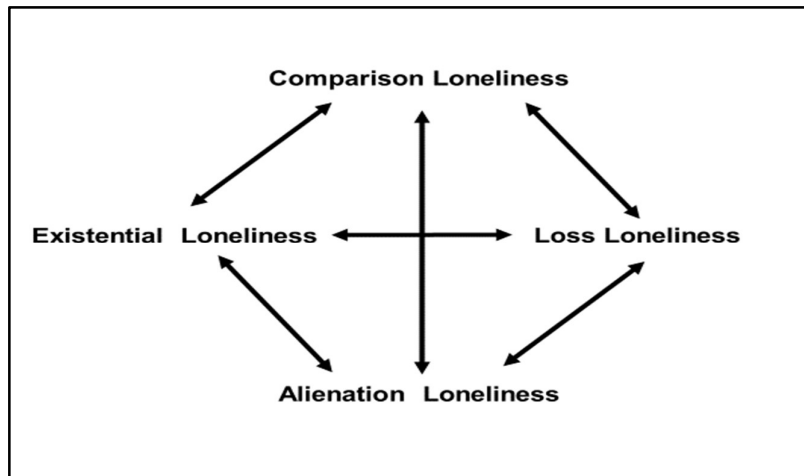
8.3 Ways for using new technology to mitigate loneliness

Existing research into loneliness has tended to focus on traditional interventions like day services and befriending (Cattan 2007; Masi et al. 2011; Kempton and Tomlin 2014) and it has been suggested that new technologies may become part of a broader range of support to help lonely older people (Jopling 2015). Particular emphasis often focuses on the importance of new technologies for enabling online social contact, and research including this study has found that new technologies can help with mitigating loneliness for older people in this respect (Fokkema and Knipsheer 2007; Ando and Sakamoto 2008; Sum et al. 2009; Loe 2010; Blažun et al. 2012; Plant et al. 2012; Cotton et al. 2013; Lelkes 2013). However, online social contact cannot mitigate loneliness for all older people, as highlighted in Chapter Six. For some older people the quality of

online contact is not satisfying, using new technologies to help meet new people will not work, and real social activities and real social contact remain central to meaningful social relationships.

Subjective experiences of individuals are therefore required, and an understanding of how new technologies may amplify or limit experiences of loneliness other than social contact. For example, benefits have been identified including how learning new technologies is both a social experience and an empowering one in terms of raising self-esteem and feeling part of the wider world (Gatto and Tak 2008; Hill et al. 2008; Cresci et al. 2010; Independent Age 2010; Sus-IT Project 2011). Participants in this study highlighted different ways that new technologies can help them or other older people with loneliness. Some participants mentioned the potential for online counselling, others talked about how new technologies were a good distraction. This could include engaging in hobbies, listening to music, doing research, playing games and generally keeping the mind active. As Matthew found, using new technologies to keep the mind active could provide temporary respite from feelings of loneliness even if not necessarily resolving the full issue:

> "*You use your computer as distraction behaviour, by playing games or playing chess or playing backgammon…you occupy your brain. The computers are quite useful for that but you are not resolving the loneliness you are just occupying your mind. The loneliness is going to come back no argument about that*".

Accordingly, these ideas brought together with online social contact as a strategy create a framework for how older people facing loneliness may benefit from using new technologies. There were potentially three beneficial ways that

new technologies may help with the Modes of Loneliness; connection, distraction, and therapy (See Table 8.2).

Table 8.2: Potential Strategies for Use of New Technologies to Help with The Modes of Loneliness

Strategy	Example of using new technologies	Example of Outcomes
Connection	Email, texting, social media, Whatsapp, Skype	Connection with families living at a distance or with like-minded people
Distraction	Games, music, hobbies, activities	Distraction to overcome social isolation or lack of company and combat feelings of loneliness
Therapy	Online counselling and support groups	Adjustment in managing expectations, restoring confidence for people recently bereaved

Connection, as has been shown, was a response to make contact with other people. This could involve face to face contact, telephones or using new technologies; email, Whatsapp and social media. Distraction was a response to finding an activity often undertaken alone but which will fill time and ease any unwanted feelings of loneliness. Traditional examples are TV, radio, reading, going out for a walk, driving and listening to music. New technologies can increasingly support this strategy by being used for existing hobbies like listening to music, reading, doing crosswords or creating new distractions like games and online shopping. As such, new technologies can consolidate existing activities and, in some cases, enhance them by giving greater choice and flexibility. New technologies may also create the potential for newer forms of distraction like interactive games.

Therapeutic support is a response that may include going to church, visiting health professionals for medication and attending counselling. New

technologies enable information to be found, online prayers to be made, online counselling to be considered, and an awareness of support groups or forums that could help with loneliness or any other emotional problem. There may be potentially different ways of harnessing new technologies for therapy, such as using technological equivalents of a group, for example, via social media or counselling such as using Skype or avatars, and companion robots.

New technologies, therefore, offer opportunitys for all three strategies. Their adoption means seeing a different kind of relationship with new technologies for older people; one depending on the biography, history, and situation of the individual (Bakardieva 2006). These strategies will be illustrated when considering the case studies below and when demonstrating how individuals were using new technologies to help with loneliness.

8.4 Using case studies to illustrate the approach

What follows draws on this case study approach. Two participants' case studies are described, highlighting a dominant Mode of Loneliness and considering what new technological strategies were or could be useful. Information is drawn from the survey, interviews, observations and reflections/field notes to illustrate the findings for each individual. A number of aspects of the participants' situations are considered, such as previous life history, social position, existing social relationships, ability to use and attitude toward new technologies, desirability and preferred outcome, and how new technologies may be helping to mitigate their mode of loneliness in terms of the technological strategies described above. The aim is to consider: Whether new technologies amplify or

limit this mode of loneliness? What appear as the main agency and structural factors that contribute to the circumstances? What is learnt from the case study about mitigating loneliness amongst older people through new technology? No real names were used, and direct location identifiers have been removed from the case studies to ensure confidentiality.

8.4.1 The case study of Claudia

Claudia was a 72-year-old White British woman who described her religion as Church of England. She lived alone after being widowed for about 10 years, in a semi-detached house on a main road in the suburbs of the city. The house was close to amenities and a local park which were all in walking distance. The immediate area was made up of private housing and was not socially deprived, although her own house required some repair work. Claudia was retired and previously worked in a routine office role. She was trained on the job and had a work-based rather than academic qualification. Her health had recently been deteriorating which was limiting her mobility and ability to carry out some daily living activities. Claudia experienced regular pain due to her disability and had recently given up using her car. Her WEMWBS score was 42 (Table 8.3), lower than 51 for the average population but comparable with those in the population who self-perceived their health as very poor (a score of 41).

Claudia had no social services provided by the local council but did have private help with household maintenance, and domestic support on regular basis. She was anxious about the future and maintaining the choice of being able to go out, socialise and do daily activities. As she was becoming more disabled, she was anxious her choices would be lost. Claudia did not do any voluntary work

and was not a member of any groups, organisations or clubs. She tended to restrict her social activities to more intimate activities like going for a meal, visiting family and friends or participating in family events.

Table 8.3 Claudia's WEMWBS Answers

I've been feeling optimistic about the future	Rarely	2
I've been feeling useful	Some of the time	3
I've been feeling relaxed	Some of the time	3
I've been feeling interested in other people	Often	4
I've had energy to spare	None of the time	1
I've been dealing with problems well	Some of the time	3
I've been thinking clearly	Some of the time	3
I've been feeling good about myself	Some of the time	3
I've been feeling close to other people	Often	4
I've been feeling confident	Rarely	2
I've been able to make up my own mind about things	Some of the time	3
I've been feeling loved	All of the time	5
I've been interested in new things	Some of the time	3
I've been feeling cheerful	Some of the time	3
Total		42

She did some social activities with friends at least twice a month. Claudia knew her immediate neighbours on a first name basis and was friendly towards them, although, as she said, 'not in each other's houses'. One neighbour did visit for coffee sometimes however. Claudia mentioned she had recently befriended a man, who was an old friend and a potential intimate relationship, but she felt reluctant to take this further. She was used to living on her own and being independent and preferred to keep this relationship as a friendship and more at a distance. She wanted the choice of who to see and when.

In terms of her family, Claudia was an only child but had two sons and four grandchildren. One son lived locally but the other some distance away. Her family were the first contact should she need any support, and family photos

were very visible in the house, suggesting a close family bond. Claudia did not have daily contact with her family and friends but would speak on the phone three or more times a week. Her preferred method of contact was to meet up with friends and family, which she did at least once or twice a week. Newer technologies were used for social contact at least once or twice a week and included email and text. Contact during special occasions involved meeting together, sending cards and sometimes speaking on the phone. At the time of the interview, it had recently been Claudia's birthday and she had a number of birthday cards on display from family and friends.

Claudia did not report feeling unsatisfied with her friendships and/or family relationships or having feelings of isolation. As described above, she had regular support and contact from her family and friends. However, she did report feeling lonely some of the time. There appeared to be several strands to her loneliness:

- The loss of her husband when she was relatively young and the fact that she had cared for him until he died.
- The loss of work following retirement, as work had become a coping mechanism for the loss of her husband.
- A recent spate of health problems which had led to disability and having to give up her car and becoming more dependent on people.

She described this as a flow of things which had led to less confidence and less control over her life. Claudia was very open during the interviews and became upset when talking about feelings. At first, this seemed to be connected to the loss of her husband and so appeared to be experiencing Loss Loneliness, a mode of loneliness identified above. She became quite tearful and emotional when talking about her husband. However, further reflection suggested that this experience of loneliness was related to her comparing her current situation with

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previous happier times in her life and so in this respect she experienced comparison loneliness. This mode appeared to be triggered by anxiety about the future and particularly her health problems. Her loneliness was not concerned with being unsatisfied with her current social and/or family relationships in any way.

Claudia described how she had only recently felt lonely, an experience she was still trying to understand. This was not something she had felt before even when her husband had died. Her loneliness appeared to be linked to feelings of depression, but it was not depression. Claudia described it as 'strange'; strange in that she was reflecting on previous times in her life with her husband. She talked about fun times, parties and how it was now 'very, very quiet'. Claudia appeared to be missing her husband more in the context of these feelings of loneliness. She talked about the security, being able to share problems and having the confidence of 'doing the right thing'. These anxieties appeared to be related to her recent health problems whereby her confidence had been lost.

What she was experiencing in later life appeared very different from what she was expecting. Her life was being shaped by life events outside of her control. It was also being structured by her identity as an ageing widow, an identity she appeared to find difficult to negotiate and find a sense of worth, value, and empowerment within. She could not see herself as old. As she described other older people:

> "*They are in a different, I don´t know, completely different section. I am not and do not want to be. Yes. That´s really weird. That´s a really weird sensation*".

These feelings, coupled with an inevitability that she was getting older and her death was approaching, created an anxiety which contributed to her loneliness. These feelings further resulted in Claudia reflecting and comparing her own experiences to those of her parents and to reminisce about the past. She was frightened despite all the support she had from friends and family. She felt vulnerable about the future and facing unwelcome decisions in her life. Reflecting on happier times, and comparing her previous life to the current situation, was leading to experiences of loneliness for her.

Claudia had used computers as part of her work, but this work was restricted to one particular use or function and so limited transferable skills that could be used with the new technology that was emerging. She was intelligent but also not particularly drawn to new technologies. She felt guilty about this and acknowledged that she was getting behind as the world was moving on. For Claudia, TV and telephones were used daily and the computer at least weekly. This was a desktop computer and used only for email. She neither agreed nor disagreed about new technologies making people lonelier or that new technology could help older people to meet new people. Given her recent health issues, she saw the benefits of new technologies, such as enabling her to do shopping online and have it delivered to her door. She was, however, particularly concerned about social media. She had young grandchildren and felt that social media was a risk to them. She was concerned about grooming and the stories of bullying seen in the media. Her own lack of confidence and understanding of how the technology worked also shaped this perception.

As Claudia had brought up two children and was a working mother, she hadn't had the time to invest in learning new technologies. Her social position, as a woman from a working-class background, meant that she tended to defer such things to her husband when he was alive but now she was widowed, she found it difficult. As an older widow, she was also at more risk of loneliness. This was compounded by her poor health which also placed her in a high-risk category of becoming lonely. Her social position also meant her relationship with new technologies appeared quite timid and she internalised any difficulties as being about her own lack of skill or understanding. She was also impatient that things did not always work as they should, and she normally ended up feeling she was messing things up. Her overall confidence and optimism in new technologies were mirrored by her feelings about later life and so was a feature of her own particular journey into later life and the experiences of loneliness. In this context, although new technologies had been supportive of her, they were also 'scary' for her. Claudia was concerned about over-use of technologies and how this may displace other activities. Her son was trying to encourage her to use new technologies more and this appeared to worry her as she didn't want it to replace 'talking to someone'. She was very much in favour of using it for practical things and less for family contact.

Telephone calls were her main contact with her family, although texting using the mobile telephone was important for her. The son that lived locally had a young family and she was in regular contact with him and cared for her grandchildren. She saw less of her other son whose children were teenagers. She found that text was a good way to maintain contact with them. This was particularly important to her as she appeared to feel that contact was 'naturally'

declining as the children began to create their own social lives and identities. Text became an easy way for her to know she had made some contact, even without a response; an aspect that gave her reassurance that she was still part of their lives. As the children had their own mobile phones, this was direct contact with them. She could do this at any time from her own phone which she preferred over email. Text seemed simpler for her than computing. She had texted for many years and was used to it. She recognised that this was unusual for her age group. Some of her friends could not use it but were fine with email. Again, previous experiences shaped what was used, and she had been an early adopter of the mobile phone and older style of SMS text messaging associated with this technology. Contact with her grandchildren tended to drive this for her.

Claudia preferred to meet with her family and friends but did use some new technologies to maintain contact. She accepted meeting was becoming more difficult for her as she was getting older. Although aware of new technologies like Skype, she couldn't consider this as a replacement for meeting with her friends/family and felt it lacked intimacy. Claudia was concerned that new technologies had the potential for reduced personal contact as they were easier. She didn't want technologies to *'take over'* and felt using them could *'mask over'* problems for older people if they were not in person. For example, she felt the use of new technologies led older people to confirm they were doing fine even when feeling depressed or lonely; something that would be observed with real contact. She recognised that life was changing and that newer generations were living a faster pace of life, but felt that less effort was made to be social. In terms of her son who lived away, she felt that he just wanted to *'check in'* and assumed everything was fine unless told otherwise. He had therefore done his

bit. Claudia could see the benefit of using new technologies to help with loneliness for contact with families and friends and also as a distraction to loneliness; playing games or broadening the mind by learning, however, she didn't feel new technologies could substitute for personal contact. She missed her hugs.

As described, Claudia was sometimes lonely despite having regular contact with friends and family and her mental wellbeing was low. Although she was concerned that new technologies may replace personal contact, she had adapted to and was using some new technologies for maintaining contact with others. Her preference, however, was to meet in person. The regular contact she had would not suggest that her feelings of loneliness could be reduced to poor or unsatisfactory social relationships or being alone. In fact, she said she enjoyed time on her own. However, without contact, it is likely that her loneliness experience would be exacerbated and so lead to feelings of loneliness more often or all of the time. Her dominant mode of loneliness was not existential or loss loneliness however, but emerged from comparing her current situation with a previously happy life which included her husband's involvement. Thus, this was a Comparison Loneliness which appeared triggered by her health problems and anxiety about the future.

In this context, new technologies were helping little to mitigate Claudia's experience of Comparison Loneliness but were helping her to maintain her current level of contact. Thus, new technologies appeared to be helping her to not experience a greater sense of loneliness. Claudia herself recognised that new technologies could help loneliness by distracting feelings. This might have

been a potential way of mitigating her own loneliness, but her confidence and motivation in using new technology were low. With the right support, she may have been more open to using these new technologies and might have used them more to help her mitigate her loneliness experience in this way.

This case study suggests that we should not assume that 'loss loneliness' is always the dominant mode of loneliness for widows, or that because a person has regular social contacts they are not lonely. Importantly, using new technologies to stay in contact is only one use; an important one but not the only use of new technologies to mitigate loneliness. In this case, it did not mitigate the full experience of loneliness for Claudia and maybe other uses, such as distraction and/or therapeutic interventions, would also be helpful for her comparison mode of loneliness.

8.4.2 The case study of Kim

Kim was a 73-year-old White English Woman with a youthful appearance who described herself as agnostic with respect to religion. She was a widow having lost her husband 40 years ago and lived alone in a rented flat within a sheltered housing complex in a moderately sized town. The complex was 'sheltered' in respect to having a warden who was on duty to provide support but not hands-on care. As such, although there were common areas, the flats were private and those who lived in them were mostly independent although increasingly frail. The sheltered housing complex contained about 30 flats on three different floors. A purpose built complex, it was nicely decorated and comfortable with pleasant surroundings and gardens. It was situated on a busy main road, across the road from a moderately sized housing estate which included both private

and social housing. The complex was close to many amenities and was within walking distance of the town centre. The town itself might be described as a historical town and was about 15 miles south of a major city. As a county town, it did not appear deprived, although like many other towns of this kind, deprivation was possibly hidden.

Kim had recently moved back to England after living abroad for many years with her son. She had lived in the sheltered housing for about 18 months. She had two sons and a young grandchild, aged 5, who she left abroad. Kim had shared a house with one of her sons but when his business got into financial difficulties she was forced to move and lost many of her assets. Anxious about her future, she mentioned that one of the reasons to return to England was in case she needed health care, which was free. Although Kim was not disabled and reported she was in good health, she had recently experienced some back problems, and this had worried her. A reason for her moving to this town was the recommendation of an old close friend who she had recently met again while living abroad. She believed that this relationship would continue when she moved to the town but had been disappointed that her old friend had rarely been in contact, and she may have misjudged the situation. The main reason for her moving to this particular town had not, therefore, worked out. As a result, she had moved to an area she was not familiar with and had no history or connection. She, therefore, had limited contact with anyone in the area.

Kim's flat was not personalised. There were no photographs to speak of and few home comforts. She only had the basics and said many of her possessions were still abroad. Kim was hoping to move to a location more familiar, where

she had grown up or near to her brother, but it was too expensive for her. In her current flat, she talked about being cold and that her hands were freezing, which indicated a lack of financial resources. This was somewhere she was living rather than 'home' and she appeared to lack the resources to change it.

This, therefore, set the scene for her journey towards loneliness, although she did not describe herself as lonely. In fact, Kim had been unsure about volunteering for the interviews because she did not view herself as lonely. She was recruited after completing a questionnaire left at the sheltered housing complex, and had only volunteered because one of her sons had undertaken a Ph.D. She therefore wanted to contribute to the study. Kim was an open and honest person but someone who appeared depressed. She scored 39 on the WEMWBS Scale, which was lower than the average of 51 in the UK overall (Table 8.4).

Table 8.4: Kim's WEMWBS Answers

I've been feeling optimistic about the future	Some of the time	3
I've been feeling useful	Rarely	2
I've been feeling relaxed	Some of the time	3
I've been feeling interested in other people	Rarely	2
I've had energy to spare	Rarely	2
I've been dealing with problems well	Some of the time	3
I've been thinking clearly	Some of the time	3
I've been feeling good about myself	Some of the time	3
I've been feeling close to other people	None of the time	1
I've been feeling confident	Some of the time	3
I've been able to make up my own mind about things	All of the time	5
I've been feeling loved	Rarely	2
I've been interested in new things	Often	4
I've been feeling cheerful	Some of the time	3
Total		39

During the interview, Kim did appear to be very emotionally flat. Within these wellbeing questions she reported she rarely was interested in other people, rarely felt useful and rarely loved. She said she really missed her family. Kim was the most isolated person interviewed during the study in respect of personal contact with other people. In the survey, Kim had a score of 5 on the ULCA loneliness scale which suggested she was not lonely. Kim had, however, indicated that she sometimes lacked companionship and sometimes felt isolated. She talked during the interview of being a loner, having a solitary existence and being on her own 'all of the time' except when she went shopping. As Kim was away from England for many years, she had few friends here anymore. She was only intermittently in contact with her neighbours who lived in the sheltered housing complex and sometimes attended a coffee morning. She also had one brother who she had not seen for five years. He had telephoned her only once in the previous three years. She called it a 'man thing'. She had one friend in England who contacted her by telephone every other month and they would meet up about once a year. She also mentioned a friend who visited her in England from where she lived abroad.

This was the extent of her social network beyond her family and therefore Kim could be described as socially isolated. When asked about where she would go to get help first, she didn't know. Lack of resources compounded Kim's social isolation. She was not able to afford a car and so was restricted to public transport or staying local, which precluded her from visiting the limited family and friends she had in England. She missed having a car to get around. She did not like public transport and had only used it twice since being back in England. Both times lead to 'unpleasant' experiences and she felt

uncomfortable, lacked confidence and did not feel safe. She had occasionally used taxis to visit her friend but this had cost a lot of money and meant she could rarely do it.

This isolation had the potential to tip into an Existential Loneliness. However, it appeared that new technologies were helping her to mitigate Existential Loneliness by enabling her to maintain contact with her family. Contact with her family was her main form of social contact. She rarely travelled to see her sons and grandchild and said this was becoming more difficult as she was getting older and it was expensive. New technologies had, therefore, become the only way she could 'see' her family regularly and particularly her young grandchild. New technologies were her 'life-line'. Her main use of new technology was with an iPad which was given to her by one son. She used FaceTime, the Apple version of Skype, to enable her to 'see' this son, her grandchild and to feel part of their lives. She talked about how she watched her grandchild grow up on the iPad and how she would 'babysit' for him on there. This was often at the weekends when she would spend prolonged time watching him using FaceTime.

She was unusual in being a daily user of this type of technology compared to other older people. During the interview, for example, her son contacted her using FaceTime. Kim also sent and received photos of her family on her iPad (which may explain the lack of photos in her flat, as they were on the iPad), although she did say she missed having them to hand. Kim contacted her other son, who did not have children, every other week as he was often busy. She did not use FaceTime with him, but the telephone. She would send a text to say

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she was available to be contacted and then he would call her on the landline. She felt texting was not *'deep'* enough for her and she couldn't say as much in a text and so she preferred talking on the telephone. She did not use social media and saw much of what was included on it as trivial. This was not what she wanted to know about other people and so could not see the point of it. She also did not want to meet new people online or share her personal details with them. Despite these concerns about social media, Kim had a very positive view of new technologies in terms of the utility they offered for her such as contacting her family, and she also felt that new technologies were having a positive impact on her life in terms of getting information, services and shopping online. At this time, for example, she was thinking of ordering shopping online as her back was becoming more painful and she was having difficulty carrying heavy items back to her flat.

Although Kim was positive about new technologies, she was not overly confident with using them. She tended to know what she needed to stay in touch with her family and that was enough. She had worked in clerical roles and so had experience of using new technologies. This started with using typewriters, then word-processors and then computers. In her personal life, she had mobile phones and eventually the iPad. She had been to classes but felt they did not help much as they were aimed at beginners and she was not a total beginner. As such, she just *'tried to find her way around using'* them. She was often frustrated with using new technologies, particularly if it went wrong which made her want to 'throw them out the window'. This was more frustrating given her reliance on them to contact her family. Kim was also concerned for those who may not have access to computers and felt this may disadvantage people.

There was some ambiguity, however, for Kim with respect to whether new technologies had a positive or negative impact on social relationships for her. For example, she neither agreed nor disagreed they helped her take part in activities, and she did not answer the question on the survey about whether they made people lonelier.

Despite being so reliant on new technologies like FaceTime to *'see'* her grandchild, she did not always find it a satisfying interaction. For example, she said her grandchild would often be playing games all the time, reducing any interaction; her son was often busy doing other things and there were times she was left looking at the ceiling when the camera was knocked into the wrong position. As such, she said she often found using FaceTime less satisfying than speaking to her son and grandchild on the telephone as a medium where she could have their full attention. For Kim, however, her situation meant she had little choice over the ways she could maintain contact and *'see'* her family. She felt that she would not *'survive'* without using these new technologies. New technologies were very important to Kim and arguably helped her to mitigate loneliness. As described above, however, Kim claimed not to experience loneliness. She could maintain daily contact with her family, which alleviated the existential mode of loneliness often associated with older people who are socially isolated and lack meaningful social networks.

A deeper analysis of Kim's experiences, however, might reveal that she did experience a mode of loneliness, even if she did not want to admit it. This was not an existential loneliness due to social isolation, which was helped by using new technologies, but loneliness borne out of alienation and disadvantage and

not feeling connected to other people. This was not described as loneliness by her but as often feeling 'alone' in the world. As she said:

> Kim: "Well, strangely being as I am on my own all the time, every day and every night, I don't feel lonely. I don't know why. I don't. I just don't. I don't. I would say lonely is a word I have never used. I often feel alone, and that is different, isn't it? To me lonely, I can always go and knock on one of these doors if you feel lonely but no I don't. I never feel lonely. That's why I hesitated about having this interview because you probably want to interview people who do feel lonely".
> Interviewer: "You said there a difference about being alone in the world and feeling lonely, do you see these as different things?".
> Kim: "Alone and lonely in the world, yes. I think alone, I mean I do sometimes feel alone. I used to feel alone more than I do now, I hardly ever feel alone now but I know times when I have".

Feeling alone, in this sense, appeared to suggest the alienation mode of loneliness. According to this interpretation, Kim's journey into loneliness began when her husband died leaving her to bring up two small children on her own in her late 20s. She had never remarried and did not appear to have settled in any other intimate relationships. Being a single parent potentially brought disadvantages. Kim was not a graduate and had worked in clerical jobs most of her life. Although she made no explicit reference to this in the interviews, the material aspects of bringing children up as a lone parent may have restricted her income and opportunity. Emotionally, she talked about how this experience had made her stronger and how over the years friends had commented on how difficult it must have been for her to be alone. She had a very resilient attitude towards life on the surface and talked about just getting on with things. During the interview however, it became evident that in her life she had experienced very difficult times which had shaped and contributed to her current situation.

Along with the death of her husband earlier, other factors had structured her life and contributed to her loneliness journey. For example, she had become a carer for her mother who had dementia. When she talked about her mother, it was with sadness. The gendered nature of caring saw that she had become the sole carer for her mother. This situation was made more difficult because both her children had also moved to live abroad to follow their careers and get married. Globalisation increasingly sees the movement of people and for Kim, this had meant that her close family had moved. She was very close to her sons, but these structural forces were separating them. In addition, and reflecting on her own relationship with her mother, she felt the closeness of her sons was different from that of having a daughter. If she had a daughter, her life would be different. An old saying that 'a son is a son until he takes a wife, a daughter is a daughter for life', reflected the gendered nature of these 'traditional' family connections and Kim often felt alone in this respect.

These events and the socio-economic structure within which Kim lived, shaped the social world for her and how she had come to terms with her situation. She was not a *'group'* person nor interested in joining any activities. She was not a member of any organisations and rarely went out with other people. She talked about being happy with her own company and simply having contact with her own family. She *'loved'* watching TV. Kim offered resilience. She talked about a time she went for coffee or a glass of wine on her own, including a visit to a pub. She thought this was brave, recognising the difficulty for a lone woman to be in this situation. It was a very public presentation of her being *'alone in the world'* and 'presentation of the self' (Goffman 1959) as independent. She

wanted to present herself as a loner and solitary and even said she thought loneliness could be seen as a weakness. This resilience also saw her being strong in the face of the tragedy she had faced and gave her a strong sense of self.

However, with this resilience, there was also acceptance, a passiveness that *'this was just how it had worked out'* for her. She was used to being alone and had limited expectations of any different kind of life. There was the 'backstage self' (Goffman 1959) of sadness and alienation from other older people and particularly those whose life had worked out more favourably. During the interview, Kim was often self-deprecating and did not feel what she had to say was of value. She did not feel there was anybody in the sheltered housing complex she could become close friends with. She was making limited contacts, attending the odd social event at the complex but she felt disconnected from many that lived there. She talked about how the residents all had children who lived locally and were all older than her and she did not have much in common with them (this was in direct contrast to another resident interviewed in the complex who had embraced others and made close friends). Kim may have found it hard to admit to being lonely because it would diminish her independence and weaken her resilience.   There were times when she appeared not to be able to contain these feelings, however. At Christmas, for example, the approaching period of loneliness had meant she got on a plane to see her son abroad. She just did not want to be *'alone'*.

There was no denying the importance for Kim for using new technology for maintaining contact with her family and mitigating Existential Loneliness.

Without this resource, her wellbeing and quality of life would be reduced. This was, therefore, a concrete example of how new technologies can be used by older people to mitigate loneliness. However, sometimes there is a need to go beneath the surface of these experiences to fully understand loneliness. This was the main lesson from this case study. Positive uses of new technology can take place within a wider context of disadvantage and Alienation Loneliness for older people, and this should also be considered if loneliness is to be addressed. More comprehensive support for Kim would not just involve helping her to access new technologies, although this was important. Rather, it would also be about appreciating something more fundamental; how events and socio-economic structures made and shaped her identity and in doing so supporting her to make and shape a more positive sense of identity for the future.

8.5 Conclusion

Loneliness remains despite the increasing use of new technologies. Loneliness is complex and multidimensional and so one solution is unlikely to be found for all people. This chapter has argued that the diverse set of findings of the nature of loneliness can be grouped into common experiences that may help to understand loneliness in later life - Modes of Loneliness - and these multidimensional and multifaceted 'ideal types' might produce a different way of exploring loneliness and uses of new technologies to help. The chapter has illustrated an alternative way to approach and evaluate loneliness interventions with respect to new technologies. Rather than trying to define what loneliness is, measure it and then observe it increasing or decreasing in response to using

new technologies, case studies highlight how different Modes of Loneliness may help understand personal loneliness journeys. Part of this personalised journey is also the person's history of using new technologies.

Chapter Nine: Conclusions

"Over the last six months or so, I have come very much to the view that computer use should be compulsory for older people and part of a free education system. I know they say that older people have gained a lot from education because of the high levels of access to university, better education for my generation, however, most people of my age miss out on computer education. It is so much part of everyday life now for most people. It disenfranchises older people. There is no doubt in my mind of that" (Melissa 60-69 years old).

The background to this research has been a social world which is changing and where older people are more connected by new technologies than ever before. A central issue has been to consider what may be described as the 'loneliness paradox' where the potential for older people to use new technologies to help with loneliness and social isolation has never been greater, and yet we continue to see older people report they experience loneliness. The study, in answering the three key research questions, has explored the reasons why this may be the case. First, it explored whether it was simply that older people are not using new technologies and so they are unlikely to have any impact on their loneliness. Accordingly, the study sought to explore the experiences of older people in terms of adapting to and using new technologies. It aimed to establish how older people were using new technologies and the difficulties they had. Second, even when new technologies were being used by older people, they may not provide an effective way of helping with loneliness. In other words, do new technologies provide a satisfactory way for older people to curb their loneliness and support their social relationships? Accordingly, the study sought to explore the differences new technologies were making to social relationships and the experiences of loneliness for older people. Third, the nature of older

people's experiences of loneliness, and complexities of these experiences may make it hard for new technologies to help. The study, therefore, sought to explore the experiences of loneliness for older people with the aim to understand what these experiences told us about using new technologies to help with loneliness. These experiences revealed a new way of thinking about the relationship between loneliness and new technologies, the Modes of Loneliness.

This chapter summarises the main findings with respect to these research questions. This is undertaken by highlighting key messages from the study, followed by some discussion about their application to support older people. Following this, an outline of the contribution to knowledge is provided and some reflections and recommendations offered. This includes limits of the study and some brief concluding remarks.

9.1. Key findings from the study

9.1.1 Research Question One: How are older people adapting to and using new technologies?

Box 9.1 highlights the key messages with respect to this research question. This study found that new technologies had become a feature of everyday life for many older people and were increasingly being used across a number of different outcomes.

Using new technologies for social contact did seem to provide an important substitute for real social contact given families and relatives were often spread apart. Although there were some older people who did not like or wish to use

new technologies, most could see the potential for new technologies to benefit them and wanted to use them.

Box 9.1: Key Messages Concerning How Older People Are Adapting to and Used New Technologies

- There were positive findings of participants using new technologies across a range of outcomes including social contact. This helped participants keep in touch with friends and family and provided a potential substitute for real contact, for example, if families lived geographically apart. Emerging uses of newer technologies like Whatsapp, particularly among younger and minority participants were increasing.

- There were still barriers that existed for some participants using new technologies particularly among some groups like the very old, those with poor health and/or low education. Some inertia also existed for participants in adapting to newer technologies. Trust was an important issue with participants concerned about scamming, privacy and bullying online, although this was often fuelled by media stories rather than actual experiences.

- Support to use new technologies was important. Previous use may lead to easier adaptation but did not always guarantee use. Support from the family was very important but may also result in a negative impact creating feelings of helplessness and low value. Those that lacked support were potentially those most lonely, thus seeing a disadvantage for this group in adapting to and using new technologies.

- As new technologies are increasingly being used by older people, with certain qualifications, digital exclusion and lack of engagement with adapting to and using new technologies does not explain a limited impact of new technologies on loneliness.

There were some variations with respect to the extent to which 'newer' new technologies were being embraced by older people. Previous experiences, confidence and the support older people could get from families made a difference. Traditional forms of communication like telephones remained the most popular form of technological contact but newer technologies like social media and Whatsapp were emerging as potential ways older people could maintain contact with their families and friends. For minority communities, these cheap and effective communications had already become significant,

particularly amongst the younger, English speaking, competent users of new technologies. The instantaneousness of new technologies appeared to be a real benefit. For those that lived alone, for example, the ability to simply send an email or text and get an immediate response was reassuring and created a sense of being connected and so a positive sense of self.

Experiences of adapting to and using new technologies were still, however, mediated by both material and non-material barriers that older people could face. Social positions like gender, ethnicity and social class, also still appeared to hinder older people adapting to and using newer technologies, with some groups using them more than others. Material aspects presented, such as not being physically able to access/use new technologies and financially being unable to pay for them. Such barriers remained very important in shaping the uses of new technologies for older people, even though new technologies were changing; becoming more accessible and cheaper. The main barrier appeared to be trust. Moral panic in the media appeared to shape this view and meant that newer technologies like social media were trusted less than older forms.

Good support appeared to mitigate these effects which meant that if good support was available, this could help older people adapt to and use newer forms of technology. Accordingly, those most lonely appeared to lack this support and were less likely to use new technologies. Formal training appeared less effective, particularly as classes did not always meet the needs of older people. Older people suggested that classes were often poorly taught, had too many people in them and did not give enough time to consolidate learning and reinforce new skills; for example, they did not allow people the time to practice

their new skills in a supportive environment. The outcome of such classes may not be what was intended and could be a disincentive in using new technologies. Formal support appeared to be a 'one-size fits all' approach rather than personally tailored and building on previous experience, raising confidence and alleviating fears for older people.

This was why, for many older people, family support, and particularly support from grandchildren, was needed. Family support to encourage use and to resolve difficulties when things go wrong was a vital ingredient for older people in adapting to and using new technologies successfully. The ability to draw on families if things went wrong was the security many needed to boost confidence, restore control and continue to engage with new technologies. However, a heavy reliance on others for support, particularly families and younger members of the family, could reduce self-esteem. How older people were supported by their families was found to be very important and if mocked or made to feel stupid, could damage confidence further and reinforce and/or exacerbate negative attitudes towards using new technologies.

This research, therefore, found that the idea of digital exclusion was a complex issue and not just about being able to use new technologies. Older people are not a homogeneous group and there will be many who simply get on with learning new technologies with little support, but findings from this study suggested that some groups are more disadvantaged and will not easily adapt to and use new technologies. Such groups included those who were lonely, older, disabled and less educated. Previous experiences, what support was available, how the support was delivered and whether the support could build

'techno-capital' that enabled older people to navigate continued changes and developments in new technologies over time appeared important to the success of adapting to and using new technologies for older people. However, despite these issues, digital exclusion and lack of engagement with adapting to and using new technologies was not found as the main reason for the 'loneliness paradox'. New technologies were increasingly being used by older people and used for social contact.

9.1.2 Research Question Two: What differences did new technologies make to older peoples' social relationships and mitigation of loneliness?

Box 9.2 highlights the key messages with respect to this research question. The findings contributed to a mixed picture of the impact of using new technologies to help with loneliness. Despite the increasing use of new technologies by older people for social contact, the extent of chronic loneliness did not appear to be changing generally.   Use of new technologies by older people was a prerequisite if it was to make a difference to their social relationships and their experiences of loneliness. As the previous question found, many older people were using new technologies, including for contact with family, friends and other people. However, many still favoured personal contact above other forms involving new technologies.

Those least satisfied took a negative view of new technologies and were concerned about it displacing face to face contact. Some appeared to struggle with the quality of such contacts and saw new technologies as having a negative impact on their social relationships. This raised the issue of a potential 'psychological' digital divide. This was a divide that saw some older people

unhappy with technologically mediated contact and others satisfied. This matches the idea of a 'cyberasociality' (Tufecki and Brashears 2014); where new technologies may never produce satisfying social contacts for some people.

Box 9.2: Key Messages About What Differences New Technologies were Making to Social Relationships and the Mitigation of Loneliness

- Despite the increasing use of new technologies by participants for social contact and fewer reported loneliness for those that use new technologies, generally, similar levels of chronic loneliness remain compared to earlier times before new technologies.

- The quality of social contact provided by new technologies was not always satisfactory or effective in helping with loneliness. New technologies could be viewed as unsatisfactory by some participants and were also increasingly disrupting other real social contact.

- New technologies did not help participants to widen social networks and meet new people. Participants often preferred real social contact and were unsure about using new technologies to contact people they didn't already know. Many did not seek new friendships online which in turn prevented other older people having the opportunity to make new social contact with their peers.

- Many participants had alternatives to using new technologies for social contact like social groups and going out for meals with friends and family. New technologies did not displace these activities, as participants who were socially active were also digitally active. Those most lonely and isolated were those who either would not use new technologies or used them anonymously.

- Experiences of loneliness are not unidimensional and so cannot simply be reducible to social contact. There is not a simple correlation between increasing digital social contact and a reduction in loneliness.

Although new technologies are being used by many older people for social contact there was also a tendency not to use them to 'meet' or contact new people. Several factors appeared to influence this, for example fear of who they may meet and the difficulty of being able to make informed judgements about who they befriended online. Some older people could not comprehend how friends could be made using new technologies or just felt they had the friends

they needed. There was an amount of curiosity regarding how younger people would meet people and make intimate relationships using social media, but the idea that it was for older people appeared alien. In this respect, there was a potential divide between generations in their approach to developing new relationships online, with older people favouring the older rather than newer ways of meeting people; meeting them first in person before entering into relationships with them. An important impact of this behaviour, however, was that for those older people who did want to meet new people of their own age online, the potential was limited.

In this respect, new technologies did not appear to be displacing more traditional forms of activities like going out and joining groups, as perhaps a dystopian view of new technologies may assume. Thus, there was no evidence of fears that new technologies were displacing 'real' relationships. Furthermore, new technologies were complimenting other activities by providing cheap and effective channels of communication. Some older people, however, were anxious that using new technologies had gone too far. Anxieties did exist, for example over how new technologies were increasingly distracting from, disrupting or disturbing real personal contacts, particularly where younger people were involved. Older people were concerned about how new technologies mediated interactions between older and younger people in these circumstances and reduced the quality of these interactions. The importance of real life and personal contact was found to remain central to the wellbeing of older people in this study, whether they welcomed new technologies or not.

Some researchers have suggested that new technologies may potentially both help and harm older people in respect to loneliness (Damant and Knapp 2015). Using new technologies was increasingly important in terms of keeping in touch and maintaining social contacts and so could help with loneliness. This supports the view that the nature of new technologies does not contribute to a 'loneliness paradox' and harm older people. However, not all older people, even those who use new technologies for social contact, feel the same about it. As described above, for some the quality of the social contact is different from personal contact, new technologies are increasingly disrupting social time, and using new technologies does not mean meeting new people and enhancing their social networks in ways which may help overcome loneliness.

This helps, in part, to explain why loneliness persists despite the increasing use of new technologies for social contact. A balanced approach for using new technologies as a substitute for real social contact is therefore required. Unthinkingly adopting new technologies as a cheaper alternative to real social contact may be misguided. The findings of this study cannot support a 'yes' or 'no' answer to the question of whether or not social contact through new technologies can help with loneliness. The themes that emerged with respect to the differences new technology make to loneliness suggested that experiences are not unidimensional and so cannot simply be reducible to social contact. In this respect, there may not simply be a correlation between increasing social contact and a reduction in loneliness, either with respect to real or digital social contact.

Traditional interventions aimed at mitigating loneliness have focused on this aspect and provided services to substitute for a lack of natural social contact. What the findings of this study suggest is that new technologies will not simply replace real social contact, nor will social contact simply help with loneliness. As such, these findings could be useful for highlighting why previous 'traditional' interventions may not work as well as developing new interventions using new technologies. To understand how new technologies may help, different experiences of loneliness need to be considered.

9.1.3 Research Question Three: What are the experiences of loneliness for older people in the context of new technologies?

Box 9.3 highlights the key messages with respect to this research question. A common feature across all experiences of loneliness was that it was a negative, painful and disturbing experience. Understanding the nature of loneliness for older people means moving beyond unidimensional perspectives like the conflation of loneliness with social contact. In this respect, different perspectives can add to an understanding of it, but there is no one perspective that can explain the range of experiences. There are different constructions and narratives that exist either directly or indirectly about loneliness. What transpires are loneliness journeys which are the way in which individual circumstances, and changes in relationships and life events shape experiences within the context of wider economic, political, and social processes. The case studies were used to help illustrate these aspects. Accordingly, understanding these journeys involves considering what has shaped the present situation which in turn shapes the context for the present situation.

Box 9.3: Key Messages About the Experiences of Loneliness in the Context of
       New Technologies

- Loneliness is not a unidimensional experience. Participants felt that it had to be experienced to be understood and it is often felt as unique. It can be triggered in the moment, by times, incidents, habits and memories. Such triggers appear to be shared by both older men and older women, although loneliness is often denied by men or manifests in a more practical rather than emotional way. Such manifestations are about cultural norms and traditional ideas of masculinity and gender roles associated with this generation.

- Changes to identity can lead to loneliness but also create resilience as found among BAME participants. In some cases, for example for participants who had been carers, there was a profound sense of loneliness. Ways in which the participant was able to get value and a sense of worth included companionship of a pet or other meaningful activity, often described as 'keeping busy'. Such aspects appeared to help construct a positive sense of identity and help with loneliness.

- Bereavement and loss for participants remained central to their experiences of loneliness. Where families did not exist or were estranged this created further disadvantage.

- Loneliness cannot be assumed and for some participants who lived alone, they had become resilient to feelings of loneliness. Having choice and control over the quality and quantity of social relationships appeared an important determinant of when loneliness may become an issue for participants. In this respect, for those who experienced poor physical health, mental health or disability, concerns often existed about their future, and loneliness featured prominently.

- Loneliness is therefore complex and multidimensional, and so one solution is unlikely to help it. We need to consider personal journeys – thinking about different Modes of Loneliness (ideal types of the most common experiences) and how these may help understand how new technologies may help overcome it.

Being alone and social isolation are important aspects of loneliness but cannot explain how some of the most isolated older people are not the loneliest. The choice and control older people have and desire from their social relationships are significant. Loneliness can be mediated by the quality of relationships, which if unsatisfactory and not meeting expectations, may nurture it, providing an aspect of the journey to loneliness. The extent to which participants exercised choice and control over their journeys also appeared to determine the

nature of and resilience to the loneliness experience. This often manifested itself in the desire for quality and quantity in social life and a comparison between a previous positive situation/time and a more negative and contemporary one.

Loneliness is not just about social needs. Changes in identity led to different experiences of loneliness. Carers, for example, appeared to experience a particularly intense form of loneliness, not from a journey lacking in social contact but from the changing nature of their relationships and identity. Experiences of loss and bereavement, whether in earlier or later life is significant for journeys to loneliness. The journey into the physical and psychological aspects of deteriorating health and increasing disability is a case in point, and intensified loneliness given the anxieties and uncertainties of the future created by later life. Deteriorating health and increasing disability may also result in a journey towards social isolation through reduced social participation. Such disadvantages were compounded for those who lacked material resources. Keeping busy and socially active can help with loneliness, and access to resources like transport, finances and a healthy environment help to support this aspect.

Such journeys highlight the importance of understanding not just the extent but also the nature of loneliness in later life. Four Modes of Loneliness were presented as aids to understanding the multidimensional aspects of the loneliness journey in later life. Such an approach is a shift beyond unidimensional perspectives of the phenomena to consider appropriate interventions to support older people. Such modes can encompass both the

agency and structural features of social reality. They draw on and utilise different perspectives from the research literature. These modes represent the most common experiences of loneliness and contribute to a wider understanding in exploring the uses of new technologies by older people which can help loneliness. The case studies utilised these modes to illustrate the journeys of two participants. Accordingly, it is proposed that Loss Loneliness, Comparison Loneliness, Existential Loneliness, and Alienation Loneliness are useful ways to explore the nature of loneliness in later life and to assess the place of new technologies in helping overcome these experiences.

A unidimensional perspective on loneliness therefore, for example, one based on a lack of social contact or social isolation, fails to capture the diversity of experiences of loneliness. Previous research into new technologies and loneliness has also tended to focus on the extent (in terms of social isolation) and not look at differences. Such differences mean that the use of new technology to help with loneliness can be more diverse than simply seeing it as about social contact. Some modes of loneliness such as existential loneliness can be easily tackled using new technologies in this respect, but other modes such as alienation loneliness, may result in new technologies potentially adding to social barriers and so creating a greater feeling of alienation. A further aspect of the loneliness journey, therefore, needs to consider the history of using new technologies. Although new technologies have become a feature of everyday life for older people, there are still barriers and difficulties with using them, including whether they feel satisfied with using new technologies to help with issues of loneliness. There may be different ways of utilising new technologies alongside social contact. The potential for different strategies emerged in the

study, such as social contact, using new technologies for distraction (or keeping busy) and therapy (or supporting emotional issues). All three strategies provide a useful framework for considering how new technologies could be used to help with loneliness. The case studies drew on these ideas to illustrate how new technologies may help or not for each person.

9.2 Contribution to Knowledge

Although this is not the first research on loneliness among older people, it contributes to knowledge in several ways. First, the study has provided original primary research involving both quantitative and qualitative methods. The study combines a survey and semi-structured interviews to enable the strengths of both quantitative and qualitative research methodologies to be utilised to answer the research questions and so contribute to the debates. Using these methods and triangulation to support different levels of analysis was also seen as contributing to new knowledge and was a useful way to explore the experiences of older people.

The research strategy was concerned to capture experiences, interpretations, and meanings of older people, starting from their everyday experiences and how these everyday expressions of themselves were central to aspects of loneliness, particularly as it was widely recognised that this involves subjective experience. The emphasis here on the individual, often also found in psychologically and technologically based studies of loneliness, however, was not designed to ignore the historical, social, ideological and structural contexts of loneliness and the uses of technology. Thus, along with quantifying their experiences, older people were able to talk about their lives and how they felt

about loneliness and using new technologies; an element which was not seen in previous studies in this area.

As a consequence, new knowledge was presented about how the extent of chronic loneliness has remained the same despite the use of new technologies and findings of a potential 'digital' divide for some older people who do not find technological contact satisfying. In terms of experiences of loneliness, new knowledge concerned the importance of identity to experiences of loneliness and further consideration of the relationship between social isolation and loneliness in terms of the 'loneliness paradox'. The findings suggest taking a new approach to evaluating the use of new technologies and their impact on loneliness from that taken by other studies. The Modes of Loneliness framework approaches evaluating how new technologies may help older people, through a detailed consideration of their loneliness journey, their preferred use and previous experiences of new technologies (and the support they have) and of how using new technologies may help or not. It is an approach that involves person-centred thinking within which different modes of loneliness are identified alongside different strategies for using new technologies; social contact, distraction, and therapeutic strategies. This new approach highlights a need for a person-centred, personalised and outcome-based approach to consider how new technologies may help loneliness. This resolves the challenge of making sense of the different and complex aspects of loneliness for older people and in the context of this study, how technological solutions can reflect the variability of loneliness in later life, rather than reducing it to the lack of social contact which informs ideas about the 'loneliness paradox'.

This new approach also involves moving beyond just the quantitative methods of research often used to evaluate new technologies and loneliness. The methodological principles that informed this research accepted uncertainty as part of the research journey, acknowledging that research is a learning and iterative process and one which requires reflection, openness, and transparency. This is not seen as a weakness in this context. Neither is a recognition that there is not a foundational point from which knowledge can be judged. Rather, an epistemological pragmatism was adopted which enabled multi-methods to be utilised to understand and interpret the experiences of older people in respect of loneliness and the uses of new technologies. Ontologically, this research approached the social world as a dialectical formation between both structure and agency. Taking an inductive and 'pragmatic' grounded approach to theory provided opportunities to contribute to new knowledge about loneliness and new technologies in older people's lives.

This approach was developed in response to the observation that many studies in this area tend to treat loneliness in a unidimensional way and so risk ignoring the multidimensional aspects of the experiences that are a feature of later life. These multidimensional aspects are argued to be important for the outcomes of interventions to help with loneliness. The presentation of different modes of loneliness to aid understanding is also seen as contributing to knowledge in this respect. This emphasis is different from the current trend in loneliness research. Increasingly, studies of loneliness appear concerned with quantitative measures as focus shifts to categorising loneliness as a public health issue. As such, reliability, validity and verifiability become central to its study as research seeks to quantify the damage loneliness inflicts on individuals.

This study challenges the drive to find a better measurement of loneliness which risks simplifying and neglecting what loneliness means for the person, what problems they face, what they feel, and how these feelings can be helped. The measurement of loneliness and the aggregation of its effects can create headlines and influence the social and health policy agenda, but in terms of understanding the phenomenon and what helps individuals (including using new technologies), it fails to capture the highly subjective nature of the feelings and the wider social structures which impact on this experience. How loneliness comes to be known and understood has been argued to be important for the solutions to it in this study.

This was the case with respect to understanding the impact of new technologies on the lives of older people. Studies that seek to evaluate whether new technologies make a difference to loneliness have tended to treat older people as a homogeneous group, and so risk replicating negative or positive stereotypes of older people's use of new technology. An important aspect of this study was to 'ground' findings in the diversity of experiences of older people and to understand both the agency and social structural aspects of these experiences of new technologies. How older people felt about using new technologies was central to this study. Such feelings, however, cannot simply be considered in response to usability or functionality as seen in some research on new technologies with older people. Rather, these uses must consider the wider cultural, social and economic milieu within which older people experience their lives, and the contradictions that exist within these transformations. Social structural aspects may not always routinely be considered in this respect

regarding the uses of new technologies by older people, and this was a contribution to knowledge from this study.

9.3 Recommendations and reflections

For practitioners, service providers and policy makers, in addressing the findings of this study, it is believed that this knowledge may contribute to successful developments, interventions, and strategies that can support older people who experience feelings of loneliness and may wish to use new technologies to help them.

The findings suggest the need for an alternative approach to practice when working with those who are lonely. It is an approach that seeks to understand what has shaped the present and what may shape the future. Such an approach must consider the things people control (agency) but also those they do not (structure). Practitioners, therefore, need to recognise both aspects with respect to experiences of loneliness and challenge the negative discourses and stigma associated with loneliness in later life. Practically, it means professionals working with older people to find solutions rather than making assumptions about their experiences based on pity and paternalism. It is an approach that requires person-centred thinking to create interventions, incorporating the meanings and values given by older people to their loneliness experience and how they feel, rather than a 'one size fits all' approach to support.

How loneliness comes to be known and understood, therefore, will shape what people try to do about it. Knowledge and theories of loneliness are part of practice or 'theories in use' (Weiss, 1982). Thus, for example, the conflation of

loneliness with social isolation (or existential loneliness) sees what might be described as the 'traditional' response to loneliness in older age. Loneliness is viewed as a social needs deficit. There is an assumption that this leads to a negative or even abnormal experience (unless attached to an eccentric or creative endeavour) and so those without social contact will become lonely. The service response will, therefore, concentrate on creating social contacts via social groups and/or befriending. Such solutions are still based on a professional gift model and the idea that social contact alleviates all loneliness.

The risk of understanding loneliness from this 'traditional' perspective is that the 'blame' for loneliness is placed with the individual. As such, this view may only seek solutions at the individual level and not changes in the wider social structural situation of the individual. There is little analysis of the factors that limit social interaction and which may lead to social exclusion or disadvantage. Loneliness is presented as a 'personal' tragedy which creates a stigma for the person involved, and this stigma reinforces a negative view of old age. Identity is always in the process of being (re)written through representation (Hall 1991) and negative discourses of old people translate into practice, denying or undermining older people's rights and leading to ageism (Thompson 2006).

Ageism is an important determinant of this disadvantage as it impacts on the external situation for older people but also is internalised and effects behaviour in terms of personal control and the sense of wellbeing and positive identity. Langer (1983) argues that negative stereotypes are particularly harmful to older people, who are vulnerable due to significant life changes which result from 'normal' ageing. This generation of negative feelings induces two tendencies in

older people. First, attribution of their negative feelings and physical symptoms to ageing, rather than to their situation. Second, a feeling of inevitability about issues and so failure to seek remedial steps to modify their situation; a feeling of dependency and helplessness. These experiences of dependency can result in a reorientation of the relationship between the self and the other; an identity from growing old to being 'old'. A loss of identity for the lonely individual is therefore facilitated by this traditional perspective, doing more harm than good, the reverse of what was intended. Ageism, therefore, can lead to interventions based on 'doing for' rather than 'with' older people, leading to learned helplessness and a 'one size fits all' approach to interventions embedded in the structure of care and support systems.

For example, on one visit to a day centre to recruit participants, it was clear how the running of the group contributed to dependency. Older people were in wheelchairs and grouped around tables playing dominoes and cards with volunteers. Conversations with members of the group consisted of what was on the menu for that day and how nice the food was at the group. Little attention was given to engaging the older people beyond their dominoes and steak and kidney pie which was on the menu. As the group was visited at lunchtime, there was constant anticipation that food would be served and that 'feeding time' was approaching. A routine had been set and my presence was seen to interfere with this happening. This is not to suggest it was an unpleasant experience for the older people attending. One participant said she enjoyed the group. However, there was little sign that those attending had any control of the group and a relationship of dependency appeared to exist. This group was run for, and not with or by the older people who attended.

In terms of how new technologies may be useful to those older people who are lonely, these concerns suggest there is a re-evaluation of the logic of how loneliness interventions work. The starting point of this re-evaluation is to describe the journey a person travels towards loneliness, which will include both the personal and structural aspects of the experience. This journey will help to identify the dominant mode of loneliness that is experienced and what is important to tackle and alleviate the experience. The next step is to consider what the person wants to achieve from any support (in this context by using new technologies) linked to the dominant mode of loneliness. The overall aim is to support the older person and shape the future by identifying individually tailored responses that can meet the outcomes they want to achieve, or find ways to adjust expectations where these outcomes are not easily obtained. The re-framing of loneliness interventions with respect to new technologies, therefore, requires the creation of different criteria when considering what works for older people, and the use of a particular set of values that guide action. This involves:

1. The personalisation of loneliness interventions in response to a personalised loneliness journey. Thus, the need for support based on outcomes and what the individual wants to achieve. Accordingly, the need for a conversation with the individual about what is important to them as the starting point of any evaluation of what works.

2. An understanding and awareness of social location and different modes of loneliness; that although perceived as a unique experience, loneliness is shaped by wider social structures and forces. Some interventions will need to challenge these wider social structures and the ways in which people are excluded from society.

3. An emphasis that research should also challenge the stigmatising aspects of loneliness discourses, which can do harm rather than help older people. This is about recognising that theory is practice, loneliness discourses

have impact, shape perceptions of others and are internalised by older people and so shape behaviour, policy and professional practice.

4. Embracing pragmatism when assessing interventions and supporting older people to mitigate loneliness using new technologies. The measure of success should not be left only to positivist methods with one-dimensional approaches to loneliness, but also develop knowledges that are useful and driven by pragmatist concerns.

This re-framing means a different approach for research in evaluating loneliness interventions and strategies that use new technologies. It is an approach which suggests starting from the person, embracing the complexity of their situation, understanding what they want to achieve and identifying the outcomes which will help them achieve these outcomes using new technologies. It evaluates the interventions and strategies based on individual outcomes. Sharing these loneliness journeys, narratives and/or stories will help other older people to realise the potential of new technologies. The method of using case studies will help practitioners by illustrating and illuminating what has worked or not worked, with the view that it may help develop solutions and service responses.

Accordingly, interventions and strategies to overcome loneliness (whether technological or not) need to involve solutions from the perspective of the individual and to be informed by person-centred thinking. This thinking should not focus on deficits, but on assets and what protects and supports older people from the experience of loneliness. This research found that keeping busy was an antidote to loneliness, and new technologies can help this by providing easy and effective ways of keeping busy such as through contact, distraction, and therapeutic support. New technologies, therefore, can offer an opportunity for older people, practitioners, service providers and policymakers to rethink

loneliness interventions. New technologies can be an enabler in many ways.

For example:

- To help people have different channels of contact, stop people from being alone and maintain closeness with others.
- To help overcome loss or change by maintaining identity and channels for identity formation. For example, to capture memories for future comfort.
- To help overcome barriers to social participation (physical and psychological, for example, shyness) and enable people to contribute to their communities.
- To help create interesting things to do like hobbies, games, and activities.
- To help people have substitutes for human relationships such as companion robots or avatars.

For service developments, new technologies can also contribute by:

- Improving or enhancing existing interventions, services and strategies to deal with loneliness.
- Constituting new approaches, interventions and services to mitigate loneliness, such as robotics and gaming.
- Facilitating self-help strategies for older people and helping to create support for older people to use new technologies in everyday life.

The findings of this study suggest that any service developments using new technologies must take account of the needs of older people to be successful. Utopian solutions that are not realistic for older people, or do not account for the specific issues faced by older people and particularly lonely older people, are likely to fail. This study highlighted that chronic loneliness continues to persist despite the increased use of new technologies for social contact. Service providers, therefore, still need to continue to target those groups most at risk. This raises the question of whether a new 'social services approach' is required to support the use of new technologies by older people, given the fear and insecurity around using them and the support needed by those lonely and digitally excluded.

This support needs to be more intensive and focused than is currently being delivered by many educational, voluntary and private sector organisations, and will also need to include levels of financial support or benefits to enable engagement with new technologies in respect of the purchase of equipment and Internet service providers. Material disadvantage and access to resources like new technologies is an important aspect of older people's vulnerability to loneliness, and interventions and solutions need to take account of this to tackle those most at risk, for example, those with deteriorating health. Support to use new technologies is essential if older people are going to use new technologies to help them with loneliness. Support, however, needs to be tailored to the individual and based on the outcomes they wish to achieve as described above.

Service providers can consider different ways to deliver this support based on the findings of this study. For example, a multi-generational approach. Most older people get support from their families and particularly younger members of their families. Helping younger people to understand the learning needs of older people and promoting dignity may both help to ensure that family support promotes rather than reduces engagement with new technologies. Awareness amongst families of the impact of new technologies on older people and the difficulties they face may also ensure that new technologies are used to complement rather than displace real social contact as some older people fear. This includes occasions where new technologies distract from real social contact. Developing this kind of 'techno-emotional intelligence', in this respect, may ensure the expectations of older people are met by their families and loneliness is prevented. Service providers should also target those that lack

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family and social networks, for example, LGBT older people. Service providers can become substitutes for this natural support and can provide a vital 'technological' social service to develop skills and provide reassurance for those older people who will not engage with new technologies without support to do so.

In policy terms, it is increasingly being recognised that new technologies will contribute to the delivery of both health and social care services in the future. This study has focused on loneliness, but increasingly new technologies are being introduced and/or seen as the solution to a range of health and social care problems. Without a commitment to fund appropriate support services, some older people will be left behind and disadvantaged. A channel shift to online services, for example, needs to be balanced against the appropriate support and access to other channels for those that find it difficult or will never engage with new technologies. Specific focus should be given to those most disadvantaged and who lack natural support and, for example, where barriers exist like language or accessibility. A starting point is to build trust, confidence, and competence in older people when using new technologies.

Any policy should also recognise that using new technologies has a cost for some older people in terms of the quality of interactions they desire. A key message from the findings with respect to loneliness is to recognise that real personal human social contact remains important to most older people. In some instances, it is the only way to have satisfying social contacts. Accordingly, using new technologies to help loneliness can be about creating new channels of contact for older people, but any policy should also recognise the value of

existing interventions which support real human social contact and activities, and such contacts and activities need to remain a central part of any programme to mitigate and alleviate loneliness amongst older people. Furthermore, as found in this study, disadvantages still exist and policy should focus not just on introducing new technologies but also attacking the issues older people face at these structural levels, which result in discrimination and disadvantage. Support to use new technologies for older people should be regarded as a statutory social service and part of a future health and social care system. Services should aim to address the barriers older people face with using new technologies but should also include the application of new technologies to promote their wellbeing. Any approach should anticipate how new technologies will increasingly become an essential part of everyday life for older people.

9.4 Limitations of this study

A limitation of this study is that it is cross-sectional and only provides a snap-shot at one point in time. It is, therefore, a document of its time. As described earlier, new technologies change and develop quickly and so in the time taken to collect and analyse this data, it may be out of date and the experience of older people, in this respect, may have changed and moved on. Furthermore, things will have changed for those who participated in this study, and a longitudinal study may have captured such changes and the factors which impacted on participants over time. Further research, therefore, should be undertaken in this area to understand how the changing nature of new technologies is impacting on the loneliness of older people in the longer term and over a period of time.

Another limitation of this study concerned the size and nature of the sample of older people who responded. The survey had only 126 responses, and the numbers who were involved from both BAME and the LGBT communities were small. Any findings from the survey, in this respect, should be treated with caution, although this does not necessarily mean the findings of the survey did not provide useful knowledge and insights. The findings are therefore more suggestive and could help inform the design and implementation of a larger study. Random samples are seen as the best approach in terms of people having equal opportunity to take part and also for the data to be meaningfully generalised. In the context of this study, the sample was neither large nor random and so limited the claims that could be made, at least in terms of the statistical analysis and generalisations.

The sampling strategy was based on a purposive approach involving recruitment using local service providers. Arguably, it was an appropriate method for a small sample from a limited geographical area where statistical inference was less a priority than other aspects of the study (Battaglia 2011). However, this imposed further limits to the study with respect to the potential bias of findings. A limit of this approach was that it involved a subjective selection mechanism. Another 'expert' or person with local knowledge could have come up with a different set of organisations, charities and agencies to contact. This reliance on expertise and local knowledge for success, therefore, made it impossible to evaluate properly any sampling error or bias in the sampling procedure.

The survey sample did appear to have a bias towards some groups. As the study was concerned with new technologies, it may have attracted those that used new technologies to take part and so over-represented these older people. Thus, there seemed a high number of respondents in the survey who used new technologies. The focus on social groups and services may also explain why there was an over-representation and/or under-representation of particular groups; for example more women, and fewer older people with low education. The findings of ethnicity in the study were shaped by those people who participated in the survey and interviews; largely from the South Asian communities. Thus, 93% of the BAME respondents in the survey described themselves as Asian/Indian, and 100% of BAME participants who took part in an interview were South Asian; from India or Kenya. Accordingly, these findings may reflect issues for this group rather than other ethnic groups.

In general, more research is needed into different groups who are difficult to reach in loneliness studies. This should include men, the oldest and disabled, LGBT, carers and different BAME groups. Research is also needed with those that feel 'sometimes' lonely, a category which appeared to be increasing. Intermittent loneliness may not have the same impact or consequences for service delivery but may tip into chronic loneliness over time. The extent to which using new technology may help prevent this from happening, combined with a longitudinal analysis, could be an interesting area for future research.

The quantitative analysis of the study also required turning answers into numbers, and this process was not a neutral one. Assumptions were made when defining and coding variables which carried implicit and hidden

conceptual - and so theoretical - views. Many of the concepts and meanings associated with this study may or may not have been shared by respondents. An example was the concept of 'new technologies', which could have been more clearly defined in the self-completion questionnaire. Furthermore, non-responses and incomplete data were found which questioned whether the survey questionnaires were easy to understand and were based on shared meanings. Whether respondents would give the same answers now, in different circumstances and at different times, the study cannot claim to fully resolve.

There were also limits with respect to ideas of grounded theory, because researchers cannot suspend awareness of other theories or be theory-neutral. Rather, researchers already 'know' about the social worlds before they enter them and so research is conditioned by these factors (Bryant 2004). This was the case in this study, undertaken by an 'insider' in the social care system who had worked in local government in social care services. The idea of being an 'insider' concerns the ways in which researchers may use their personal experiences to engage with the participants in their studies (Daly 1992). Drawing on insider experiences can help create 'reciprocal' relationships with participants (Daly 1992). Reflections on insider experiences may mediate power relationships, contributing to a non-hierarchical research relationship which can help to build trust, acceptance and empathy with distressing and sensitive experiences. This may contribute to 'reliability and validity' of the data by gathering deeper and richer information from participants.

This is in opposition to mainstream research discussions, where the focus is on researchers being 'outsiders'; how they remain objective or outside of their

participants' lives but at the same time acquire useful information about individuals' feelings and experience. However, the insider/outsider division is largely a false dichotomy, because most researchers will have experience of the social world they and their participants live in, and will have existing knowledge of the topics they wish to research. Such issues will impact on any analysis and make redundant any pure notions of grounded theory.

The insider/outsider division is, therefore, more appropriately viewed as a continuum of experiences where the researcher is neither fully 'inside' nor fully 'outside' of research. Accordingly, as all social research involves contact with other people, there will always be a tension between what can be described as 'role' and 'self' demands; the role of gathering information for analysis from participants and also the transaction creating a personal interaction between the researcher and participant (Daly 1992). Accordingly, adopting the 'role' of a researcher, albeit as a Ph.D. student, requires the presentation of the self (Goffman 1959). Using the 'self' means subjective perceptions cannot be removed from research but can be managed and reflected upon. The issue becomes how to create some 'distance' between ourselves and the study, to ensure that the knowledge produced is not simply a reflection of our own personal bias or experience. Where this 'distance' leads to research as presented using a 'disembodied self', the issue becomes how to bring the 'self' back into the research process. One implication of this position is to include statements, disclosures of experiences and motivations within any methodological writing to enable transparency.

As this study did not use experimental techniques both the survey and interviews relied on self-reporting data. Although these were useful for exploring how people made sense of their social worlds and helped draw some conclusions about older people's perspective and experiences, there will always be a limit regarding the 'hermeneutics of suspicion' - what people say they do and what they actually do are different (Hammersley 2012). Accordingly, what participants said may not have been true and/or may have been incomplete. During the interviews, for example, the interaction with participants affected the answers given. The way the interviews were conducted, and the language used, identified social positions (my own age and identity as white, straight and male), what participants anticipated from the research, and who would read it, all of which meant that findings were not based on 'naturally' occurring data. Rather, participants adopted footings (Hammersley 2012) and tended to speak on behalf of others rather than themselves. The interview answers were therefore shaped by the questions asked and influenced by these interactional processes.

Research methods like interviews and self-completion questionnaires create artificial circumstance and raise issues about whether they really discover 'social reality'. During the research, some participants said they had enjoyed the interviews and liked the opportunity to talk about things they would not normally discuss. This suggested something different from a 'normal' type of situation and/or conversation, and so was artificial. The process of doing interviews was interesting. Turning up, not knowing the person or just spoken to them on the phone.   A sense of anticipation and even relief can be felt when meeting the participant. The artificial nature of the interviews is apparent. The situation creates an interaction and so all participants are 'performing'. Although

this does not make what people are saying any less important, it does raise issues of getting at the real feelings of participants. A number of participants commented after the interviews that they hoped what they had said was useful. Some said, 'was that what you wanted?' One participant queried whether what they had said was 'interesting'. Another kept apologising for being too negative because they did not use new technologies.

Their role was as 'philanthropists' in helping and contributing to the study. Many people had kindly given up their time to contribute to the study and they wanted to ensure what they said was relevant. These points were found in post-interview recorded reflections after visiting a frail older man at home:

> *"We sat in the front room initially opposite each other but as the interview progressed, I sat next to him and talked. At the end of the interview, I stayed and had a cup of tea and we talked a little bit more… He kept folding his arms which I suppose suggested he was uncomfortable but at other times he was okay. It was a strange scenario because I had not met him before so it was like a cold call, but he was a very kind gentleman and obviously wanted to give something back" (Taped Interview Reflection).*

Participants were therefore conscious of the need to say things in line with the research study. For example, some participants' answers tended to be mediated by a technological 'lens' even if asked about other issues.

What was said may also have been influenced by how participants felt towards the interviewer and how comfortable they were to disclose information about themselves. This reflects aspects of identity. There were aspects of the researcher's identity that both helped and hindered the interview process and impacted on how participants interacted. Firstly, age and experience. As an older Ph.D. student with many years' experience of working with older people,

this contributed to the reciprocity of the interview relationship. Methodologically, however, being too familiar with participants could lead to assuming knowledge of what they mean and are talking about, and so not disclosing some of their experiences (Daly 1992). Secondly, social class and cultural capital (Bourdieu 1986) were involved in the interaction. Although from a working-class family having had lived experience and consciousness of a working-class socio-economic position, many years of working in a middle-class occupation had contributed to a changing consciousness, social position and the development of a different cultural capital for the researcher.

This became apparent during the interviews and there was an observation that those who appeared to participate were more articulate and shared this cultural capital. Those who did not were quieter and reserved. On reflection, this cultural capital materialised in the interview questions and the way they were phrased and delivered. Thus, it appeared that those who could be described as middle-class seemed more comfortable and confident with the interviews and able to expand on their views more easily. Along with this class, identity was the intersectionality of gender and ethnicity. An example of this was the conjoined interview undertaken with two working-class Asian women who wished to participate in the interviews but wanted to take part together. They were cautious about being interviewed and being together gave them the confidence to engage in the interaction. Accordingly, although the interviews went well there were indications that the identity of those taking part in the interaction shaped the potential outcome. There was a consciousness of how to present the 'self' during the interviews, and this was shaped by objective bodily physiology (like skin colour) and internal subjectivities and values. What people

said may or may not be limited or expanded by these aspects, and so raises questions of the limits of the 'reliability and validity' of data gained from the interviews.

Equally however, participants often disclosed information about themselves in interviews which were intimate and distressing. Some participants seemed comfortable talking to a stranger (interviewer) and found it easier to disclose intimate details. This may be because there would be no further interaction after the interview. Here an interviewer may be perceived to have objectivity which can create an openness which would not exist with a close or related person. Accordingly, the information gained from the interviews may have an 'authenticity' not found through other methods of research. The information produced in the interviews contained many of these aspects. This raised some difficult personal and ethical issues, not just during the interview but also after it had finished, including how to deal with those issues and feelings. As a registered professional, with a professional code of conduct, this raised some dilemmas about the extent to which intervention was appropriate in any issues found.

The ethics approval process with the University dealt with situations where people were at immediate risk, but this did not help with negotiating other difficult issues about 'professional identity'. The role of a researcher is not the same as a social worker, and is about discovering the 'data', and so there was no infrastructure or resources to provide support if identified. Accordingly, there were situations where some people interviewed were going through a very difficult time. Talking about issues of loneliness and social isolation inevitably

raised past, previous, and often unpleasant experiences. There were times where participating in the interviews may have contributed to these negative experiences, which were particularly evident when people became visibly upset during the interviews.

This felt difficult. Did the interview questions contribute to causing some distress for participants? To what extent should questions be pursued if distress is evident? Participants knew they could stop the interviews at any time. Where people were getting upset, interview questions were moved, changed or stopped to avoid further distress if needed. Incorporated in the interview schedule was time to have discussions after the interview, to bring people back to happier memories. Should any self-harm be disclosed, confidentiality could be broken. Such safeguards satisfied 'professional roles' but personally, there were still times after the interviews where anxieties existed that the upset experienced by the participant contributed to a negative experience, leaving them feeling less happy than before the interview. Contributing to misery does not help one's own sense of wellbeing.

However, it was also recognised that the impact of interviews on people should not be overemphasised or overstated. Interviews are artificial, not as 'deep' as we like to think. The brief time spent with each participant did not enable time to know the extent to which the person was really upset or not, and they had consented to take part and knew what they were taking part in. These anxieties were, therefore, more about the interviewer than the participant. There was one interview where the person lived alone, appeared very isolated but not lonely. What was verbalised was positive and optimistic, but their body language

seemed 'flat'. Thus, was this someone needing support? Feelings of pity may be considered patronising to the person.   This interview stayed in the mind during the transcription of the interview. It was the recognition that some of the upsetting and distressing talks would be written down for the person to see in black and white and sent back for them to see. This meant wondering about the wellbeing of the person, even though they would not be seen again. How was the transcription received? How did the person feel? Such thoughts go through the mind during transcription.

This risked influencing the decisions about what remained in the transcription. Would the transcription make the person upset? Transcription involved listening to the audio of interviews a number of times and making a judgment about whether to transcribe sections which may cause further upset. Again, there was no way of knowing whether this would be the case. Not including some comments and thoughts may be more upsetting than missing these out for fear of causing upset. Accordingly, the interviews were transcribed fully with the 'reassurance' that a covering letter gave permission for the participants to raise any issues or concerns when they received the transcription. Equally, this anxiety also exists with what is written about participants in the final report. The interaction is an artificial one, but still one where people disclose important information about their lives and feelings. Participants may not think much about how they feel about this in the moment but feel very differently later. People may feel free to talk and disclose feelings and emotions, doubts and concerns, hopes and fears which on reflection they regret disclosing. One interview saw someone criticise their family, another their partner. This was why a record of the interview was offered to participants to create a transparent relationship.

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Reassurance comes from the opportunity participants had to comment and withdraw at every stage.

Dealing with distressing and upsetting issues, therefore, required the need to have some 'distance' between my 'professional/researcher self' and the 'personal self'. This is because good reciprocal relationships could risk leading to 'role' confusion (Daly 1992). Boundaries can become blurred, with researchers being seen as friends, counsellors, therapists or experts on situations. Ethically, this blurring of roles could lead participants to view the interviewer inappropriately and set up false expectations of the relationship. The role of a researcher is very different from the role of a therapist, counsellor and social worker, but negotiating between a 'professional self' and 'personal self' is difficult. The professional/researcher role is to discover data in an ethical way, but the personal self has to deal with the feelings and emotions of others. There was always the potential for harm, and this harm equally applied to the 'personal self' of the researcher. As Daly (1992, p.113) notes, perhaps the appropriate balance is to utilise the best of both worlds of the insider/outsider perspective:

> *Use the nearness and involvement afforded by shared experience to gain access and establish trust but maintain whenever possible the distance and mystery of the stranger in order to encourage a full account of the participant's experience.*

The use of multi-methods and triangulation was an attempt to try to mitigate some of these limitations by drawing together different kinds of data. However, a further limit to the study was the skill and competence of the researcher. A personal finding of this study was an underestimation of the complexities of the process of research and social theory. Skills and competence in multi-method

research are not easily gained and require practice, continued reflection, and questioning of perspectives. The resource and time constraints of a study mean limited opportunities for 'deep digging' or the development of competencies across a number and range of different research projects to enable quality multi-method analysis. As an older than average Ph.D. student, and one who had not studied for a while, this added to the imperfections of this study. With hindsight, focus on one specific method of analysis, for example, qualitative analysis, may have strengthened the study. A process of learning has therefore been central to this study and as the methodology chapter described, a pragmatism was adopted to compensate for research experience involving transparency and modesty about the knowledge found in this study.

9.5 Concluding remarks

This study was one of three funded Ph.D. projects considering Technology for Healthy Wellbeing (THAW) for older people, that started work in October 2014. These projects were located in the Centre for Assistive Technology and Connected Healthcare, a multidisciplinary centre within the School of Health and Related Research at Sheffield University in the United Kingdom. The purpose of this study with respect to THAW was to look at the impact of new technologies on older people, with a focus on their experiences of loneliness. At issue was the continued relevance of loneliness for older people in a society that is increasingly connected through new technological devices. In addressing these issues, the aim of this study was to provide knowledge that may contribute to successful developments of interventions and strategies that can support older people who experience feelings of loneliness and may wish to use new

technologies. It is hoped that the findings may support individuals, professionals, service providers and commissioners in this respect.

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Appendices

Appendix One: Composite Scale

Appendix Table 1: Composite Scale on Using New Technology for Social Contact

If you use computers and the Internet to communicate and contact other people – do you use:	Never use it	Use it daily	Used in last month	Used in last year
Email	0	3	2	1
Skype, video conferencing	0	3	2	1
Social Networking	0	3	2	1
Online Chat	0	3	2	1
Reading and writing blogs	0	3	2	1
Using online forums or groups	0	3	2	1
Using dating/meeting people websites	0	3	2	1
Sharing and sending photos (such as Instagram)	0	3	2	1
Scores can range from 0 (never use) to 24 (used all means of contact daily).				

THAW
Technology for Healthy Ageing and Wellbeing

The University Of Sheffield.

Exploring loneliness amongst older people and their engagement with new technologies to alleviate it.

Let's get started on the survey!

If you want to complete this survey on-line then please go to:

http://goo.gl/forms/4eLJJfcJRD

I am happy to take part in this survey and understand the purpose of the survey	YES ☐ NO ☐

If NO, please give the main reason

☐ Do not have time to take part

☐ Worried about how the information will be used

☐ Not interested in taking part

☐ Do not think it is relevant to me

☐ Other:

Office use – survey number ☐☐☐

CATCH | The University Of Sheffield.
Centre for Assistive Technology and Connected Healthcare

Please tick the boxes

1. These questions are about you

Are you:

☐ A man

☐ A woman

What was your age, in years, at your last birthday?

Your Ethnic Identity:

White

☐ Welsh/English/Scottish/Northern Irish/British

☐ Irish

☐ Gypsy or Irish Traveller

☐ Other:

Mixed/multiple ethnic groups

☐ White and Caribbean

☐ White and Black African

☐ White and Asian

☐ Other:

Asian/Asian British

☐ Indian

☐ Pakistani

☐ Bangladeshi

☐ Chinese

☐ Other:

Black/African/Caribbean

☐ African

☐ Caribbean

☐ Other:

Other Ethnic Group:

☐ Arab

☐ Other:

☐ Do not want to say

Your main language:

☐ English

☐ Do not want to say

☐ Other:

Your sexuality:

☐ Heterosexual/straight   ☐ Do not want to say

☐ Gay or Lesbian

☐ Bisexual

Your marital status:

☐ Single   ☐ Do not want to say

☐ Married/Civil partnership

☐ Co-habiting

☐ Separated

☐ Divorced

☐ Widowed

Do you provide unpaid care for any of the following below?

☐ I am not a carer   ☐ Do not want to say
Go to the next question
(you can tick more than one box)

☐ Partner

☐ A son or daughter

☐ Other family member

☐ A friend/neighbour

☐ Do not want to say

☐ Other:

The area you live or post code:

What type of property you live in:

☐ A house   ☐ Do not want to say

☐ A flat

☐ A bungalow

☐ Other:

Your living arrangements:

☐ I Live alone   ☐ Do not want to say

☐ I Live with partner/husband/wife only

☐ I Live with other family/relatives/children

☐ I Lives with friends

☐ I live in supported housing/accommodation

☐ I live in residential care

☐ Other:

Your education qualifications (please tick the highest qualification):

☐ CSE/GCSE/O Level   ☐ Do not want to say

☐ A level/highers

☐ Undergraduate (BA/BSC)

☐ Post Graduate(MA/MSC)

☐ Work based qualification

☐ School leaving certificate

☐ No qualifications

☐ Do not want to say

☐ Other:

Your working status:

☐ I am seeking paid work   ☐ Do not want to say

☐ I work full-time (at least 30 hours a week)

☐ I work part-time (less than 30 hours a week)

☐ I am retired

☐ Other:

What is your main or previous occupation if retired?

....

Do you do volunteering work?   YES ☐   NO ☐

On average how many hours do you volunteer per week?.............

What volunteer work do you do?...

Your religion:

☐ Agnostic   ☐ Jain

☐ Atheist   ☐ Jehovah's Witness

☐ Baptist   ☐ Jewish

☐ Buddhist   ☐ Methodist

☐ Catholic   ☐ Mormon

☐ Church of England   ☐ Muslim

☐ Hindu   ☐ Sikh

☐ Humanist   ☐ Other:

                                    ☐ Do not want to say

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2. These questions are about your computing and Internet use

Below is a list of some technologies. Please say whether or not you use them, and if so how often.	Never use it	Use it daily	Used in last week	Used in last month	Used in last 8 months	Used in last year	Given up using it	Do not want to say
Television	☐	☐	☐	☐	☐	☐	☐	☐
Radio	☐	☐	☐	☐	☐	☐	☐	☐
Record player/cassette	☐	☐	☐	☐	☐	☐	☐	☐
Land line telephone	☐	☐	☐	☐	☐	☐	☐	☐
Mobile phone	☐	☐	☐	☐	☐	☐	☐	☐
Desktop computer	☐	☐	☐	☐	☐	☐	☐	☐
Laptop computer	☐	☐	☐	☐	☐	☐	☐	☐
Tablet computer (e.g. iPad)	☐	☐	☐	☐	☐	☐	☐	☐
Digital camera	☐	☐	☐	☐	☐	☐	☐	☐
Digital camcorder	☐	☐	☐	☐	☐	☐	☐	☐
E-book reader (e.g. Kindle)	☐	☐	☐	☐	☐	☐	☐	☐
Games console (e.g. Wii, play station)	☐	☐	☐	☐	☐	☐	☐	☐
CD/DVD player	☐	☐	☐	☐	☐	☐	☐	☐
Hard disk recorder (e.g. Sky+)	☐	☐	☐	☐	☐	☐	☐	☐
Satellite navigation device (e.g. Tom Tom)	☐	☐	☐	☐	☐	☐	☐	☐
MP3 player (e.g. IPod)	☐	☐	☐	☐	☐	☐	☐	☐

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On which of these devices and places do you use computers and the Internet?

☐ Do not use the computers or the Internet   ☐ Do not want to say
Go to page 7

Devices - You can tick more than one box	Places - You can tick more than one box
☐ Desktop computer	☐ At Home
☐ Laptop	☐ Another person's home
☐ Tablet (e.g. iPad)	☐ Public library
☐ Smart Phone	☐ Community/voluntary organisation
☐ TV/Games Console	☐ Educational institution
☐ Other:	☐ Internet cafe
---------------------------------	☐ On the go with a mobile phone
	☐ Other:

If you use computers and the Internet to communicate and contact other people - do you use:

	Never use it	Use it daily	Used in last week	Used in last month	Used in last 6 months	Used in last year	Given up using it	Do not want to say
Email	☐	☐	☐	☐	☐	☐	☐	☐
Voice calls (e.g. Skype, video conferencing)	☐	☐	☐	☐	☐	☐	☐	☐
Social Networking (e.g. Facebook, Twitter)	☐	☐	☐	☐	☐	☐	☐	☐
On-line Chat (e.g. MSN)	☐	☐	☐	☐	☐	☐	☐	☐
Reading and writing blogs	☐	☐	☐	☐	☐	☐	☐	☐
Using on-line forums or groups	☐	☐	☐	☐	☐	☐	☐	☐
Using dating/meeting people websites	☐	☐	☐	☐	☐	☐	☐	☐
Sharing and sending photos (e.g. Instagram)	☐	☐	☐	☐	☐	☐	☐	☐

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Please answer the following questions from your perspective even if you do not use a computer or the internet. How much do you agree or disagree with the following statements about new technologies?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Do not want to say
They make life easier	□	□	□	□	□	□
They are a fast and efficient way of finding information	□	□	□	□	□	□
They allow people to keep in touch or connect with friends and family	□	□	□	□	□	□
They are frustrating to work with	□	□	□	□	□	□
They take up too much time	□	□	□	□	□	□
They are expensive	□	□	□	□	□	□
They help people develop new skills	□	□	□	□	□	□
They let people find personal information about me too easily	□	□	□	□	□	□
They make people more friendly	□	□	□	□	□	□
They help people to take part in activities, hobbies, social groups or clubs	□	□	□	□	□	□
They help people find out about local events	□	□	□	□	□	□
They make people isolated or lonely	□	□	□	□	□	□
They help people save money on shopping and bills	□	□	□	□	□	□
They help to find out about and access services	□	□	□	□	□	□
They help to meet new people	□	□	□	□	□	□

3. These questions are about your health

Would you say your health is:
☐ Very good   ☐ Good   ☐Fair   ☐ Poor   ☐ Very Poor   ☐ Do not want to say
Do you have a long-standing condition, illness, disability or infirmity? (by long-standing we mean more than 6 months).   YES   ☐   NO   ☐   ☐ Do not want to say
Do these health problems or disabilities substantially limit your ability to carry out day to day activities?   YES   ☐   NO   ☐   ☐ Do not want to say
Do you have any of these health problems or disabilities which may affect your ability to use computer technology? (tick all that apply)   ☐ Difficulty in seeing   ☐ Do not want to say   ☐ Difficulty in hearing   ☐ Not Applicable   ☐ Difficulty in sitting   ☐ Difficulty in standing   ☐ Problems with arms or hands   ☐ Problems with neck or back   ☐ Migraine or frequent headaches   ☐ Anxiety or depression   ☐ Other: ---
Do you have use of any assistive technology in your home? (you can tick more than one box)   ☐ Fall detectors   ☐ Do not want to say   ☐ Medication reminders   ☐ Not Applicable   ☐ Alarms   ☐ memory aids   ☐ Hearing aids   ☐ Talking books   ☐ Other: ---

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Do you need any help or support with the following due to ill health or disability?

☐ Not applicable   ☐ Do not want to say

Go to the next question
(you can tick more than one box)

☐ Shopping

☐ Cooking/meals

☐ Cleaning

☐ Laundry

☐ Gardening/DIY/house maintenance

☐ Pet care

☐ Getting dressed

☐ Having a bath/shower

☐ Personal grooming

☐ Going outside

☐ Making some decisions

☐ Being a carer for someone

☐ Paying bills/finances

☐ Other:

Use of services- which services have you used within the last 12 months?

	Everyday	Several times a week	Once a week	Several times a month	Once a month	Less than once a month	Not used	Do not want to say
GP	☐	☐	☐	☐	☐	☐	☐	☐
Nurse or other health visitor	☐	☐	☐	☐	☐	☐	☐	☐
Pharmacy	☐	☐	☐	☐	☐	☐	☐	☐
Chiropodist	☐	☐	☐	☐	☐	☐	☐	☐
Physiotherapist	☐	☐	☐	☐	☐	☐	☐	☐
Social worker/care manager	☐	☐	☐	☐	☐	☐	☐	☐
Home care services	☐	☐	☐	☐	☐	☐	☐	☐
Disability equipment/ aids/adaptation	☐	☐	☐	☐	☐	☐	☐	☐
Charities/voluntary sector organisations	☐	☐	☐	☐	☐	☐	☐	☐

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Final Version 1

4. These questions are about your relationships, social life and activities

Where would you go <u>first</u> to get help and support if you needed it? (only tick one box)

☐ Family   ☐ Do not want to say

☐ Friends

☐ GP/Health Service

☐ Pharmacy

☐ Council Services

☐ Privately fund your own support

☐ Charities

☐ Supported/residential care services

☐ Other:

On average, how often do you do each of the following with family and friends?

	Three or more times a week	Once or twice a week	Once or twice a month	Every few months	Once or twice a year	Less than once a year or never	Do not want to say
Meet up (include both arranged and chance meetings)	☐	☐	☐	☐	☐	☐	☐
Speak on the phone	☐	☐	☐	☐	☐	☐	☐
Write or email	☐	☐	☐	☐	☐	☐	☐
Send or receive text messages	☐	☐	☐	☐	☐	☐	☐
Use skype	☐	☐	☐	☐	☐	☐	☐
Contact using social media e.g. Facebook, Twitter	☐	☐	☐	☐	☐	☐	☐

Do you feel lonely?

☐ Hardly ever or never   ☐ Do not want to say

☐ Some of the time

☐ Often or all of the time

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Here are some questions about what and how often you undertake social activities.

	Twice a month or more	About once a month	Every few months	About once or twice a year	Less than once a year	Never	Do not want to say
I go to the cinema	☐	☐	☐	☐	☐	☐	☐
I go out for a meal at a restaurant	☐	☐	☐	☐	☐	☐	☐
I go to the art gallery or museum	☐	☐	☐	☐	☐	☐	☐
I go to the theatre, concert or the opera	☐	☐	☐	☐	☐	☐	☐
I go to a place of worship	☐	☐	☐	☐	☐	☐	☐
I participate in family events	☐	☐	☐	☐	☐	☐	☐
I visit friends	☐	☐	☐	☐	☐	☐	☐
I attend a group/club/sport/ activity	☐	☐	☐	☐	☐	☐	☐
I go to a pub	☐	☐	☐	☐	☐	☐	☐

If you are a member of an organisation/social club/group, what are they?

☐ I am not a member of any organisations, clubs or groups - *Go to the next question*   ☐ Do not want to say

(you can tick more than one box)

☐ Political party, trade union

☐ Tenants/residential/neighbourhood group

☐ Church or religious group/club

☐ Charitable association

☐ Education, arts, music or learning classes

☐ Social groups/clubs

☐ Sports clubs/groups/societies

☐ Other:

Final Version 1

Please say how you feel in respect of the following questions.		
I am content with my friendships and relationships.	**I have enough people I feel comfortable asking for help at any time.**	**My relationships are as satisfying as I would want them to be.**
☐ Strongly disagree	☐ Strongly agree	☐ Strongly disagree
☐ Disagree	☐ Agree	☐ Disagree
☐ Neutral	☐ Neutral	☐ Neutral
☐ Agree	☐ Disagree	☐ Agree
☐ Strongly agree	☐ Strongly disagree	☐ Strongly agree
☐ Do not want to say	☐ Do not want to say	☐ Do not want to say

What happens on special occasions like your birthdays? How do people contact you?	Mostly	Sometimes	Rarely	Never	Do not want to say
Meet up or visit	☐	☐	☐	☐	☐
Phone call	☐	☐	☐	☐	☐
Text	☐	☐	☐	☐	☐
Letter or card	☐	☐	☐	☐	☐
Email	☐	☐	☐	☐	☐
Skype	☐	☐	☐	☐	☐
Social media e.g. Facebook	☐	☐	☐	☐	☐

Please say how you feel in respect of the following questions.	Hardly ever	Some of the time	Often	Do not want to say
How often do you feel that you lack companionship?	☐	☐	☐	☐
How often do you feel left out?	☐	☐	☐	☐
How often do you feel isolated?	☐	☐	☐	☐

5. These questions are about your well-being

Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last two weeks.

	None of the time	Rarely	Some of the time	Often	All of the time	Do not want to say
I've been feeling optimistic about the future	☐	☐	☐	☐	☐	☐
I've been feeling useful	☐	☐	☐	☐	☐	☐
I've been feeling relaxed	☐	☐	☐	☐	☐	☐
I've been feeling interested in other people	☐	☐	☐	☐	☐	☐
I've had energy to spare	☐	☐	☐	☐	☐	☐
I've been dealing with problems well	☐	☐	☐	☐	☐	☐
I've been thinking clearly	☐	☐	☐	☐	☐	☐
I've been feeling good about myself	☐	☐	☐	☐	☐	☐
I've been feeling close to other people	☐	☐	☐	☐	☐	☐
I've been feeling confident	☐	☐	☐	☐	☐	☐
I've been able to make up my own mind about things	☐	☐	☐	☐	☐	☐
I've been feeling loved	☐	☐	☐	☐	☐	☐
I've been interested in new things	☐	☐	☐	☐	☐	☐
I've been feeling cheerful	☐	☐	☐	☐	☐	☐

Thank you for participating in the survey

Taking Part in Further Research

If you want to talk more about the issues raised in this survey and volunteer to be interviewed, please give your details below.

Not everyone can be chosen and you will be contacted if you are.

Thank you again for showing an interest in and contributing to the survey. Your details are keep in the strictest confidence and cannot be accessed by anyone other than the researcher.

I would be interested taking part in an interview and am happy to be contacted in the future.	YES ☐ NO ☐ If yes please fill out the details below.
Name:	
Address:	
City/Town:	
Post Code:	
Email Address:	
Phone/Mobile Number:	

THAW — Technology for Healthy Ageing and Wellbeing

CATCH — Centre for Assistive Technology and Connected Healthcare

The University Of Sheffield

Please use the prepaid envelope to return. If you do not have a prepaid envelop, the address to send this survey back is:

David Clayton (THAW Research)
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Appendix Three: Resources consulted in the design of the self-completion survey questionnaire

Resource	Rationale
Derby City Council Self-Assessment Form	One of the approaches used was to consider previous work and experience used in adult social care and utilise my knowledge of social care assessments linked to the assessment of older people. This included looking through old assessment forms and incorporating some of the questions on disability. I was able to look for common themes/questions but also identify gaps in questions. Of particular use was the Derby City Council Self-Assessment Form which was accessed from their website on 25th March 2015. The tool seemed useful at gathering some of the information required and included simple questions. It also incorporated person-centred thinking tools which were useful for the interview schedule.
The English Longitudinal Study of Ageing (ELSA)	Data from this resource were observed in other studies of older people (Victor et al. 2009). ELSA collects information on the health, social, wellbeing and economic circumstances of the English population aged 50 and older. The current sample contains data from up to six waves of data collection covering a period of eleven years. It asked various questions, like ones looking at loneliness and technological use, which could potentially be harmonised and enable comparisons with my data. The Health and Lifestyles of People Aged 50 or over (Self-completion Questionnaire) was reviewed and inspiration for questions incorporated. Further details of ELSA can be found www.elsa-project.ac.uk.
Sus-It Study Questionnaires	This was a project funded through the New Dynamics of Ageing (NDA) programme. Sus-it stands for 'Sustaining IT use by older people to promote autonomy and independence'. The reason for using this survey was because the research was with older people and was a collaborative programme working with older people looking at digital engagement. Therefore, an assumption was made that it may be useful in terms of phrasing and considering questions to ask regarding ICT use. The project had two questionnaires that were used; A Digital Engagement Questionnaire and a Demographic questionnaire. Further details of the project can be found at http://sus-it.lboro.ac.uk.
Campaign To End Loneliness (CTEL) - Measurement Guide	In 2015 the CTEL produced guidance on different loneliness scales. Although primarily aimed at service providers, a number of the recognised academic scales were reviewed and included in the document. This is also linked with ELSA, above, which includes the UCLA three scale measure and the Single Item measure. Certain loneliness scales were adapted and used in my questionnaire, which meant a number of indicators of loneliness (CTEL, UCLA and

	Single Item) could be drawn upon when/as required. As some of the scales were made up of different questions, these questions may also be useful as stand-alone data as well as counting towards the scales. The guidance can be found at www.campaigntoendloneliness.org/wp-content/uploads/Loneliness-Measurement-Guidance1.pdf.
The National Institute of Adult Continuing Education (NIACE) Get Digital Impact Study	This study aimed to assess the benefits of the Get Digital Programme and to identify its critical success factors. The key objectives of this study seemed to share some overlaps with mine in terms of assessing behaviours and attitudes to ICT, albeit in a sheltered housing environment. This study was found during the literature review and the format of the questionnaire used in their survey appeared user-friendly and person-centred, and so useful. Like many social work assessments, the questionnaire was also usefully divided into sections to facilitate completion, an idea used in my final questionnaire. This survey resonated with my own feelings and experience of working with older people and how to design a self-completion tool. This study was therefore also useful for questions relating to technological use. Details of the study can be found at http://shop.niace.org.uk/media/catalog/ product/f/i/file_3_75.pdf.
Census Information	The Office of National Statistics (ONS) harmonisation questions. Some questions, like ethnicity and disability/long-standing conditions, were taken from the ONS guidance and website. Details can be found at www.ons.gov.uk.
Warwick and Edinburgh Mental Wellbeing Score (WEMWBS)	A mental wellbeing scale was included in the questionnaire as a way of considering how loneliness and the uses of technology may impact on mental wellbeing. Following a chance meeting with a member of the Essex Older Peoples Research Group (See www.olderpeoplesresearchgroupessex.org), this led to some conversations with other members of the group about research issues. They mentioned they had used this scale in their work and sent me some guidance and shared their views on it. The WEMWBS seemed easy to use, fitted into the questionnaire and incorporated positive statements. The WEMWBS comprises 14 items that relate to an individual's state of mental wellbeing in the previous two weeks. Responses are made on a five-point scale ranging from `none of the time' to `all of the time'. Each item is worded positively and, together, they cover most, but not all, attributes of mental wellbeing. However, areas not covered include spirituality or purpose in life. WEMWBS aims to measure mental wellbeing itself and not the determinants of mental wellbeing (which include resilience, skills in relationships, conflict management and problem-solving, as well as social acceptance, respect, equality, and social justice). Details of the WEMWBS can be found at www2.warwick.ac.uk/fac/med/research /platform/wemwbs.

THAW

Technology for Healthy Ageing and Wellbeing

A study exploring loneliness amongst older people and their engagement with new technologies to alleviate it.

Information about taking part in a survey of older people (65 years and older).

CATCH

The University Of Sheffield.

Centre for Assistive Technology and Connected Healthcare

Information for people thinking of taking part in this survey

This information sheet gives you details about this research and what is involved for you.

Before you decide to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Take time to decide whether or not you wish to take part. Thank you for reading this information sheet.

This research has been ethically approved by the University of Sheffield Sociological Studies Department ethics review procedures

1

Hello

My name is David Clayton and I am a PhD student in the Sociological Studies Department at Sheffield University. I am a member of a research group who are looking at how technology can make life better for older people.

The group is called Technology for Healthy Ageing and Well-being or THAW for short. This is also part of the Centre for Assistive Technology and Connected Health Care at Sheffield University.

You are being invited to take part in a survey for a research study called **Exploring loneliness amongst older people and their engagement with new technologies to alleviate it.**

2

What is the purpose of the research?

The research is about loneliness which is a common experience for many older people and how new technology may or may not be helping older people to overcome these feelings.

The aim of the research is to find out about the experiences older people have with new technology like computers, mobile phones and computer tablets in this respect. This includes using the internet.

The experience of older people who use older technologies, like TV and radio or have never used computers but have an opinion on them is also welcome.

The research will run for three years, be written up as a PhD thesis and is due to end in October 2017

3

How will I be involved?

Taking part in the survey involves asking you some questions. You do not have to give your personal details to take part. The survey will take about 10-15 minutes. Questions with be simple tick boxes and include questions such as about what technological equipment you own and how you use it.

Will my taking part in this research be kept confidential?

Whatever information is collected will be treated in strictest confidence. You do not have to answer any questions you do not like and can stop the survey at any time if you want to.

4

You will not be able to be identified in any reports or publications.

What happens to the information collected from the survey?

Any details obtained during this survey will be used only for analysis and for illustration in conference presentations and lectures. The information will be kept secure and safe and only be accessible to the main researcher.

A distressing feature of old age is loneliness. All who have done welfare work among the old have found it the most common, if at the same time the most imponderable, of the ills from which the aged suffer, and its frequency was amply confirmed by our study (Rowntree, 1947).

Most of us will experience loneliness at some point in our lives, but for many it will be transitory. Sadly though, for a growing number of older people loneliness defines and devastates their lives (Age UK, 2015).

5

Why is the collection of this information important for the research?

The views of older people and how they feel about issues described in this project may be neglected in some research. Your views are therefore important to understand what is happening for older people

The survey also asks if you want to be interviewed. What does this mean?

If you wish to take part in an interview for the research, you can include your details at the end of the survey. Interviews will be more like conversations and involve discussion rather than all set questions. You will need to give your written consent to take part and will be provided with more information if you volunteer and are chosen to take part in interviews.

6

THAW
Technology for Healthy Ageing and Wellbeing

Want to know more about the research?
Contact:
David Clayton,
Technology for Healthy Ageing and Well-being (THAW)
Sociological Studies,
University of Sheffield
E:mail: dcclayton1@Sheffield.co.uk
Telephone: 07774943070

CATCH
The University Of Sheffield.
Centre for Assistive Technology and Connected Healthcare

www.catch.org.uk

www.catch.org.uk/current-project/thaw-technology-healthy-ageing-well

Appendix Five: The final interview Schedule

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Exploring loneliness amongst older people and their engagement with new technologies to alleviate it.

Notes on introduction:

- The interview involves a semi-structured approach with questions so we diverge if we wish
- It is about me listening to your views and so I will now comment/talk much
- We do not have to get through all the questions/prompts I have prepared on this sheet

Participant Number:	
Has the consent form been completed with participant:	YES ☐ NO ☐
Date of Interview:	
Time of Interview:	
Duration of Interview:	

Reasons for no Interview (if applicable):

☐ Unable to contact

☐ Refused - no time

☐ Refused -not interested

☐ Refused fear of confidentiality

☐ Other:

Updated follow interview where participant didn't use the computers/internet

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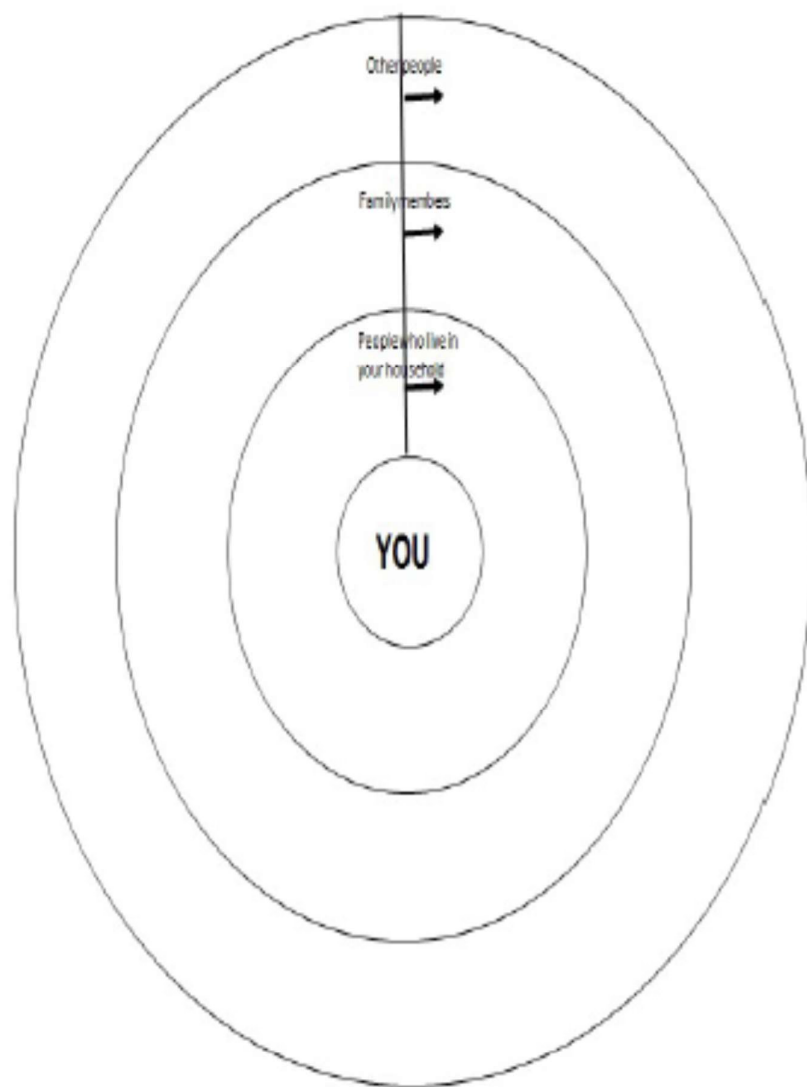
1

1.About Technology

Please say any words that describe how you feel about computers and the Internet	
Why did you choose these words?	
How long have you been using computers and the Internet and what motivated you to start using them? **If you do not use them, what are the main reasons why?**	
What do you feel is important that helps you successfully use computers and the Internet? **Or inhibits you from using them?**	

2

Do you think there are ways computers and the Internet have or could positively impacted on your everyday life and why?

If you do not use computers or the internet do you have a view about this or any other technology?

What do you think are the difficulties, problems or negative impact of using computers and the Internet on your everyday life?

If you do not use computers or the internet do you have a view about this or any other technology?

Do you use the computer and Internet for any support or care needs? If so what and how?

If not, do you use any technology to help with this i.e. telephone?

---

a) What do you feel is the impact of computers and the Internet (or the technology you use) on the support people can get?	Please explain your answer. Is this your experience?
☐ Made things a lot worse	
☐ Made things worse	
☐ Not made a difference	
☐ Made things better	
☐ Made things a lot better	
☐ Do not want to say	

3

About Relationships
Personal Network Diagram?

Other people

Family members

People who live in
your household

YOU

4

In your personal network, who would you like to see more of and why do you not see them as often as you like? How would you prefer to keep into contact and why?		
b) What do you feel is the impact of computers and the Internet on maintaining personal and social networks and friendships? ☐ Made things a lot worse ☐ Made things worse ☐ Not made a difference ☐ Made things better ☐ Made things a lot better ☐ Do not want to say	Please explain your answer. Is this your experience? If you do not use computers do you have a view or do you use any technology for this i.e. phones?	
c) What do you feel is the impact of computers and the Internet on expanding personal and social networks and meeting new people? ☐ Made things a lot better ☐ Made things better ☐ Not made a difference ☐ Made things worse ☐ Made things a lot worse ☐ Do not want to say	Please explain your answer. Is this your experience? If you do not use computers do you have a view or do you use any technology for this i.e. phones?	
Do you think your family gives you as much support as they could? Do you think technology has made any difference?		

5

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d) What do you feel is the impact of computers and the Internet on family support for older people?	Please explain your answer. Is this your experience?
☐ Made things a lot worse ☐ Made things worse ☐ Not made a difference ☐ Made things better ☐ Made things a lot better ☐ Do not want to say	

What is the relationship with your neighbours (people who live near to you)? Do you know them? What are your views about this?

e) What do you feel is the impact of computers and the internet on community relationships?	Please explain your answer. Is this your experience? **If you do not use computers do you have a view or do you use any technology for this i.e. phones?**
☐ Made things a lot better ☐ Made things better ☐ Not made a difference ☐ Made things worse ☐ Made things a lot worse ☐ Do not want to say	

Do you have a pet? If so please say what and how you feel towards it.

6

About Loneliness

If you feel lonely, is this something new or have you always felt lonely. Please explain? If not, have you ever felt lonely?

Do you feel there is any difference being a man or women in this respect?

Please look at this photograph (show Photo below). How does it make you feel? What emotions or thoughts does it trigger?

Why do you think people feel lonely?

If you were advising someone about loneliness, what would you say and tell them to do?

When/if you have felt lonely, what do you do to help this?

8

Are you able to get outside your home? What places do you go? What transport do you use e.g. your own car, public transport, trains or taxis etc.
What is a good day and a bad day for you when thinking about your social life?
What do you feel is working well or not working well in your life in terms of your social life? What would you change?

f) What do you feel is the impact of computers and the Internet on social activities?	Please explain your answer. Is this your experience?
☐ Made things a lot better	
☐ Made things better	If you do not use computers do you have a view or do you use any technology for this i.e. phones?
☐ Not made a difference	
☐ Made things worse	
☐ Made things a lot worse	
☐ Do not want to say	

Do you use the computer and Internet to help with feelings of loneliness? In what ways? How do you feel about this? Does it work?

If you do not use computers do you use any technologies to overcome loneliness i.e. music, phones etc.?

g) What do you feel is the impact of computers and the Internet on loneliness?	Please explain your answer. Is this your experience?
☐ Made things a lot worse ☐ Made things worse ☐ Not made a difference ☐ Made things better ☐ Made things a lot better ☐ Do not want to say	If you do not use computers do you have a view or do you use any technology for this i.e. phones?

Do you have any other thoughts on loneliness?

9

About Life experiences

Have important things changed in your life recently and if so how has this affected you? i.e. loss or bereavement

h) What do you feel is the impact of computers and the Internet on these important life events?	Please explain your answer. Is this your experience?
☐ Made things a lot worse ☐ Made things worse ☐ Not made a difference ☐ Made things better ☐ Made things a lot better ☐ Do not want to say	If you do not use computers do you have a view or do you use any technology for this i.e. phones?

What are your hopes and fears for the future?

What was the happiest period in your life and why?

10

Any questions/follow ups from the survey

Thank you for participating in this interview.

Appendix Six: Photos used in interviews

Appendix Seven: Observation Sheet used after interviews

Observation Sheet for interviews

- After interview perceptions.

- Observations/description of person so that you can put words to the image; dress, size, hair, sitting location/position, etc.

- Non-verbal; body language (open/closed), facial expressions/posture (interested, bored, agitated, upset, happy, thinking, tired), gestures/actions (meeting words, seemed reasonable what people are saying doubts about what they were saying in respect of views).

- Verbal; tone/volume of voice/type of language/rate/loud/soft/pauses etc.

- Observations about the area; suburban, close to amenities, working/middle class, industry, local knowledge.

- Observations about home; pictures of others, style, furniture, neighbours, environments, others in the house, animals.

- Any other observations.

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A study exploring loneliness amongst older people and their engagement with new technologies to alleviate it.

Information about taking part in the research

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Hello

My name is David Clayton

I am a PhD student in the Sociological Studies Department at Sheffield University. I am a member of a research group who are looking at how technology can make life better for older people.

The group is called Technology for Healthy Ageing and Well-being or THAW for short. This is also part of the Centre for Assistive Technology and Connected Health Care at Sheffield University.

You are being invited to take part in a research study called: **Exploring loneliness amongst older people and their engagement with new technologies to alleviate it.**

1

Information for people thinking of taking part in this research

This information sheet gives you details about the research study and what is involved for you in taking part.

Before you decide to take part, it is important for you to understand why the research is being done and what it will involve.

Please take time to read the following information carefully. Take time to decide whether or not you wish to take part in the research.

This research has been ethically approved by the University of Sheffield Sociological Studies Department ethics review procedures

What is the purpose of the research?

The research is about loneliness which is a common experience for many older people and how new technology may or may not be helping older people to overcome these feelings.

The aim of the research is to find out about the experiences older people have with new technology like computers, mobile phones and computer tablets. This includes using the internet.

The experience of older people who use older technologies like TV and radio or have never used computers but have an opinion on them is also welcome.

The project will run for three years and is due to end in October 2017

Why is the collection of this information important for the research?

The views of older people and how they feel about issues described in this research may be neglected in some research.

Often research may not enable older people to really express how they feel about issues and the impact on their daily lives.

Do I have to take part in the research?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given more information and you may be asked to sign a consent form (a copy is at the back of this leaflet). You can still withdraw at any time. You do not have to give a reason

How will I be involved?

You can take part in a survey. If you want to take the survey on-line you can type:

bit.ly/THAWSURVEY

If you prefer, you can fill in a paper copy of the survey given with this booklet and send it back in the free post envelop.

Taking part in the survey involves asking you some questions. You do not have to give your personal details to take part. The survey will take about 10-15 minutes. Questions with be simple tick boxes and include questions such as what technological equipment you own and how you use it.

You can also take part in an interview. The interviews will be more like conversations and involve discussion rather than all set questions.

Interviews can take place in your own home or at another venue if you prefer. This will enable us to talk about your experiences, views and feelings towards loneliness, computers and the internet in more depth and detail.

If you want to take part in an interview you can include your details at the back of the survey.

How long will the interviews take?

Questions will be asked about the things that are important to you.

Interviews can therefore take time to complete.

No more than two hours will be spent in any one time and you will have to agree to any additional time needed to finish the interview.

You can stop being interviewed at any time if you wish.

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What are the Advantages of taking part in the research?

Advantages
Your views will contribute to some exciting research
It is a chance for you to express your thoughts and feelings with other people
It may help to get things off your chest that are worrying you
The research may assist services, researchers, Government and local authorities to make things better for older people
You may learn something new about yourself or others

What are the disadvantaged of taking part in the research?

Disadvantages
Talking about loneliness can be distressing
You may feel uncomfortable expressing your feelings
Your views and feeling will be written down and seen by other people (you will not be identified however)
You may not agree with the conclusions of the research project
You may not want your views seen or shared with others

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9

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CONFIDENTIAL

Will my taking part in this research be kept confidential?

Whatever discussion are had, the information collected will be treated in strictest confidence. You do not have to answer any questions you do not like and can stop at any time if you want to.

You will not be able to be identified in any reports or publications.

Information disclosed that is seen as a risk to you or others, for example reports of abuse or threats of self-harm, may mean confidentiality may be broken in order to inform your GP or Local Authority.

This would be discussed with you in the first instance.

10

What happens to the information collected from our discussions?

Any notes and audio recordings made during this research will be used only for analysis and for illustration in conference presentations and lectures.

No other use will be made of them without your written permission, and no one but me will be allowed access to the original recordings.

The information will be kept secure and safe

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What will happen to the results of the research?

The results of the research will be written up and submitted as a PhD thesis for examination by Sheffield University, Sociological Studies Department in October 2017. If you wish to obtain a copy you can contact me for a copy of the finished thesis.

In addition, some of the results may be published in articles and journals.

What happens if things go wrong and I want to make a compliant?

In the first instance, you should talk to me about your concerns and I will try to resolve the matter. If however, you do not wish to speak with me or are unhappy with my response, you can contact my supervisor, Professor Alan Walker or the Sheffield University's Registrar and Secretary.

Professor Alan Walker (supervisor)
Sociological Studies.
a.c.walker@sheffield.ac.uk
Telephone: 0114 2226466

Sheffield University's Registrar and Secretary
registrar@sheffield.ac.uk
Telephone: 0114 2221100

Consent Form
(copy)

1.I confirm that I have read and understand the information sheet explaining the above research and I have had the opportunity to ask questions about the research.

2.I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline.

3.I understand that my responses will be kept strictly confidential unless these reveal risk of abuse or self-harm. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

4. I agree for the data collected from me to be used in future research. I agree my interview can be tape recorded.

5.I agree to take part in the above research.

Name:....................Signature:...................
Researcher:............................
Date:.............................

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Technology for Healthy Ageing and Wellbeing

Want to know more about the research?

Contact:
David Clayton, Technology for Healthy Ageing and Well-being (THAW)
Sociological Studies,
University of Sheffield
E:mail: dcclayton1@Sheffield.co.uk
Telephone: 07774943070

CATCH
The University Of Sheffield
Centre for Assistive Technology and Connected Healthcare

www.catch.org.uk

www.catch.org.uk/current-project/thaw-technology-healthy-ageing-well

Consent Form
(Researchers copy)

1. I confirm that I have read and understand the information sheet explaining the above research and I have had the opportunity to ask questions about the project.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline.

3. I understand that my responses will be kept strictly confidential unless these reveal risk of abuse or self-harm. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

4. I agree for the data collected from me to be used in future research. I agree my interview can be tape recorded.

5. I agree to take part in the above research

Name:.....................Signature:.................
  Researcher:............................
  Date:............... ....

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Appendix Ten: Survey variable coding book

Survey Question	Variable Name	Coding
Are you: ▫ A Man ▫ A Woman	Gender	(1) Man (2) Women -9999 missing
What was your age, in years, at your last birthday?	Ageinterval AgeCategories	List of ages (1) 65-74 (2) 75 and over (3) 60-64 -9999 missing
Your ethnic identity ▫ White ▫ Mixed/multiple Asian/Asian British ▫ Black/African/Caribbean ▫ Other Ethnic Groups ▫ Do not want to say	Ethnicity Newethnicity	(1) White (2) Mixed/Multiple ethnic groups (3) Asian/Asian British (4) Black/African/Caribbean (5) Other Ethnic Group (6) Do not want to say -9999 missing (1) White (2) Non-White (3) do not want to say -9999 missing
Your main language: ▫ English ▫ Other ▫ Do not want to say	Language	(1) English (2) Other (3) Do not want to say -9999 missing
Your sexuality ▫ Heterosexual/straight ▫ Gay or lesbian ▫ Bisexual ▫ Do not want to say	Sexuality Newsexuality	(1) Heterosexual/straight (2) Gay or lesbian (3) Bi-sexual (4) Do not want to say -9999 missing (1) Heterosexual (2) Gay, Lesbian or bisexual (3) Do not want to say -9999 missing
Your marital status Single ▫ Married/Civil partnership ▫ Co-habiting ▫ Separated ▫ Divorced ▫ Widowed	Marital	(1) Single (2) Married/Civil partnership (3) Co-habiting (4) Separated (5) Divorced (6) Widowed

☐ Do not want to say		(7) Do not want to say -9999 missing
	Intimatepartner	(1) Married/Civil Partnership/co-habiting (2) Not in marriage or civil partnership (3) Do not want to say -9999 missing
Do you provide unpaid care for any of the following below? ☐ I am not a carer ☐ Partner ☐ A son or daughter ☐ Other family member ☐ A friend/neighbour ☐ Do not want to say ☐ Other: ☐ Do not want to say	Careyn Caredpartner CaredChildren CaredFamily CaredFriend CaredOther	(1) I am a carer (2) No I am not a carer (3) Do not want to say 9999 missing (1) Yes (2) No (3) Do not want to say -5555 not a carer so not filled in
The area you live or post code	AreaTEXT Area	List of post codes and areas (1) Within the City Limits (indicating urban/inner city) (2) County (Indicating Rural/semirural) -9999 missing
☐ What type of property you live in? ☐ A house ☐ A flat ☐ A bungalow ☐ Other ☐ Do not want to say	Property	(1) House (2) Flat (3) Bungalow (4) Other (5) Do not want to say -9999 missing
Your living arrangements: ☐ I Live alone ☐ I Live with partner/husband/wife only ☐ I Live with other family/relatives/children ☐ I Lives with friends ☐ I live in supported housing/accommodation ☐ I live in residential care ☐ Other: ☐ Do not want to say	LivingArrangments	(1) Lives alone (2) Lives with partner, husband/wife only (3) Lives with Children/family (not good as may live with children and wife etc) (4) Lives with friends (5) Lives in supported housing accommodation (6) Lives in residential care

		(7) Do not want to say -9999 missing
	Livesalone	(1) Lives alone (2) Not living alone (3) Do not want to say -9999 Missing
Your education qualifications (please tick the highest qualification): ☐ CSE/GCSE/O Level ☐ A level/highers ☐ Undergraduate (BA/BSC) ☐ Post Graduate(MA/MSC) ☐ Work based qualification ☐ School leaving certificate ☐ No qualifications ☐ Do not want to say ☐ Other ☐ Do not want to say	EducationTEXT Educationlevel	List of qualifications (1) Graduate (Under and post graduate) (2) Non-graduate (No Qual, GCE, Work based, A Levels) (3) Do not want to say -9999 Missing
Your working status: ☐ I am seeking paid work ☐ I work full-time (at least 30 hours a week) ☐ I work part-time (less than 30 hours a week) ☐ I am retired ☐ Other ☐ Do not want to say	Workingstatus	(1) I am retired (2) I work part time (less than 30 hours a week) (3) I work full time (at least 30 hours a week) (4) I am seeking paid work (5) Other (6) Do not want to say -9999 missing
What is your main or previous occupation if retired?	PreviousOcctext Previousoccupation	List of occupations (1) Professional/Management/Administration (2) Routine Clerical/technical/manual -9999 Missing
Do you do volunteering work? ☐ YES ☐ NO	Volunteeringwork	(1) Yes (2) No -9999 missing

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On average how many hours do you volunteer per week?	Averagenumbersofhoursvolunteered	(1) Less than 5 hours (2) 5 or more hours -9999 missing
What volunteer work do you do?	Volunteeringoccupations	(1) groups/community work/befriending (2) driving/transport/sports (3) Finance/education/Admin/Shops (4) Advice/Information (5) Animal care -9999 missing -8888 No volunteering so not filled in
Your religion: ▢ Agnostic ▢ Atheist ▢ Baptist ▢ Buddhist ▢ Catholic ▢ Church of England ▢ Hindu ▢ Humanist ▢ Jain ▢ Jehovah's Witness ▢ Jewish ▢ Methodist ▢ Mormon ▢ Muslim ▢ Sikh ▢ Other ▢ Do not want to say	Religion	(1) Agnostic (2) Atheist (3) Baptist (4) Buddhist (5) Catholic (6) Church of England (7) Hindu (8) Humanist (9) Jain (10) Jehovah's Witness (11) Jewish (12) Methodist (13) Mormon (14) Muslim (15) Sikh (16) Other (17) Do not want to say -9999 missing
	Relidentity	(1) Religious identity (2) Non-religious identity (3) Do not want to say -9999 missing
Below is a list of some technologies. Please say whether or not you use them, and if so how often. Television Radio Record player/cassette Land line telephone Mobile phone Desktop computer	Television Radio RecordPlayerCassette Landlinetelehone MobilePhone DesktopComputer Laptopcomputer	(1) Never Use it (2) Use it daily (3) Used in the last week (4) Used in the last month (5) Used in the last 6 months

Laptop computer Tablet computer (e.g. iPad) Digital camera Digital camcorder E-book reader (e.g. Kindle) Game console (e.g. Wii, play station) CD/DVD player Hard disk recorder (e.g. Sky+) Satellite navigation device (e.g. Tom Tom) MP3 player (e.g. IPod) ▫ Never use it ▫ Use it daily ▫ Used it in the last week ▫ Used it in the Last Month ▫ Used in the last 6 months ▫ Used in the last year ▫ Given up using it ▫ Do not want to say	Tabletcomputer DigitalCamera DigitalCamcorder EbookReader GamesConsole CDDVD HardDiskRecorder Satelitenavigation MP3Player NewTVUse NewRadioUse Newrecorduse Newlandlineuse Newmobuse Newdesktopuse Newlaptopuse Newtabletuse Newcamerause NewcamUse Newebookuse Newgamesuse NewDVDuse Newharddiskuse Newsatuse NewMP3use	(6) Used in the last year (7) Giving up using it (8) Do not want to say -9999 missing From above recoded (0) Never used or given up (never use) (1) Used in last six months or in the last years (occasional use) (2) Used in last week or month(Regular use) (3) Daily use (use it daily) -99 do not want to say -9999 Missing
	Emextech	Variables were added into composite scale – "I am Embracing or Excluding Technology" - based on combination of all score: Max score 48 (Embracing various Technologies) Min score 0 (Excludes Technology) Where incomplete in any variable -9999 missing input – so participant had got to complete all 16 questions for the scale to be used.
On which of these devices and places do you use computers and the Internet? ▫ Do not use the computers or the Internet ▫ Do not want to say	DoyouUseComputers	(1) Yes (2) No (3) Do not want to say -9999 missing

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Devices - □ Desktop computer □ Laptop □ Tablet (e.g. iPad) □ Smart Phone □ TV/Games Console □ Other:	Desktop Laptop Tablet SmartPhone tVGamesConsole Other_A	(1) Yes (2) No (3) Do not want to say -9999 missing
Places □ At Home □ Another person's home □ Public library □ Community/voluntary organisation □ Educational institution □ Internet cafe □ On the go with a mobile phone □ Other:	UseatHome UseinLibraryEduction UseonMobilePhone Otherplacestouse	(1) Yes (2) No (3) Do not want to say -9999 missing
If you use computers and the Internet to communicate and contact other people - do you use: Email Voice calls (e.g. Skype, video conferencing) Social Networking (e.g. Facebook, Twitter) On-line Chat (e.g. MSN) Reading and writing blogs Using on-line forums or groups using dating/meeting people websites Sharing and sending photos (e.g. Instagram) □ Never use it □ Use it daily □ Used it in the last week □ Used it in the Last Month □ Used in the last 6 months □ Used in the last year □ Given up using it □ Do not want to say	Email VoicecallsSkype SocialNetworks OnlineChat Readingwritingblogs Onlineforums Dating sites Sharingphotos Newemail Newskype Newsocialnewt Newonlinechat Newblogs Newonlineforums Newonlinedating NewSharingphot	(1) Never Use it (2) Use it daily (3) Used in the last week (4) Used in the last month (5) Used in the last 6 months (6) Used in the last year (7) Giving up using it (8) Do not want to say -9999 missing -7777 Do not use computers so not filled in From above recoded (0) Never used or given up (never use) (1) Used in last six months or in the last years (occasional use) (2) Used in last week or month(Regular use)

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		(3) Daily use (use it daily) -99 do not want to say -9999 Missing -7777 Do not use computers so not filled in
	Newemail22 Newskype22 Newsocial22 Newonlinechat22 Newblogs22 Newonlineforums22 Newonlinedating22 Newsharingpho22	From above recoded (0) Used never or occasionally (1) Used regularly or daily -9999 Missing -99 Do not use Computers -77 Do not want to say
	Technoconnected	Variables were added into composite scale – "I use a range of platforms to technologically connected with family and friends" Scale based on combination of all score: Max 24 (Positive) Min 0 (Negative) Where incomplete in any variable -9999 missing input – so participant had to complete all 8 questions for scale to be used
Please answer the following questions from your perspective even if you do not use a computer or the internet. How much do you agree or disagree with the following statements about new technologies?		
They make life easier They are a fast and efficient way of finding information They allow people to keep in touch or connect with friends and family They are frustrating to work with	Theymakelifeeasier Theyareafastandefficientwasoffindinginformation Theyallowpeopletokeepintouchorconnectwithfriendsandfamily Theyarefrustratingtoworkwith	(1) Strongly agree (2) Agree (3) Neither agree nor disagree (4) Disagree (5) Strongly disagree (6) Do not want to say -9999 missing

They take up too much time They are expensive They help people develop new skills They let people find personal information about me too easily They make people more friendly They help people to take part in activities, hobbies, social groups or clubs They help people find out about local events They make people isolated or lonely They help people save money on shopping and bills They help to find out about and access services They help to meet new people	Theytakeuptoomuchtime Theyareexpensive Theyhelppeopledevelopnewskills Theyletpeoplefindpersonalinformationaboutmetooeasily Theyhelppeopletotakepartinactiviteshobbiessocialgroupsorclubs Theymakepeoplemorefriendly Theyhelppeoplefindoutaboutlocalevents Theymakepeopleisolatedorlonely Theyhelppeoplesavemoneyonshoppingandbills Theyhelptofindoutaboutandaccessservices Theyhelptomeetnewpeople	

□ Strongly agree
□ Agree
□ Neither agree nor disagree
□ Disagree
□ Strongly disagree
□ Do not want to say
	NewlifeEasier
	Newfindinginfo
	Newstayintouch
	Newtrust
	Newtaketime
	Newexpensive
	Newdevskills
	Newfindinfoeasy
	Newpeofriend
	Newacticities
	Newlocalevent
	Newmakepeoplelonely
	Newshoppingbills
	Newaccessservices
	Newmeetnewpeople
		Recording from above (positive)
		    (1) Strongly agree or agree
		    (0) Neither agree or disagree
		(-1)Disagree or strongly disagree

	Posnegview	Variables were added into composite scale – "I have a positive or negative view of technology" - Scale 15= positive view 0=Neither Positive/negative - 15=negative view

Would you say your health is: □ Very good □ Good □Fair □ Poor □ Very Poor □ Do not want to say	Health	(1) Very good (2) Good (3) Fair (4) Poor (5) Very poor (6) Do not want to say -9999 missing
Do you have a long-standing condition, illness, disability or infirmity? (by long-standing we mean more than 6 months). □ YES □ NO □ Do not want to say	Longstandingcondition	(1) Yes (2) No (3) Do not want to say -9999 missing
Do these health problems or disabilities substantially limit your ability to carry out day to day activities? □YES □ NO □ Do not want to say	LimitsADL	(1) Yes (2) No (3) Do not want to say -9999 missing -6666 no disability so not filled in
Do you have any of these health problems or disabilities which may affect your ability to use computer technology? □ Not Applicable □ Difficulty in seeing □ Difficulty in hearing □ Difficulty in sitting □ Difficulty in standing □ Problems with arms or hands □ Problems with neck or back □ Migraine or frequent headaches □ Anxiety or depression □ Other: □ Do not want to say	Healthonabilitytousecomputertechnology Seeing Hearing Sitting Standing Arms/hands Neck/back Headaches/migraine Anxiety/depression Other_B	(1) Yes (2) Not applicable (3) Do not want to say -9999 missing (1) Yes (2) No (3) Do not want to say -6666 not applicable -9999 missing
Do you have use of any assistive technology in your home? □ Not Applicable □ Fall detectors	Assistivetechnologyinyourhome Falldetectors MedicationReminders	(1) Yes (2) Not applicable (3) Do not want to say -9999 missing (1) Yes (2) No

□ Medication reminders □ Alarms □ memory aids □ Hearing aids □ Talking books □ Other □ Do not want to say	Alarms MemoryAids Hearingaids TalkingBook Other_C	(3) Do not want to say -5555 not applicable
Do you need any help or support with the following due to ill health or disability? □ Not applicable □ Do not want to say	Doyouneedsupportduetoill healthordisability	(1) Yes (2) Not applicable (3) Do not want to say -9999 missing
□ Shopping □ Cooking/meals □ Cleaning □ Laundry □ Gardening/DIY/house maintenance □ Pet care □ Getting dressed □ Having a bath/shower □ Personal grooming □ Going outside □ Making some decisions □ Being a carer for someone □ Paying bills/finances □ Other	PersonalCare Personal Care (making decisions, personal grooming, having a bath, getting dressed) DomesticSupport Domestic Support (Shopping, Cooking, cleaning, laundry, Gardening, pet care, paying bills) Beingacarer Goingoutside	(1) Yes (2) No (3) Do not want to say -7777 Do not need any support -9999 missing
Use of services- which services have you used within the last 12 months? GP Nurse or other health visitor Pharmacy Chiropodist Physiotherapist Social worker/care manager Home care services Disability equipment/ aids/adaptation Charities/voluntary sector organisations □ Everyday	GP NurseHealthVistor Pharmacy Chirpodist Physio Socialwork Homecare Disabilityequipment CharitiesVolSector	(1) Everyday (2) Several times a week (3) Once a week (4) Several times a month (5) Once a month (6) Less than once a month (7) Not used -9999 missing

□ Several times a week □ Once a week □ Several times a month □ Once a month □ Less than once a month □ Not used □ Do not want to say		
Where would you go first to get help and support if you needed it? □ Family □ Friends □ GP/Health Service □ Pharmacy □ Council Services □ Privately fund your own support □ Charities □ Supported/residential care services □ Other □ Do not want to say	Firstcallonsupport	(1) Family (2) Friends (3) GP/health (4) Pharmacy (5) Council Services (6) Privately Funded (7) Charites (8) Supported/residential care services (9) Other (10) Do Not want to say -9999 missing
On average, how often do you do each of the following with family and friends? Meet up (include both arranged and chance meetings) Speak on the phone Write or email Send or receive text messages Use skype Contact using social media e.g. Facebook, Twitter □ Three or more times a week □ Once or twice a week □ Once or twice a month □ Every few months □ Once or twice a year □ Less than once a year or never □ Do not want to say	Meetupincludingbotharrangedandchancemeetings Speakonthephone Writeoremail Sendorrecievetextmessages Useskype Contactusingsocialmediae.g.FacebookTwitter Contactaverage My average contact with friends and family	(1) Three or more times a week (2) Once or twice a week (3) Once or twice a month (4) Every few months (5) Once or twice a year (6) Less than once a year or never -99 Do not want to say -9999 missing -7777 do not use the computer New Composite – "My average contact with friends and family" - Taking all measures above, using values below and using mean (to sig fig) average of answers given across all ways to contact.

		This questions includes meeting up and so not just technology parts. 5 Three or more times a week 4 Once or twice a week 3 Once or twice a month 2 Every few months 1 Once or twice a year 0 Less than once a year or never Any average score of 2 or below can be classed as isolated regardless of ways of contact.
Do you feel lonely? □ Hardly ever or never □ Some of the time □ Often or all of the time □ Do not want to say	Doyoufeellonely	(1) Hardy ever or never (2) Some of the time (3) Often or all of the time (4) Do not want to say -9999 missing
Here are some questions about what and how often you undertake social Activities. I go to the cinema I go out for a meal at a restaurant I go to the art gallery or museum I go to the theatre, concert or the opera I go to a place of worship I participate in family events I visit friends I attend a group/club/sport/ activity I go to a pub □ Twice a month or more □ About once a month □ Every few months □ About once or twice a year	Igotothecinema Igooutforameal Igototheartgalleryormuseu m Igotothetheatreconcertorth eopera Igotoaplaceofworship Iparticipateinfamiliyevents Ivisitfriends Iattendagroupclubsportacti vty Igotoapub	(1) Twice a month or more (2) About once a month (3) Every few months (4) About once or twice a year (5) Less than once a year (6) Never (7) Do not want to say -9999 missing

□ Less than once a year □ Never □ Do not want to say		
If you are a member of an organisation/social club/group, what are they? □ I am not a member of any organisations, clubs or groups □ Do not want to say - Go to the next question	Ifyouareamemberofanorga nisationsocialclubgroupwh ataretheyYoucant	(1) Yes (2) No (3) Do not want to say -9999 missing
□ Political party, trade union □ Tenants/residential/ neighbourhood group □ Church or religious group/club □ Charitable association □ Education, arts, music or learning classes □ Social groups/clubs □ Sports clubs/groups/societies □ Other	Political NeighbourhoodTenants Religious Charity Education Social Sports Other_D	(1) Yes (2) No -4444 not a member of a group so not filled in -9999 missing
Please say how you feel in respect of the following questions. I am content with my friendships and relationships. I have enough people I feel comfortable asking for help at any time. My relationships are as satisfying as I would want them to be.	Iamcontentwithmyfriendsh ipsandrelationships IhaveenoughpeopleIfeelco mfortableaskingforhelpata nytime Myrelationshipsareassatisf yingaslwouldwantthemtob e CTELScore NEWCTEL	(1) Strongly agree (2) Agree (3) Neutral (4) Disagree (5) Strongly Disagree -8888 Do not want to say -9999 missing Scores added up for CTEL Score Variable – where data incomplete -9999 for missing This was then recoded: Score 0-3 =(1) Unlikely experiencing a sense of loneliness

		Score 4-9= (2) In between feelings of none and intense loneliness Score 10-12 = (3) Likely to be experiencing intense loneliness -9999 missing
What happens on special occasions like your birthdays? How do people contact you? Meet up or visit Phone call Text Letter or card Email Skype Social media e.g. Facebook ▢ Mostly ▢ Sometimes ▢ Rarely ▢ Never ▢ Do not want to say	Meetuporvisit Phonecall Text Letterorcard Email Skype Socialmediae.g.Facebook ContactSO	(1) Mostly (2) Sometimes (3) Rarely (4) Never -99 Do Not want to say -9999 Missing -7777 Do not use computers Composite variable – "I am contacted on special occasions" - Taking all measures above, using values below and using mean (to sig fig) average of answers given across all ways to contact. This questions includes meeting up and so not just technology parts. 3 Mostly 2 Sometimes 1 Rarely 0 Never -99 Do Not want to say -9999 Missing -7777 Do not use computers Any score of 1 or below will be classed as isolated regardless of ways of contact
Please say how you feel in respect of the following questions.		

How often do you feel that you lack companionship? How often do you feel left out? How often do you feel isolated? □ Hardly ever □ Some of the time □ Often □ Do not want to say	Howoftendoyoufeelthatyo ulackcompanionship Howoftendoyoufeelleftout Howoftendoyoufeelisolate d UCLAScores NewUCLA	(1) Hardly ever (2) Some of the Time (3) Often -8888. Do not want to say -9999 missing Scores added up for UCLA where data incomplete -9999 for missing Scores 3-5 = (1) Not Lonely Scores 6-9 = (2) Lonely -9999 missing where below score of 3
Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last two weeks. I've been feeling optimistic about the future I've been feeling useful I've been feeling relaxed I've been feeling interested in other people I've had energy to spare I've been dealing with problems well I've been thinking clearly I've been feeling good about myself I've been feeling close to other people I've been feeling confident I've been able to make up my own mind about things I've been feeling loved I've been interested in new things I've been feeling cheerful □ None of the time □ Rarely □ Some of the time □ Often □ All of the time □ Do not want to say	Ivebeenfeelingoptimisticab outthefuture Ivebeenfeelinguseful Ivebeenfeelingrelaxed Ivebeenfeelinginterestedin otherpeople Ivehadenergytospare Ivebeendealingwithproble mswell Ivebeenthinkingclearly Ivebeenfeelinggoodabout myself Ivebeenfeelingclosetoothe rpeople Ivebeenfeelingconfident Ivebeenabletomakeupmyo wnmindaboutthings Ivebeenfeelingloved Ivebeeninterestedinnewthi ngs Ivebeenfeelingcheerful WEWBTotal	(1) None of the Time (2) Rarely (3) Some of the Times (4) Often (5) All of the time (6) Do not want to say -9999 Missing Scores added together under WEWB Total - if survey not self-completed - 3333 or -9999 if incomplete/missing data

Other coding for admin purpose		
How the survey was completed	Interview	(1) Electronic survey (2) Paper survey self-completed (3) Paper survey completed with support (like at groups) (4) Paper survey done at interview (where I did it with them)
If the survey was completed at the interview	Interview	(0) Took part in an interview (1) Didn't take part in a an interview