Is Social Exclusion still important for Older People?

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What is social exclusion?

- The idea of social exclusion builds on a long-standing recognition that material exclusion is both caused by, and is a cause of, exclusion from other domains related to an individual's wellbeing.

- Social exclusion is generally accepted to be a multifaceted concept involving more than simply material disadvantage.

What do we know about social exclusion among older people?

- Older people are faced by the threat of losing independence – either financial or otherwise – which is a key challenge and underpins the identification of different domains of social exclusion for older people.

- Most studies of social exclusion have focussed on children, young people, and families. Where studies have focussed on older people, risk factors such as ethnicity and gender, known to be predictive of social exclusion among other age groups, have not been identified in some quantitative studies as particularly important components in explaining patterns of deprivation.

- Decent housing and access to public transport have been found to be key issues for older people. Given that social exclusion is also related to societal participation, social exclusion is possibly more relevant for older people than other measures of deprivation given that age related factors operate to prevent societal participation.

What is the current political standpoint on social exclusion?

- Social exclusion is not generally a term explicitly used by the current coalition government. However, the notion that material exclusion is both caused by, and is a cause of, exclusion from other domains remains a focus of some policies, albeit under alternative terms of 'social isolation' or 'social justice'.

1. What does social exclusion mean for older people?

1.1 What is meant by 'social exclusion'?

'Social exclusion' has evolved over several decades. Early work began with Townsend (1979) whose work centred on the detrimental effects of poverty. Townsend argued that exclusion arose when "resources are so seriously below those commanded by the average individual that they are, in effect, excluded from ordinary living patterns, customs and activities" (Townsend, 1979; p32). Townsend argued that poverty did not merely represent lack of financial wealth, but could also encompass non-financial resources, and that there existed a loosely defined set of customs, material goods and social 'pleasures' that the majority of people were entitled to, giving a threshold below which people were excluded.

Walker & Walker (1997, p8) also focussed on income and poverty in their definition of social exclusion as "a lack of material resources, especially income, necessary to participate in British society" but also noted that exclusion has a broader meaning: it refers to "the dynamic process of being shut out, fully or partially, from any of the social, economic, political and cultural systems which determine the social integration of a person in society". Indeed, definitions of social exclusion that focused mainly or exclusively on poverty prompted researchers to argue that social exclusion must be defined with both monetary and non-monetary indicators (Nolan and Whelan, 1996), and that there is a need to separate "social exclusion" from "poverty" (Room, 1998).

As a result of earlier work, it is now the norm for definitions of social exclusion to focus on other outcomes besides financial indicators, (Barnes et al 2006; Levitas, 1998) and in particular to focus in on the relationship between the individual and society. Individuals are defined as socially excluded when they suffer from a range of problems, which may or may not include poverty, but which endanger their relationship with society; for example, the "inability to participate effectively in economic, social, political and cultural life, alienation and distance from the mainstream society" (Duffy 1995, p241). Nolan and Whelan (1996) were among the first to emphasise the importance of identifying different dimensions of disadvantage, and the relationship between them, in order to more thoroughly understand social exclusion. Building on this, Burchardt, Le Grand and Piachaud (1999) identified four dimensions of exclusion: the inability to purchase goods and services, the inability to participate in economically or socially valuable activities, lack of involvement in local or national decision making, and lack of integration with friends, family and community.

The Social Exclusion Unit, was set up in 1997 to enhance understanding of the key characteristics of social exclusion and to cover the impact of government policy, and was one of the first official bodies to attempt to define social exclusion. It included a number of domains in their definition of exclusion as being "...what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdown" (SEU 2001, p10). However, this latter definition suggests passivity on the part of those who are socially excluded, and does not fully acknowledge that social exclusion is, at least partly, a reflection of the exclusionary practices of the socially included. A more satisfactory definition may therefore lie in the definition proposed by Burchardt and colleagues (2002a), who describe social exclusion as a process or state by which socially

excluded people become detached from their communities and wider society through the practices of the socially included, as the socially included attempt to gain a more privileged position - this detachment includes a break between the common values of the socially included and excluded.

As well as being a more multi-faceted concept than poverty, social exclusion has evolved to be understood as a dynamic process, with exclusion happening over time as well as on different dimensions. This is particularly important when considering the most applicable study design, with longitudinal studies having the advantage of being able to track movements in and out of social exclusion.

1.2 How is social exclusion measured?

Just as the definition of social exclusion has developed over several decades, so has the accepted means of measuring social exclusion. Given the multi-dimensional nature of social exclusion, its measurement necessarily involves analysis of a wide range of resources potentially available to individuals, although there is no widely accepted agreement on which of the many potential elements should be measured. Studies tend to select different measures of social exclusion, and empirical work can investigate social exclusion in a static context at a single point in time, or in a more dynamic longitudinal context, with analysis of changes in exclusion over a number of years (see for example Barnes, 2005).

Burchardt and colleagues (1999) used data from the British Household Panel Survey (BHPS), choosing five domains of social exclusion that they believed to represent an individuals' exclusion from society (a low standard of living; lack of security; lack of engagement in an activity valued by others; lack of decision-making power; lack of support from or contact with family or friends and the wider community). The study explored the prevalence of these factors over a five year period, made possible by the longitudinal nature of the BHPS. The study emphasised that few people were excluded on all five domains simultaneously, and that even fewer were excluded over the whole five year period, emphasising that social exclusion among the general population is a relatively fluid state. Gordon et al (2000) meanwhile, focused primarily on social relations in their study of social exclusion, and adopted a cross-sectional approach, without any analysis of how their measurements changed over time. Barnes (2005), meanwhile, undertook a multi-country study which enabled them to study how exclusion varied between countries. They constructed a number of domains, such as income, non-monetary deprivation, health and social participation.

As well as selecting the dimensions of social exclusion to study, and the time period over which to observe exclusion, empirical studies also require some means of assessing whether an individual is excluded on the dimension in question. Barnes and colleagues' (2006) study of social exclusion among older people defines social exclusion over seven dimensions and considers individuals to be suffering from multiple exclusion if they are "excluded on three or more of these dimensions". The authors construct a minimum threshold for each dimension (for example, an individual is considered to be excluded from social relationships if they have less than three good quality relationships with family and friends, with quality assessed through a range of measure). Constructing minimum thresholds is a popular method of measuring social exclusion throughout the literature, and is also used by Burchardt et al (1999) among others.

1.3 How does the definition and measurement of social exclusion change when applied exclusively to older people?

In 1998, the Labour Government committed to measuring social exclusion in its paper Opportunity for All (DSS, 1998), through a set of quantitative social indicators. This was the first official measure of social exclusion, and different sets of dimensions were identified for three main population groups – children and young people, people of working age, and older people. For children and young people, dimensions of social exclusion focused on education (largely academic test scores, but also school exclusions), health outcomes (such as low-birth weights), family poverty and youth unemployment. For people of working age, dimensions of social exclusion were focussed primarily on unemployment, but also included low income jobs, as well as drug use and homelessness. The dimensions for older people centred on poverty (largely from reliance on state pension, but also from fuel poverty), health and life expectancy, fear of crime, poor housing, lack of independence. These dimensions also mirror more recent analyses of social exclusion among older people (see Aldridge et al 2011).

The indicators used for studies examining social exclusion among older people seem to acknowledge that social exclusion among older people often occurs as a result of loss of independence – including pension wealth, public transport and housing, prompting the need for state intervention. However, one of the main difficulties around applying the social exclusion concept to older people in any straightforward sense concerns the centrality of labour market participation (current and previous) as an indicator of exclusion. Retirement from work is a normal event or process for people in later life, and not an indication of social exclusion – although retirement may have an exclusionary impact among some older people. Furthermore, the experience of retirement may be largely shaped by earlier experiences of labour market participation, making the process of understanding the dynamics of social exclusion among older people additionally complex.

Several studies have acknowledged that, whilst age is not a dimension in itself of social exclusion, there is an important relationship between social exclusion and age. Agulnik, Burchardt and Evans (2002) note that the risk of lower incomes in particular increases with age – due to loss of earned income accompanying retirement. They also point out the elevated risk of social exclusion associated with retirement, which may require the state to become involved in the individual's life. The authors note that pensioners are much better off than in the past in absolute terms, but the risk of relative poverty in retirement has worsened since 1979, largely driven by government policy to increase pensions in line with prices rather than earnings. For Phillipson and Scharf (2004), the main causes of social exclusion for older people are: firstly, age-related characteristics, that is, things that are more likely to occur on later life, such as disability, low income and widowhood. Secondly, cumulative disadvantage, that is, where cohorts become more unequal over time due to, for instance, the impact of labour market experiences on pension outcomes. Thirdly, community characteristics; older people are more vulnerable to things like population turnover, economic decline and crime, in their local areas. The final component in explaining social exclusion among older people related to the experience of age-based discrimination.

Work by Barnes et al (2006) also found an important relationship between social exclusion and age. Increasing age was found to have a particularly strong relationship with exclusion from social

relationships, service provision and material consumption, particularly with individuals aged over 80. Almost one in three persons aged over 80 were found to be excluded on basic services, and almost one in four were found to be excluded from social relationships – in both cases these proportions were far higher than among those aged 50-59. Barnes et al (2006) point out that age is correlated with greater risk of social exclusion for a number of reasons. For example, as a result of their age, older people are less likely to live with a partner, more likely to be widowed, and likely to live alone or with fewer people than average, making them particularly vulnerable to exclusion from social relationships, but also more vulnerable to exclusion from civic and cultural activities. For example, Barnes et al (2006) find that people who live alone, or have children but no partner, are the most likely to experience exclusion in two, three or more dimensions. This is particularly important given that approximately a quarter of older people live alone, with the proportion living alone rising with age. Older people are also more exposed to poor health which can limit their independence as well as their ability to become less excluded. Finally, it is important to bear in mind that older people have very different living situations to younger people – for example they spend disproportionately more time at home (SEU, 2006) and are more reliant on their immediate environment (Burns, Lavoie and Rose, 2011) - factors which researchers must bear in mind when measuring social exclusion among this group.

1.4 What are the known predictors of social exclusion and predictors of social exclusion of older people?

Predicting social exclusion can be difficult due to the bi-directional relationships between outcome variables and predictors, as well as the inter-related nature of outcome variables themselves. For example, poorer life satisfaction is generally regarded as an outcome of social exclusion, but can in itself predict further social exclusion. Many empirical studies of social exclusion constitute investigations of the relationship between outcome variables, illustrating correlations between different dimensions of exclusion, or investigations of the proportion of individuals with different characteristics that are excluded.

Hobcraft and Kiernan (2001) examine the interplay between a number of outcomes of social exclusion, including a high malaise score, living in social housing, receipt of benefits, lack of qualifications and low income, and also measure the impact of early motherhood on exclusion status. They acknowledge that many are inter-related, and also that there is reverse causality between many of the factors. Hobcraft (1998) also examines the inter-generational and life course transmission of social exclusion, using the National Child Development Study (NCDS), and finds four childhood precursors that have particularly prevalent associations with social exclusion at age 33: low educational test scores, childhood poverty, contact with the police, family disruption during childhood and parental interest in education.

Barnes (2005) investigates the nature of social exclusion in Britain in the 1990s, and his is one of the few studies to examine persistent, long-term exclusion (on a variety of dimensions). He uses the BHPS to investigate the prevalence of social exclusion, and the key characteristics of adults most at risk. Barnes discovers that it was relatively rare to have suffered from persistent, long term exclusion on multiple factors, but that the individuals most at risk were lone parents (whose

children were living at home) and, similar to the findings of Hobcraft (1998) described above, particularly those with no educational qualifications. He concludes that these types of individuals are unable to accumulate resources due to there being only one worker in the household. In an earlier study (Barnes et al, 2002) found that these types of individuals are also less likely to receive help through family networks, putting them more at risk.

Most research into social exclusion has focussed on exclusion by people of working age, or by families with children. However, a small number of studies have focused purely on social exclusion among older people. This line of enquiry is somewhat in its infancy and consequently there is little research which looks at the link between childhood factors and social exclusion in later life – this is also the case with a number of studies which look at social exclusion among adults. Barnes et al (2006) focus on social exclusion among older people using the English Longitudinal Study of Ageing (ELSA). Whilst the authors begin by examining correlations between characteristics of older people and social exclusion (on seven dimensions), finding that many are inter-related, they advance this study using logistic regression to investigate the relationship between (current) characteristics of older people and their likeliness to be excluded. They find a variety of characteristics associated with exclusion among older people including advanced old age, single person households, poor mental and/or physical health (including depression), lack of access to private transport, living in rented accommodation, living on a low income, reliance on benefits (including state pensions) as the main source of income and, in a few cases, lacking access to a telephone. Whilst their analysis does not seek to prove a causal relationship between these characteristics and social exclusion, their analysis is useful in that it illustrates the importance of controlling for multiple characteristics in regression analysis of social exclusion.

Barnes et al (2006) also show that well-known risk factors for social exclusion among the general population, especially gender, ethnicity and location are not found to be risk-factors – for example, whilst elderly women are certainly more at risk of social exclusion than elderly men, this is largely because they are much more likely to be aged 80 or older and to live alone without private transport, and not a gender effect per se. Similarly, elderly people from ethnic minorities are often socially excluded but this is largely driven by their increased propensity to live in rented accommodation.

Both a lack of access to transport, and poor accommodation are found to be key drivers of social exclusion among elderly people. Work by the Social Exclusion Unit (SEU, 2006) showed that older people spend between 70-90% of their time in their home, meaning that poor accommodation can have a disproportionately large impact on them. Elderly people were found to be the most likely to live in accommodation that was non-decent (English Housing Conditions study, 2001), whilst for many, the accommodation was unsuitable for their needs – such as houses on two levels inhabited by people who were unable to use the stairs because of mobility problems. In addition, elderly people were found to suffer from a lack of information about housing services particularly information on how to get help with maintaining their homes, and information about types of accommodation available to them if they wish to move. Many were also found to be ill-informed about home safety, particularly the maintenance of safety devices such as fire alarms – indeed fire statistics in the UK show that people aged over 60 are at greater risk of death from a fire in the home than any other age group (SEU, 2006).

The Social Exclusion Unit study also revealed that older people suffer disproportionately from transport issues, again increasing their risk of social exclusion (SEU, 2006). The study found that car ownership decreases with age, and that older women in particular are less likely to have access to a car. Forty-two per cent of women aged 75 to 84 and 25 per cent aged 85 and over had access to a car in the household, compared to 66 per cent and 45 per cent of men in these two age groups. Older people, and older women in particular, are more reliant on public transport than those from different age groups. There is a strong link between transport and social exclusion, raising the risk of exclusion from basic services and social relationships. Affordability and access to public transport were found to be key issues for older people, whilst a lack of mobility prevented many from accessing transport. This is particularly true for older people in rural areas. Similarly, Barnes et al (2006) found that older people with no access to a car or van are more likely to be excluded than old people as a whole, particularly as location becomes more rural.

Transport and housing issues are often intertwined, as research by Hoff, 2008, illustrated. This multi-country study found inadequate housing and lack of access to public transport to be key predictors of social exclusion. But the study also notes that there is something of an urban-rural divide. Whilst access to transport is invariably better in urban areas, elderly inhabitants of major cities find it difficult to afford decent housing. Those living in rural areas were less likely to suffer from inadequate housing and more likely to own their own homes – but experienced difficulties accessing care services due to inaccessibility and a lack of public transport. Burns, Lavoie and Rose (2011) also looked at neighbourhood issues, and found that find that gentrification of neighbourhoods can play a role in social exclusion among old people, due to loss of spaces dedicated to older people – though there were other positive changes as a result of gentrification. Barnes et al (2006) found among old people, renters and part renters had the highest proportion of individuals excluded on all dimensions.

1.5 How did the previous government respond to social exclusion?

The concept of social exclusion was a key aspect of the Labour government's agenda. They established the Social Exclusion Unit (SEU) upon taking office in 1997 which was rebranded in 2006 as the Social Exclusion Task Force (SETF), under the UK's first ever Cabinet minister for social exclusion, former Chief Whip Hilary Armstrong[1]. New Labour's interest in social exclusion represented a departure, to some extent, from a more traditional centre-left agenda through valorising participation or inclusion in mainstream society. This does not mean that the role of material deprivation in creating non-participation or exclusion was not recognised, but so too were non-material causes such as discrimination, culture and illness. Some critics have suggested that the social exclusion agenda was part of New Labour's attempt to identify individual behaviour, rather than structural factors, as the root cause of poverty; for these critics, it is not non-participation in mainstream society that causes poverty, but rather the terms upon which disadvantaged individuals and families are compelled to participate (see Annesley, 2000; Levitas, 2005).

[1] However, Armstrong's post was abolished when Gordon Brown became Prime Minister in June 2007 – although the SETF continued to operate.

Such criticisms notwithstanding, it is possible that the social exclusion agenda has greater relevance for older people, for whom non-participation is clearly a significant problem, due to age-based factors rather than, or in addition to, material factors. Yet it is fair to say that social exclusion policy was not initially concerned with older people. Interest grew in the early-2000s, culminating in Chris Phillipson and Thomas Scharf's 2004 review of the impact of government policy on social exclusion among older people for the Social Exclusion Unit.

Phillipson and Scharf (2004) reviewed a wide range of policy initiatives that could be said to be tackling social exclusion among older people, including social security payments, fuel poverty and energy efficiency measures, the universal banking agenda, community care policies and health action zones, the New Deal for Communities and Home Improvement Agencies, and policies designed to reduce crime such as the Locks for Pensioners initiative. They conclude that government policy had been successful in addressing age-related characteristics (by, for instance, reducing pensioner poverty and tackling chronic health problems and community care needs), but unsuccessful in addressing cumulative disadvantage (through failing to appreciate the multiple causes of hardship among older single women and ethnic minority groups, and the barriers to take-up of means-tested benefits). There was also only limited success in addressing community characteristics, because older people's needs were not systematically taken into account in urban regeneration projects. According to Phillipson and Scharf, further development of policy was required in three areas: firstly, a consideration of new forms and causes of social exclusion - for instance, the experience of 'late old age' among the early retirees of the 1970s and 1980s, and the particular difficulties experienced by divorced, widowed or single women. Secondly, they identified a need to broaden community care from 'survival needs' to integration into mainstream activities. And thirdly, there was a need to further understand the differences within groups identified as most socially excluded, such as older disabled people and ethnic minority groups; people with different forms of disability, for instance, will have different experiences of participation and non-participation in mainstream society.

The Labour government's 2005 ageing strategy, Opportunity for All, contained some initiatives relevant to social exclusion, as part of the UK's response to population ageing. However, the main focus of the strategy was employment issues among people in their 50s and early-60s, with the intent of preventing early retirement – this has now pushed to the policy forefront of both the previous and current governments. A fuller social exclusion agenda was outlined in the 2006 SEU report A Sure Start for Later Life. The report was in fact based on a major study of the social exclusion of older people using the English Longitudinal Study of Ageing (ELSA) conducted by the National Centre for Social Research and the University of Sheffield, that recommended a stronger multi-agency focus on the 7 per cent of people aged 50 or over experiencing the most substantial and complex forms of social exclusion (see Barnes et al, 2006). The approach outlined by the SEU built upon the apparent success of SureStart (in relation to early years) in providing a single, accessible gateway to a wide array of services. As such, the report announced the piloting of Link-Age Plus, which aimed to bring together local authorities with health services, and organisations in the voluntary and community sector, to find innovative ways to break down traditional organisational and financial barriers to integrated service delivery. There were multiple access points for information for service recipients, based on the principle of 'no wrong door', and joined-up outreach services.

A range of other measures were outlined in the 2006 report, such as initiatives to improve take-up of pensioner benefits and other services, and improve processes of joint commissioning and delivery between different service providers (such as health and social care, and national and local authorities). There was also a particular focus on housing standards, reflected also in the national strategy for housing in an ageing society, published by CLG (2008) in the report Lifetime Homes, Lifetime Neighbourhoods, which stated that 'good design works well for people of all ages, but for those with mobility problems or with sensory or cognitive impairments it can make the difference between independent living and social exclusion'. The 2009 ageing strategy 'refresh', Building a Society for Old Ages (HM Government 2009), contained few references to social exclusion, although it is worth noting that it brought digital inclusion for older people firmly into the ageing strategy agenda.

1.6 How has the current government responded to social exclusion?

It remains unclear whether the coalition government intends to continue its predecessor's efforts to address social exclusion, for older people or more generally. The Social Exclusion Task Force was abolished after the coalition took office, or more precisely, its staff was absorbed into a new Office for Civil Society (OCS). The OCS' main aim is the promotion of the Conservative Party's 'big society' agenda (Cabinet Office, 2010b). What the big society means for older people has yet to be established (Kneale, 2011a) – therefore what it means for the social exclusion of older people is far from certain. In some ways, the association of social exclusion with the big society is a good fit, given the big society agenda's focus on empowering individuals and communities to do more for themselves (Cabinet Office, 2010a). However, the premise of the social exclusion concept is that some people are excluded from participation in mainstream society, in contrast to the big society concept which emphasises the relationship between society and the state, without necessarily acknowledging that some people may not be fully included in society. Recent policies have largely been silent on the matter of the 'big society'. Furthermore, while the Labour government's approach was criticised for focusing on non-material sources of exclusion at the expense of material deprivation, there seems to be little attempt in the big society agenda to tackle material deprivation. When the OCS remit was announced, the Cabinet Office (2010b) noted that '[l]ead responsibility for issues of multiple disadvantage now sits within the Department for Work and Pensions' (DWP). This may suggest a return to focusing on material deprivation rather than the broader social exclusion agenda, given DWP's responsibility for social security, including pensioner benefits. The decision to increase the basic state pension to the level of the minimum income guarantee for pensioners is suggestive of this approach.

There is as yet little sign of a renewed strategy for tackling 'multiple disadvantage' among older people. However, findings from the Older Age review conducted by the Centre for Social Justice (CSJ) – set up by current DWP Secretary of State Iain Duncan Smith while in opposition – may provide a useful insight into the government's thinking. The review's first report The Forgotten Age: Understanding Poverty and Social Exclusion in Later Life was published in 2010. The report certainly focuses on both material and non-material sources of the problems faced by many older people, and could therefore be said to encompass a focus on 'multiple disadvantage'. It emphasises issues around money, health, housing, care and communities, and calls for a

celebration of later life within society, more personalisation and information, and greater co-ordination between public services. However, whereas New Labour's approach included poverty within its definition of social exclusion, CSJ actually seems to contrast poverty with social exclusion, defining the latter more narrowly in relation to isolation and loneliness among older people.

The review's second and final report Age of Opportunity: Transforming the Lives of Older People in Poverty (CSJ, 2011) abandons the terminology of social exclusion altogether. It identifies the need to build 'dynamic communities' in order to tackle social isolation among older people in poverty, alongside other priorities such as benefit reform and money planning advice, suitable housing, reorienting the care system towards prevention. As such, while CSJ certainly recognises material deprivation, the Older Age review suggests that tackling social exclusion is germane as a public policy objective for the coalition government and that it is most relevant in relation to community development, along the lines of the big society agenda. Poverty matters in its own right, not simply as a marker of social isolation; however, overcoming social isolation can be part of the solution for preventing or alleviating poverty.

However, two new publications published in 2012 alter the state of play. The first was a report by DWP that introduced the concept of 'social justice' where social justice is defined as being "about making society function better – providing the support and tools to help turn lives around" (DWP 2012a, p4). Specifically, it revolves around the principles of: (i) early prevention; (ii) on interventions that promote recovery or independence where problems do arise; (iii) on promoting work but offering unconditional support to those unable to work; (iv) local design and delivery of solutions; and (iv) providing a fair deal for tax payers. However, the report makes no mention of older people, and in both content and tone, expands on some of the themes of a withdrawal of the state and increasing personal responsibility, observed in other tranches of policy. The second publication is the DWP's 'National Social Report' (2012b), which does explicitly reintroduce the terminology of social exclusion, and discusses policy measures aimed at reducing poverty and improving healthcare and long-term care. However, the report was launched part of the EU's 'Open Method of Coordination' initiative, which supports a move towards the sharing of good practice and learning across EU member states; the usage of 'social exclusion' appears to acknowledge the concept at the EU level, although all other publications and policies aimed at audiences working at the national (UK) level appear to favour alternative terminology and concepts.

Therefore the indications are that social exclusion, as a term and possibly as a concept, is not favoured by the current coalition government, who favour 'social isolation' or 'social justice' as a means of recognising that deprivation encompasses more than poverty alone. The theoretical underpinnings for 'social isolation' and 'social justice', and the extent to which they differ from the theoretical underpinnings of 'social exclusion' reviewed earlier, are unclear. Therefore it is uncertain to what extent 'social isolation' and 'social justice' are passive or voluntary processes, or to what extent they are contingent on the actions of those in a more advantaged social position. Despite this shift in perspective between governments, it is worth noting that social exclusion remains pervasive at the European level since the change in government, with 2010 signalling the 'European Year for Combating Poverty and Social Exclusion'. In addition, 'social exclusion'

remains common parlance in United Nations publications and commissions examining deprivation among groups including older people, indicating that it will remain pervasive in social policy, albeit on the world stage.

1.7 Summary and research questions

This review highlights that the concept of social exclusion, the recognition that material exclusion is both caused by and causes exclusion from other domains essential for wellbeing, builds on a longstanding tradition within public policy and social science research. However, the terminology 'social exclusion' is perhaps most synonymous with the former Labour government, with the new coalition government having disbanded the Social Exclusion Unit Taskforce. In its place there exists a gulf in terminology to replace the usage of 'social exclusion' in policy-terms, although the concept itself continues to play some part in policy making, while the term itself is still widely used within academic research. However, while research into social exclusion may have continued, there remain gaps in the evidence. Specifically, in comparison to children, young people, and families, social exclusion among older people has received little attention. This is despite the fact that it is perhaps among this group that the notion of social exclusion is most pertinent, with older people at high risk of social isolation and loneliness, as well as exhibiting substantial inequalities in income and housing. In addition, within the extant evidence base, there has been comparatively little longitudinal research into social exclusion patterns among older people. There are also other societal changes and evidence gaps that necessitate further exploration of social exclusion among older people, including the growing reliance on digital technology, changing marital and family building patterns, and the recession. These are themes that we explore in this report through addressing the following broad research questions:

- How can social exclusion be measured among older people?
- How have levels of exclusion changed between 2002 and 2008?
- Which factors are associated with an increased risk of being socially excluded and which are associated with a decreased risk of being socially excluded?
- How did individuals' experience of social exclusion change between 2002 and 2008?
- Are older people 'recession proof' in terms of social exclusion?
- What is the impact of being socially excluded on other factors, including health?

These questions generally form the basis of individual chapters and we begin through exploring the measurement of social exclusion using data from the English Longitudinal Study of Ageing (ELSA) as well as the methods used and the challenges that we face.

Chapter 2: Data and Methodology: How can social exclusion be measured among older people?

KEY MESSAGES

How is social exclusion measured in this report?

- Following on from the theoretical basis that social exclusion reflects more than simply material disadvantage alone, this report develops a framework conceived by Barnes et al (2006) that measures social exclusion across seven domains.

- The domains of social exclusion included in this report reflect: (i) exclusion from social relationships, (ii) exclusion from cultural activities, (iii) exclusion from civic activities and access to information, (iv) exclusion from local amenities, (v) exclusion from decent housing and public transport, (vi) exclusion from financial products, and (vii) exclusion from common consumer goods.

How did the level of social exclusion change between 2002 and 2008?

- There was little change between 2002 and 2008 in the level of exclusion across some domains of social exclusion, with only small increases observed in the prevalence of exclusion from cultural activities and only small decreases observed in the prevalence of exclusion from civic activities and access to information, exclusion from social relationships, and exclusion from financial products. The level of exclusion across these domains remained at around ten per cent being excluded at both 2002 and 2008.

- There were large increases in the proportion excluded from local amenities and decent housing and public transport, with increases of over 5 per cent observed in the proportion of over 50s excluded in 2008 compared with 2002. A large decrease of 6.5 per cent was observed in the proportion excluded from common consumer goods among the over 50s in 2008 compared to 2002.

- While there was little change in the level of exclusion from civic activities and access to information among the 50+ population as a whole between 2002 and 2008, this masked age differences, with older people at greater risk of exclusion in 2008, and younger age groups (50-59) at reduced risk. Similarly,

while there was only a small decrease in the risk of exclusion from financial products among the 50+ population, this masked that the levels of exclusion had fallen over time for the oldest age groups in particular.

- Increases in exclusion from local amenities and decent housing and public transport were mainly attributable to increases among younger age groups (50-59 years). Decreases in exclusion from common consumer goods were observed across all age groups, although were particularly prominent for older age groups.

2. Data and Methodology: How can social exclusion be measured among older people?

2.1 How can social exclusion be measured among older people? Introduction

In the previous chapter, we established that social exclusion was a concept encompassing more than simply poverty, and reflecting people's participation in the social, civic, political and recreational life of their communities and society; for socially excluded people, low levels of participation could reflect the exclusionary practices or barriers put in place by the socially included. For older people, social exclusion was much more focussed on the loss of independence than it was for working age people or children.

Across all age groups, social exclusion was generally measured across different domains and levels, and people who were socially excluded were generally those who fell beneath a certain threshold of exclusion. However, while there was some consensus in the method of measuring exclusion through domains using thresholds, there was less agreement across studies in terms of which actual domains or thresholds to include when measuring social exclusion. In this report, our theoretical model for measuring social exclusion is heavily influenced by earlier work from Barnes and colleagues (2006), who developed a framework for analysing social exclusion among older people in ELSA, the English Longitudinal Study of Ageing. In this report, we also use data from ELSA to examine changes in levels of social exclusion among older people. While a direct replication of Barnes and colleagues' model of exclusion would have been desirable, changes in the study over time have necessitated some changes, which we describe in this chapter, as well as presenting some descriptive information of our indicators.

2.2 Measuring social among older people using data from ELSA

The English Longitudinal Study of Ageing (ELSA) is a longitudinal study focussed on older people aged 50 and above. The study originally recruited around 12,000 respondents who were originally members of the Health Survey for England (HSE), with the first full wave of data collection under the auspices of ELSA occurring in 2002. Since the original recruitment of study members in 2002, two additional waves of study members have been recruited to replenish study numbers (see Hussey et al 2010 for further information). ELSA collects a range of health information, but also includes a number of other topics including household and individual demographics, income and wealth, social participation, work and economic activity, housing, cognitive functioning, expectations, relationships, and access to services and amenities – many of these are used in this current study to measure social exclusion. Since the original 2002 sweep of data collection, further sweeps were collected in 2004, 2006, 2008 and 2010 facilitating longitudinal research, with data up to 2008 available for use at the time of writing. The study continues to evolve and expand in terms of topic areas, with the 2008 sweep collecting information on sleep quality for the first time.

However, the study does hold some drawbacks. As is the case for most longitudinal studies, attrition (respondents dropping out of the survey for various reasons) is a challenge in using the data; item non-response is also an analytical challenge, although one that is easier to overcome

under certain conditions. The study also only has a focus on older people in England, and there are currently no Scottish, Welsh or Northern Irish equivalent data. However, these limitations do not detract from the usefulness of ELSA in studying social exclusion among older people, and make ELSA data an obvious candidate for these analyses.

2.3 Defining the domains of social exclusion among older people

In Chapter 1, we presented the notion of social exclusion being the process by which people become detached from common values and practices through the exclusionary practices of the socially included. This emphasis on values and practices means that social exclusion encompasses a broader scope than simply material disadvantage, although material disadvantage is an important component of social exclusion. In this research, we build on earlier work by Barnes et al (2006), which conceptualised social exclusion across seven domains[2], reflecting both material and non-material domains, and used cross-sectional data from the ELSA study from 2002. The current research builds on this earlier work through utilising data from two different sweeps (2002 and 2008), which allows us to understand change over time between two similar samples, as well as to understand patterns of change as experienced by individuals. However, as we use two different sweeps of information, it was necessary to change the items used in developing some of the domains of social exclusion.

We conceptualise older people who are socially excluded as being excluded from: (i) financial products; (ii) common consumer goods; (iii) local amenities; (iv) social relationships; (v) cultural activities; (vi) decent housing and public transport; and (vii) civic activities and access to information. Each domain of social exclusion is composed of a number of different indicators (described below), and a score for each component is summated. An arbitrary threshold is then imposed on the score that roughly approximates to ten per cent of respondents being classed as socially excluded in 2002. We then use the same absolute values based on the 2002 distributions to define social exclusion both in 2002 and 2008, which allows us to infer whether or not levels of social exclusion increased or decreased across the study period.

[2] We use the word domain to indicate an individual component or type of social exclusion, such as exclusion from financial products.

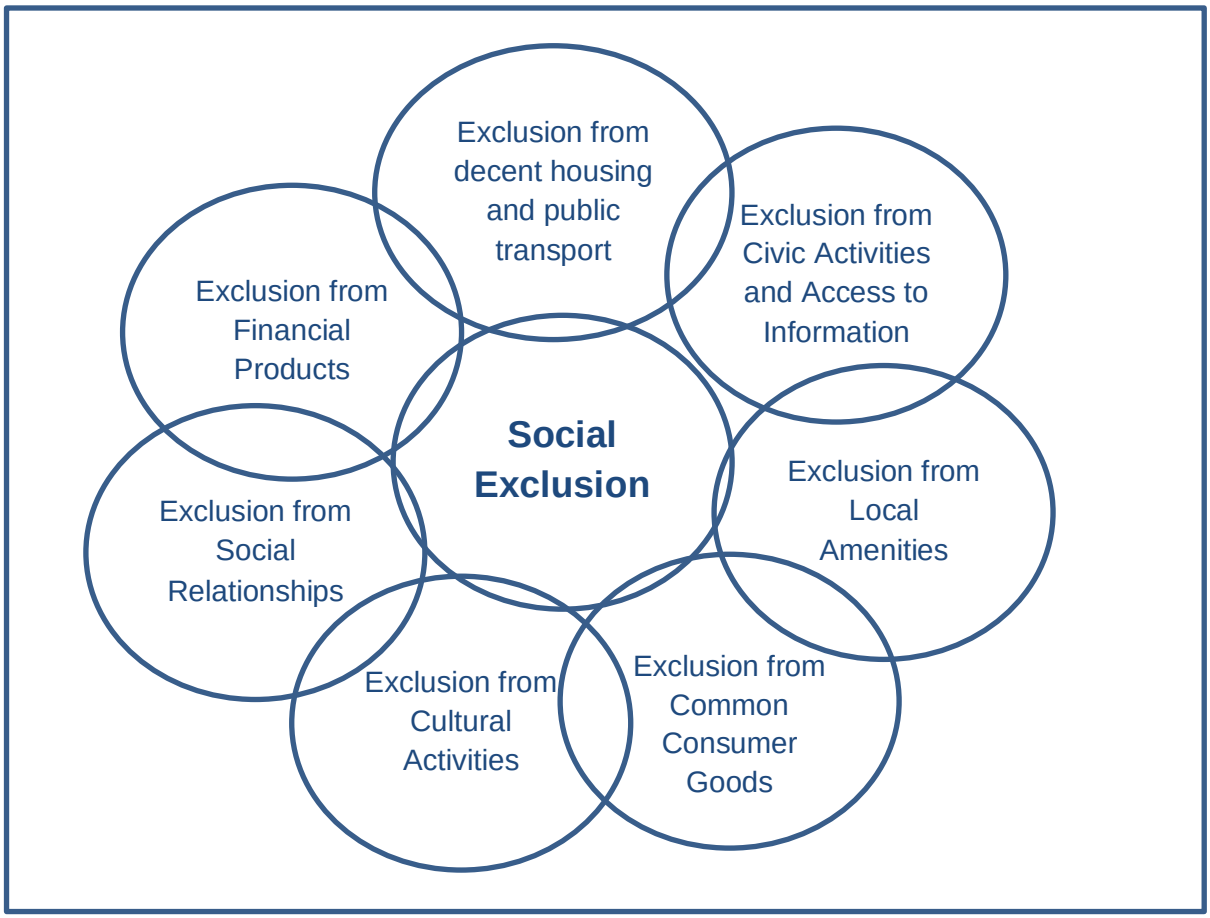


Figure 1:The seven domains of social exclusion for older people

The seven domains included allow us to examine the relationships between older people in ELSA and their participation in the social, economic, cultural, community and civic aspects of society. The choice of domains also allow us to infer to what extent the respondents remain independent, a crucial element in the measurement of social exclusion among older people as discussed in the previous chapter; for example, the domain of exclusion from financial products allows us to infer the extent to which older people can manage their own money which can be particularly important for weathering financial shocks; further details for individual domains are given below. If we also return to the causes of social exclusion among older people proposed by Phillipson and Scharf (2004), we find that the domains themselves, and measurements that compose each domain, include age-related experiences such as widowhood or the consequences of a low income; they also reflect where cohorts may become more unequal over time, for example in the way that some cohorts were more prepared for retirement with private pension compared to others; finally, the domains also allow us to assess the relationship between older people and their communities through examining their civic behaviours, their access to local amenities, as well as their access to decent housing and public transport.

As a note of caution, it is important to remember what an empirical analysis of social exclusion, as is presented in this report, actually represents. Due to the breadth of measurements used to create each domain of exclusion, and the arbitrary thresholds used to define who is and who isn't excluded, the empirical analyses included in this report should not be taken as an in-depth study depicting the nuances of exclusion for any one domain, or its component measurements. What

such a broad-based approach represents instead is a set of shorthand indicators of social exclusion; this report uses these shorthand measurements to demonstrate who is at risk of exclusion, how exclusion changes over time and among individuals, and the outcomes of social exclusion.

2.4 Exclusion from Social Relationships

The domain for exclusion from social relationships reflects whether respondents report relationships with partners, friends, children, and other family members, how close the respondent perceives these relationships to be, and the extent to which these relationships are maintained through meeting up, or through talking on the phone. Exclusion from social relationships therefore represents an individual's ability to sustain relationships that the majority of older people report having. Of any of the domains of social exclusion, exclusion from social relationships is probably most closely aligned with the focus on loneliness and isolation of some recent government policies. However, exclusion from social relationships is also a key component of social exclusion as it gives an indication as to whether individuals are able to sustain relationships that can help to overcome other domains of social exclusion; the social support that this domain captures is an essential ingredient for older people to maintain their independence.

In examining the individual components that form our indicator of exclusion from social relationships, there was little obvious difference between older people's social relationships in 2002 compared to 2008 (Table 1). However, one apparent significant difference was an increase among those who had friends in the proportion who reported that they were close to three or more of these friends between waves (from 45% to 54%) – the mechanism underlying this change is unclear.

Table 1: Indicators used to construct domain for exclusion from social relationships – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

			2002 (Wave 1)	2008 (Wave 4)
Relationship with Partnership	Live with a husband or wife	Yes	70.6%	69.4%
		No	29.4%	30.6%
	Close to partner*	Very/Quite Close	95.7%	95.6%
		Not very/Not Close	3.4%	3.6%
		No answer	0.8%	0.7%
Relationship with Children	Have any children	Yes	86.6%	86.4%
		No	13.4%	13.6%
	How often meet with children?*	Not answered	7.8%	6.2%
		Once a week or more	56.3%	54.3%
		Every few months or more	30.2%	32.6%
		Once or twice a year or less	5.76%	6.9%
	How often speak on the phone with children?*	Not answered	6.7%	5.9%
		Once a week or more	81.1%	80.5%
		Every few months or more	10.0%	10.8%
		Once or twice a year or less	2.2%	2.8%
	Number of close relationships with children	None	6.6%	6.3%
		One	23.3%	22.7%
		Two	42.3%	44.9%
		Three or more	27.8%	26.2%
Relationship	Have any friends	Yes	95.4%	94.1%

with Friends		No	4.6%	5.9%
	How often meet with friends?*	Not answered	2.0%	1.0%
		Once a week or more	58.4%	55.6%
		Every few months or more	34.2%	37.9%
		Once or twice a year or less	5.4%	5.6%
	How often speak on the phone with friends?*	Not answered	2.8%	1.1%
		Once a week or more	57.1%	57.4%
		Every few months or more	33.9%	35.8%
		Once or twice a year or less	6.2%	5.7%
	Number of close relationships with friends	None	22.2%	10.3%
		One	11.3%	11.9%
		Two	21.2%	23.3%
		Three or more	45.3%	54.4%
Relationship with Other Immediate Family	Have any other immediate family	Yes	91.7%	92.5%
		No	8.3%	7.5%
	How often meet with other immediate family?*	Not answered	2.9%	1.9%
		Once a week or more	34.9%	33.0%
		Every few months or more	38.5%	40.0%
		Once or twice a year or less	23.7%	25.0%
	How often speak on the phone with other immediate family?*	Not answered	2.3%	1.5%
		Once a week or more	51.9%	52.4%
		Every few months or more	35.3%	34.6%
		Once or twice a year or less	10.6%	11.5%
	Number of close relationships with other immediate family	None	21.5%	18.7%
		One	23.4%	23.4%
		Two	21.2%	22.1%
		Three or more	33.9%	35.8%
Sample Size			8,998	7,550

Notes: Cross-sectional data, weighted by self-completion weights; *sample size varies from below dependent on number who report presence of relationships

The definition of exclusion from social relationships is based on the methodology developed by Barnes and colleagues (2006). For relationships with friends, immediate family members, and children, respondents are given points to develop a score based on the frequency of meeting, speaking on the phone, and the number of close relationships (see table 1 for a breakdown of scoring, and table 2 for an annotated outline). In addition, respondents who have quite a close relationship or a very close relationship with partners are allocated an additional 1.5 points. Those respondents who report the presence of a relationship, but not the nature of the relationships are awarded no points[3].

Table 2:Scoring system for creating domain for exclusion from social relationships

Occurrence	Meeting up (points)	Speaking on the phone (points)	Number of close relationships	Number of close relationships (points)
3 times a week or more	1.0	0.5	Three or more	1.5
1-2 times a week	0.8	0.4	Two	1.0
1-2 times a month	0.6	0.3	One	0.5
Every few months	0.4	0.2	None	0
1-2 times a year	0.2	0.1		
Less than once a year	0	0		

[3] To preserve the sample size, we do not treat these respondents as missing. However, if respondents fail to give information on the quality of all their reported relationships, then they are treated as missing.

When we plot the scores for social exclusion by year (see histogram in Figure 2), we can already observe that the scores for 2008 are skewed slightly to the right of those for 2002, indicating higher scores for the quality of social relationships at this later point. The red line denotes where the definition of 'socially excluded' is drawn, at 3.5, equating to 10.6 per cent of the respondents being excluded in 2002, compared to 8.9 per cent in 2008.

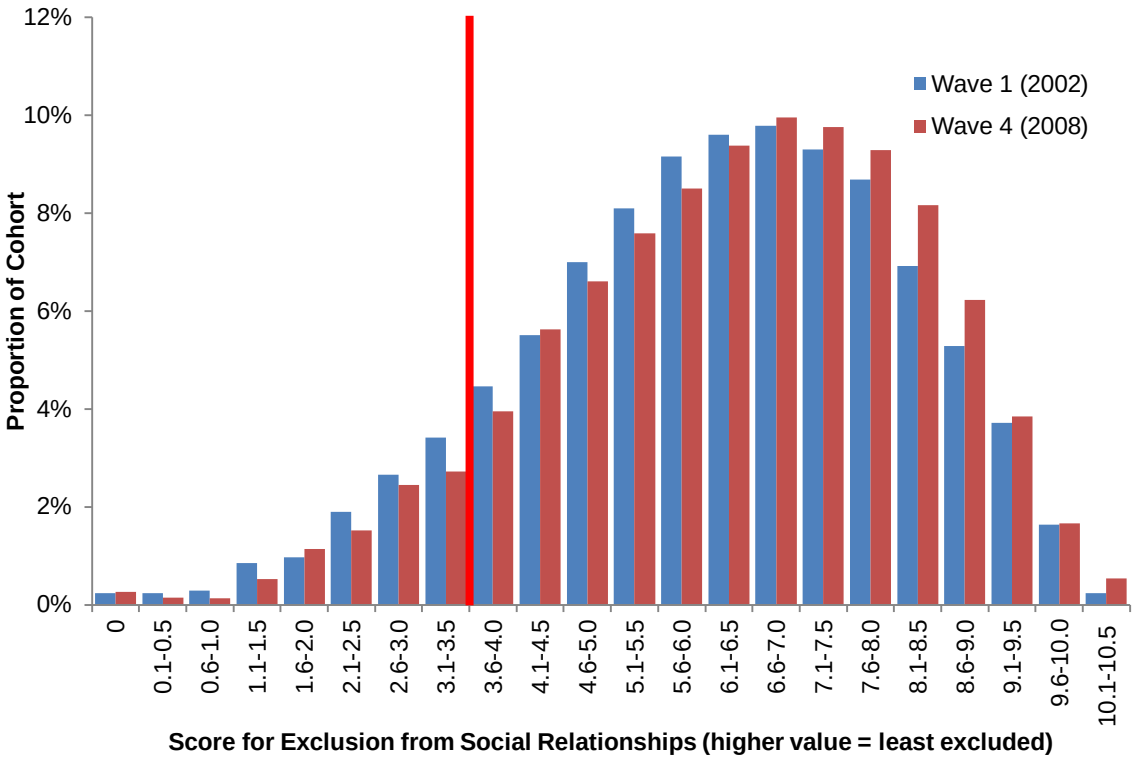


Figure 2: Exclusion from Social Relationships score and cut off point (2002 and 2008 samples).

In figure 3, we plot the proportion excluded by age group for the 2002 and 2008 sweeps. Here we show that although there was a slight decline in the proportion excluded from social relationships in 2008, this decline occurred unequally across age groups, being most noticeable among those aged 70-84 years, where between 3-6 per cent fewer older people were excluded. Nevertheless, for both periods, older age increased the risk of social exclusion; in 2002 the point at which this risk increased occurred among the 70-74 year age group although by 2008 this point had occurred later among the 75-79 year age group. Among the 2008 sample therefore, the levels of exclusion from social relationships were lower and appeared to occur later in life than in 2002.

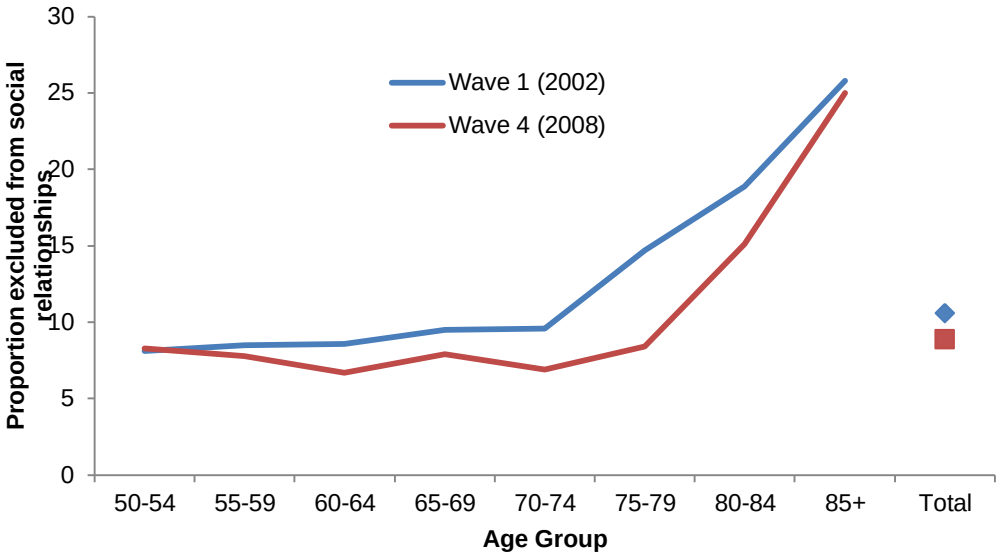


Figure 3: Proportion excluded from Social Relationships by age in 2002 and 2008.

2.5 Exclusion from Cultural Activities

Older people were defined as being excluded from cultural activities if they did not access these activities on a relatively frequent basis, and were unsatisfied with this low level of access. Exclusion from cultural activities represents an important dimension of social exclusion as it represents an inability to fully access the cultural fabric of society. Exclusion from cultural activities can occur for a multitude of reasons, for example because of an inability to afford or physically access these activities. However, given that many activities, for example access to museums, may be free, and others including the cinema, may be heavily discounted for older people, other reasons such as because of poor provision in the local area, or because of exclusion from other domains including social relationships and public transport, may be more pertinent. Similarly, personal factors reflecting a lack of confidence or low self-esteem may be underlying reasons for an inability to access cultural activities. Older people who are excluded from cultural activities may be more prone to instances of poor mental health and depression, may find it more difficult to form and maintain social relationships, and may also be more prone to isolation and loneliness. Returning to the theoretical basis of social exclusion and older people, older people excluded from cultural activities may be emblematic of those who are excluded due to age related factors (such as poor health), who are excluded through cumulative disadvantage (such as being on a low income and being unable to afford cultural activities) and who are excluded because of community characteristics (due to a lack of appropriate and accessible cultural activities locally). Cultural activities may represent a critical domain in helping to keep older people independent, with some studies reporting health benefits of engagement with leisure time activities (for example Lennartsson and Silverstein 2001, Crowe et al 2003).

Table 3: Indicators used to construct domain for exclusion from cultural activities – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

		2002 (Wave 1)	2008 (Wave 4)
Going to the Cinema	Twice a month or more	1.7%	1.9%
	Once a month or more	3.8%	4.9%
	Every few months or more	11%	14.4%
	Less than once a year, want to go more frequently	17.5%	21.7%
	Less than once a year, don't want to go more	66%	53.1%
	Less than once a year, no answer	0%	4.0%
Going to the Theatre/Opera	Twice a month or more	1.9%	1.1%
	Once a month or more	3.4%	3.1%
	Every few months or more	11.2%	12.2%
	Less than once a year, want to go more frequently	27.5%	20.6%
	Less than once a year, don't want to go more	56%	57.3%
	Less than once a year, no answer	0.1%	5.7%
Going to a Museum/ Gallery	Twice a month or more	1.7%	1.2%
	Once a month or more	4.5%	4.4%
	Every few months or more	17.1%	16.4%
	Less than once a year, want to go more frequently	31.7%	31.9%
	Less than once a year, don't want to go more	45%	43.4%
	Less than once a year, no answer	0%	2.8%
Going to eat out	Twice a month or more	39.1%	29.7%
	Once a month or more	20.6%	23.8%
	Every few months or more	18.5%	22.6%
	Less than once a year, want to go more frequently	7%	11.5%
	Less than once a year, don't want to go more	14.8%	11.2%
	Less than once a year, no answer	0%	1.2%
Taken a holiday or daytrip	Taken in the past year	14.7%	13.8%
	Not taken in the past year	85.3%	86.1%
	Not answered	0.1%	0.0%
Sample size		8,998	7,550

The indicators used to construct our exclusion from cultural activities domain reflect whether respondents go to the cinema, to the theatre or opera, to museums or galleries, eat out in a restaurant, café or elsewhere, and whether they have taken a holiday or daytrip in the UK or abroad. As is noted by original Barnes et al (2006), some of the activities, such as visiting the opera, are those most associated with people from higher socioeconomic groups, although others have wider applicability. In this sense, this domain simultaneously reflects involuntary exclusion through not having financial means to access cultural activities, involuntary exclusion through the exclusionary practices of the socially included, as well as involuntary and voluntary exclusion for a number of other reasons. There were few differences in the frequency that older people engaged in these behaviours over time, with slight increases in the proportion of older people who report infrequently going to the cinema and eating out and wanting to undertake these activities more frequently (4% and 4.5% respectively); conversely, the proportion who went to the theatre or opera infrequently but wanted to go more often declined by over seven per cent. Patterns of eating out also exhibited other changes between sweeps, with the proportion that ate out twice a month or more exhibiting a decline of over nine per cent.

In constructing a score, respondents were allocated one point to reflect whether they went to the cinema, to a museum or gallery, to the theatre or opera, or ate out infrequently, but would like to undertake on a more frequent basis; an additional point was added to reflect if the respondent had not gone on a holiday or daytrip in the past year. Older people who had a score of three or more

were classified as being excluded from cultural activities, with 11.4 per cent being excluded from cultural activities in 2002 and 12.5 per cent excluded in 2008[4].

Table 4: Distribution of scores for exclusion from cultural activities in 2002 and 2008 (un-weighted sample size and weighted proportions)

		Wave 1 (2002)	Wave 4 (2008)
Not Excluded	0	44.5%	45.9%
	1	27.4%	25.3%
	2	16.7%	16.3%
Excluded	3	8.4%	8.4%
	4	2.5%	3.0%
	5	0.5%	1.2%
	Sample Size	8,998	7,550

When we examine exclusion from cultural activities by age, a definite u-shaped pattern emerged in 2002, with those in the youngest and oldest age groups most likely to be excluded from cultural activities. This pattern was not directly replicated in 2008 where the pattern had changed subtly so that it was only those in the younger age groups who were at greatest risk of exclusion on this domain.

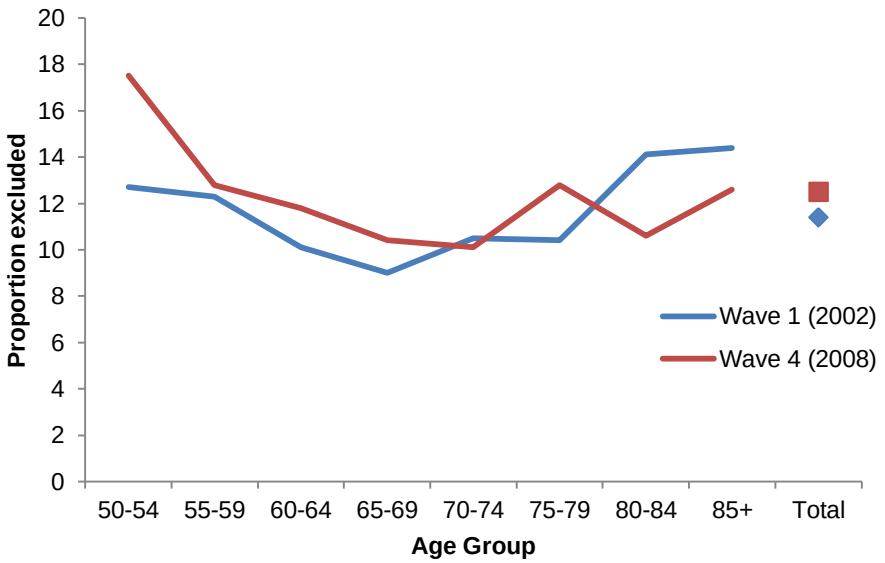


Figure 4: Proportion excluded from Cultural Activities by age in 2002 and 2008.

[4] For the small number of people who responded only to the question on the frequency of engaging with a cultural activity, but not if they wanted to engage more, we code those with no response as not wanting to engage with the activity more frequently (less than 6% for each indicator individually in wave 4 , less than 1% in wave 1). For those with values missing for the frequency of engagement, although not for whether they would like to engage more often (less than 3% for each indicator individually in wave 4, none in wave 1), we code these as belonging to a group who do not frequently engage in the activity. In calculating the cultural exclusion score and defining respondents who are culturally excluded, we include respondents who had information for three or more indicators (out of the total of five).

2.6 Exclusion from Civic Activities and Access to Information

Exclusion from civic activities may be most emblematic of social exclusion in some senses, in that exclusion on this domain signifies an inability to participate in the structures that can allow individuals to influence choices that could improve their lives. Exclusion from civic activities has become particularly important in the context of recent government policy that has honed in on the principles of 'the big society' and 'localism'. At heart, both of these philosophies symbolise a desire to towards decentralisation and a withdrawal of the state from areas of public life in favour of community action and personal responsibility. Elsewhere, it has been argued that among the factors critical to the success of some of these policies is the existence of substantial levels of community engagement as well as the accessibility of timely and relevant information to enable people to participate in civic activities and in local decision making (Kneale 2011a). In this respect, the outcomes of being excluded from civic activities and access to information may not only involve decreased participation in civic structures, but this may also have a direct impact on older people's ability to lobby and receive the services that they need in their local community, particularly if these services are aimed at minority or underrepresented groups. Engagement with civic activities, particularly volunteering, has been shown to have a positive effect of wellbeing and mental health, which in turn are key to maintaining independence among older people (for example Nazroo and Matthews 2012).

In our measure of exclusion from civic activities and access to information, we include the following indicators: being a member of a political party, trade union or environmental group; a tenants group, resident group or neighbourhood watch scheme; the church or other religious organisation; and charitable associations; doing regular voluntary work is also included. In the Barnes et al (2006) report, voting in the last general election was included. As there was no general election in the year before the 2008 sweep, we do not include this indicator. However, we include an indicator of whether the respondent contributes to committee work for any club or society, in recognition that this work may be valuable to the local community. To discern whether older people access information, we incorporate additional measures of internet usage. While internet usage is likely to have grown between waves due to the expansion of new opportunities to engage with digital media, newspaper readership in contrast may have correspondingly declined as people access information digitally. Therefore, we hope that the inclusion of both indicators should cancel out any systematic bias towards lower levels of exclusion from access to information over time.

Table 5: Indicators used to construct domain for exclusion from civic activities and access to information – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

		2002 (Wave 1)	2008 (Wave 4)
Member of Political Party/ Trade Union	Not reported	82.9%	83.5%
	Reported	14.2%	13.4%
	No answer	3.0%	3.2%
Member of Tenant's/ Neighbourhood Watch Group	Not reported	79.9%	82.8%
	Reported	17.2%	14.1%
	No answer	3.0%	3.2%
Member of Church or Religious Organisation	Not reported	77.5%	78.7%
	Reported	19.6%	18.1%
	No answer	3.0%	3.2%

Member of Charitable Organisation	Not reported	79.8%	80.3%
	Reported	17.3%	16.5%
	No answer	3.0%	3.2%
Carry out committee work for any organisation	Not reported	56.8%	65.9%
	Reported	32.8%	29.2%
	No answer	10.5%	4.9%
Carry out voluntary work	At least once a year	25.4%	26.9%
	Less than once a year	2.3%	2.0%
	Never	72.3%	71.2%
	No answer	0.0%	0.0%
Use the internet	Not reported	67.9%	45.2%
	Reported	32.1%	54.8%
	No answer	0.1%	0.0%
Read a newspaper	Not reported	27.6%	37.4%
	Reported	72.4%	62.6%
	No answer	0.1%	0.0%
Sample size		8,998	7,550

In examining our individual indicators, it is with respect to access to information that, as expected, we observe the most substantial social change over the study period (table 5). The proportion of internet users rose from around a third to over half (32.1 to 54.8%), becoming a majority activity in 2008; newspaper readership declined by approximately ten per cent over the same period (from 72.4 to 62.6%). Comparatively, there was little difference in participation in 'civic' activities – small declines of three per cent or less were observed in terms of organisational membership for the over 50s as a whole. There was a small 1.5 per cent increase in the proportion engaged in volunteering activities at least once a year despite a small decline in membership of charitable organisations, and a more substantial six per cent increase in the proportion engaged in committee work for organisations[5].

Many of the changes observed across the indicators that make up our domain of exclusion from civic activities and access to information were observed unevenly across age groups. Virtually all of the increase in internet usage was confined to the under 80s, with internet usage only increasing by 5 per cent and by 0.2 per cent among the 80-84 age group and 85+ respectively in 2008 compared to 2002. In comparison, internet usage was at least 25 per cent higher for all age groups aged 50-69 in 2008 compared to 2002. There were also declines in newspaper readership among all older people aged 50 and above; for those in the younger age groups (50-69) a decline in newspaper readership may be a possible reflection of changing internet habits and accessing information in different ways although it was actually among those in the oldest (85+) age group that the highest levels of declining readership were observed (a 19% reduction in 2008 compared to 2002 values). In comparison changes in civic participation were seemingly minimal for the most part, although did vary across age groups; for example, it was among the 85+ age group that highest rises were observed in terms of volunteering (4%), committee membership (9%), with rises also observed in membership of a tenants' group or neighbourhood watch committee (7%).

[5] Excludes missing data.

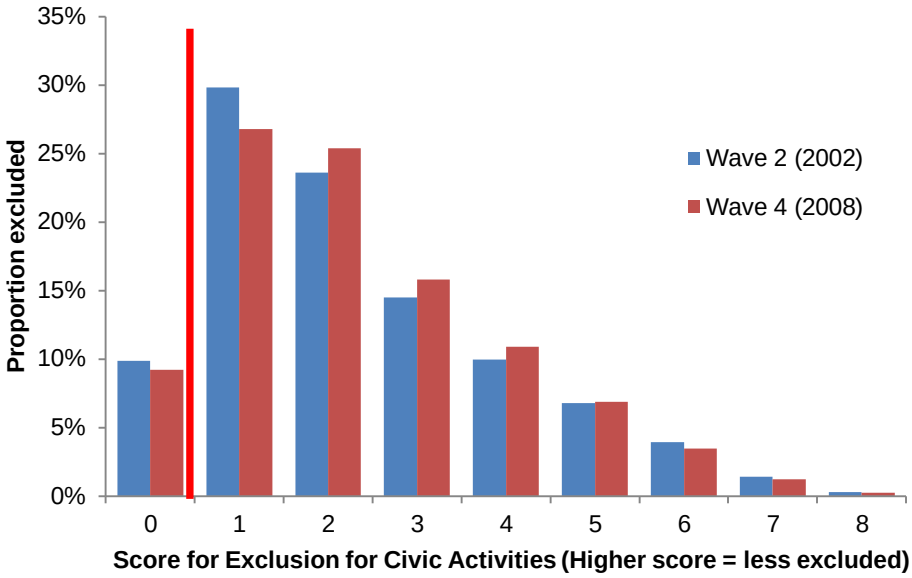


Figure 5: Exclusion from Civic Activities and Access to Information score and cut off point (2002 and 2008 samples).

In developing a score for exclusion from civic activities and access to information, older people were give a point for each of the organisations that they reported membership of, and a point each if they undertook committee work and voluntary work or if they used the internet or read a newspaper regularly. Older people were excluded if they undertook none of these activities. In 2002, 9.8 per cent of older people aged over 50 were excluded from civic activities and access to information, declining slightly to 9.2 per cent in 2008 (figure 5). A small number of older people (approximately 30 at each sweep of the study) reported undertaking all activities. Between 2002 and 2008, age differences in exclusion on this domain became more prominent (figure 6), with almost a fifth of those aged 85 and above excluded in 2008 (12% in 2002) compared to seven per cent of those aged 50-54 were excluded in 2008 (9% in 2002).

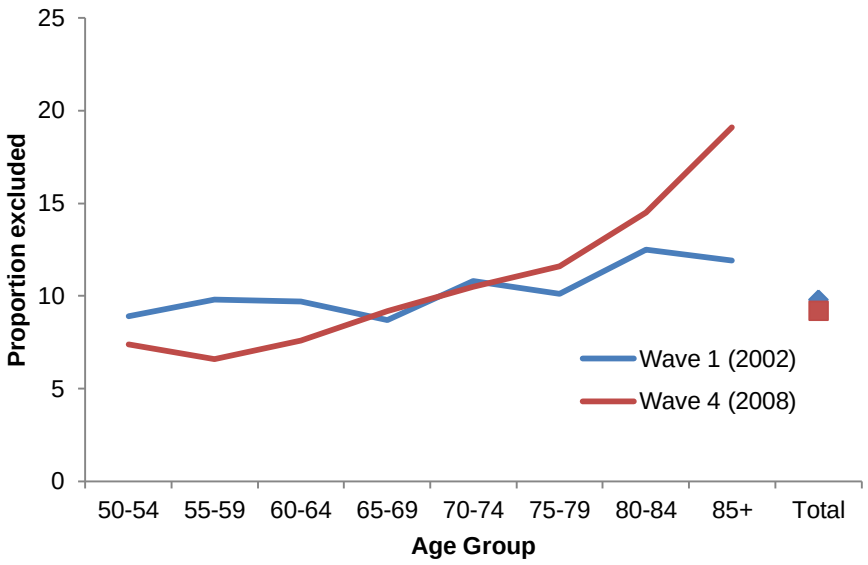


Figure 6: Proportion excluded from Civic Activities and Access to Information by age in 2002 and 2008.

2.7 Exclusion from Local Amenities

Exclusion from basic amenities reflects older people's ability to access essential services. Older people might be expected to be at higher risk of exclusion from local amenities than younger age groups due to their vulnerability to age related conditions such as ill-health and disability that will directly impact on their physical ability to access basic amenities; because of cumulative disadvantage resulting in the lower socioeconomic means or educational capital with which to purchase or negotiate access to basic amenities; as well as because of a higher risk of exclusion due to older people's increased vulnerability to community level changes including economic decline and changing land use patterns, that will directly impact on the amenities available to older people. Older people who are unable to access local amenities are thought to experience a lower quality of life as a consequence (Barnes et al 2006; Demakakos et al 2010). The inability to access essential service may also signify an inability to participate in other social structures, and may be related to other domains of social exclusion. Our measure of exclusion from local amenities, based on an index of exclusion from basic services developed by Barnes et al (2006), reflects whether older people report difficulties in accessing financial services, shopping services, and a number of health related services using their usual mode of transport[6]. However, we change the terminology from exclusion from basic services to exclusion from local amenities, believing this to be a better reflection of the nature of the domain. An inability to access local amenities will have a transparent impact on older people's independence.

Between the 2002 and 2008, there were small increases in the proportions of older people reporting difficulties in accessing the post office (4.6% in 2002 to 8.1% in 2008), local shops (5.4% to 7.9%), shopping centre (8.0% to 12.2%), dentist (7.7% to 12.0%), GP (5.2% to 6.8%) and hospital (12.0% to 15.4%), using their usual form of transport[7]. While this domain is intended, to large extent, to capture the quality of provision of local amenities, for some older people it may reflect problems with public transport if this is their usual mode of transport, or health problems if walking is their main form.

Table 6: Indicators used to construct domain for exclusion from basic amenities – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

			2002 (Wave 1)	2008 (Wave 4)
Financial Amenities	Difficulties Accessing Bank/Cash Point	No difficulty	90.6%	90.8%
		Difficulties in access	6.8%	6.7%
		Don't wish to go or not answered	2.6%	2.6%
	Difficulties Accessing Post Office	No difficulty	94.7%	89.9%
		Difficulties in access	4.6%	7.9%
		Don't wish to go or not answered	0.7%	2.2%
Shopping Amenities	Difficulties Accessing Local Shop(s)	No difficulty	93.4%	85.3%
		Difficulties in access	5.4%	7.3%
		Don't wish to go or not answered	1.2%	7.4%
	Difficulties Accessing Shopping Centre	No difficulty	90.5%	82.4%
		Difficulties in access	7.9%	11.5%
		Don't wish to go or not answered	1.6%	6.1%
	Difficulties	No difficulty	92.5%	90.9%

[6] It is possible that some respondents answered on the basis of perceived difficulties and some on the basis of actual experiences of difficulties, although it is not possible to differentiate between these.

[7] Percentages are based on valid data (data excluding values that are missing or where older people have stated that they do not wish to access the amenity).

	Accessing Supermarket	Difficulties in access	6.8%	7.4%
		Don't wish to go or not answered	0.7%	1.8%
Local Healthcare Services	Difficulties Accessing Chiropodist	No difficulty	75.9%	50.9%
		Difficulties in access	8.0%	8.5%
		Don't wish to go or not answered	16.1%	40.5%
	Difficulties Accessing Dentist	No difficulty	87.5%	80.1%
		Difficulties in access	7.3%	11.0%
		Don't wish to go or not answered	5.2%	8.9%
	Difficulties Accessing GP	No difficulty	93.6%	92.6%
		Difficulties in access	5.1%	6.8%
		Don't wish to go or not answered	1.3%	0.7%
	Difficulties Accessing Hospital	No difficulty	86.6%	82.7%
		Difficulties in access	11.8%	15.0%
		Don't wish to go or not answered	1.6%	2.3%
	Difficulties Accessing Opticians	No difficulty	91.2%	88.9%
		Difficulties in access	6.4%	7.5%
		Don't wish to go or not answered	2.4%	3.6%
	Sample size		8,998	7,550

In developing a score for exclusion from local amenities, older people are allocated one point for each local amenity they report difficulties in accessing, with any difficulties in accessing financial or shopping amenities combined and treated as one point each. Respondents could therefore score up to seven points indicating exclusion across all indicators (3% and 2% in 2002 and 2008 respectively)[8]. If respondents reported difficulties in accessing more than one local amenity, they were categorised as excluded from local amenities, with 16.2 per cent falling above this threshold in 2008, a substantial rise from the 10.9 per cent in 2002. Figure 8 demonstrates that most of this rise is attributable to a rise in reports of exclusion from local amenities among those in younger age groups; for example there was over a two-fold rise in the proportion of those aged 50-54 excluded from local amenities between 2002 and 2008. Despite this rise, those in the oldest age groups remained at higher risk than those in younger age groups of being excluded at both points.

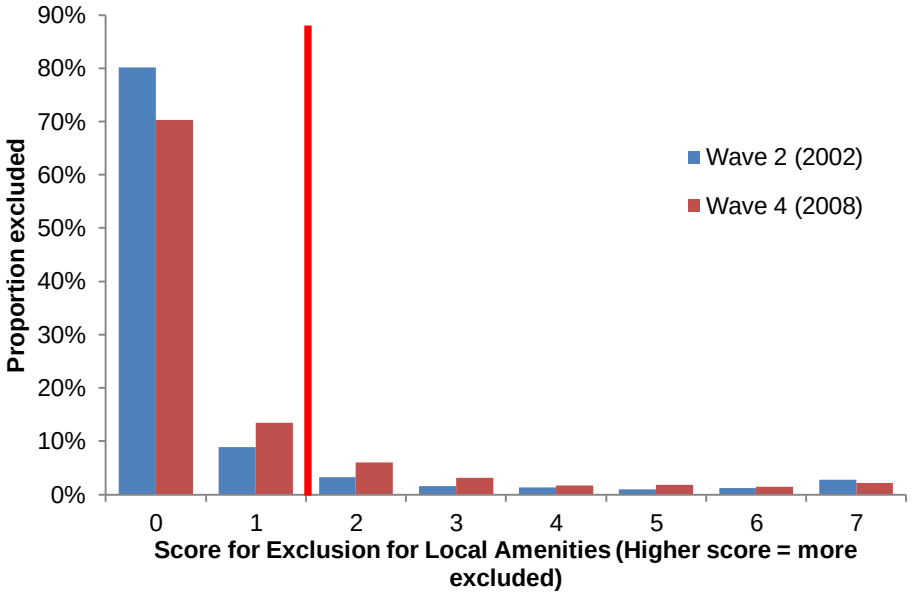


Figure 7: Exclusion from Local Amenities score and cut off point (2002 and 2008 samples).

[8] Respondents were classified as missing data for this indicator if they were missing 5 or more values included in Table 6.

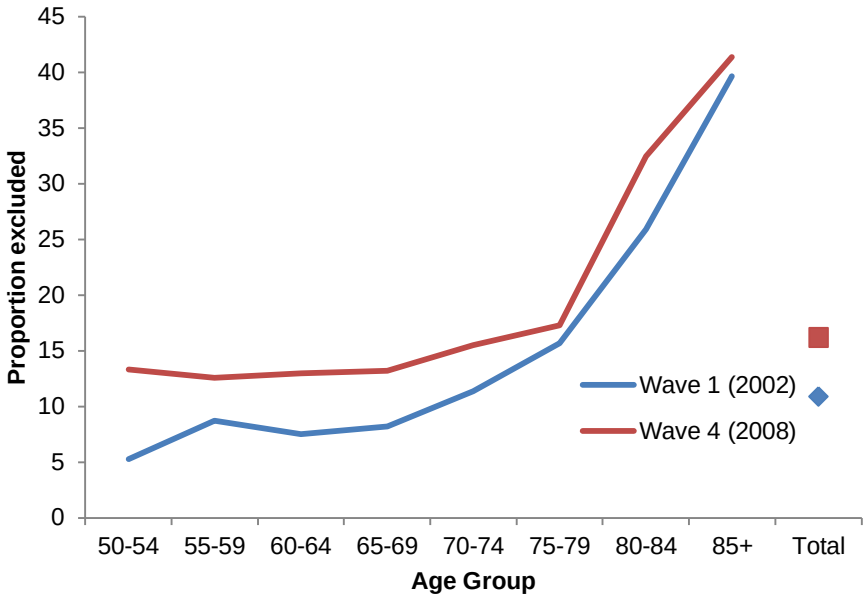


Figure 8: Proportion excluded from Local Amenities by age in 2002 and 2008.

2.8 Exclusion from Decent Housing and Public Transport

Exclusion from decent housing and public transport combines indicators of people's immediate living conditions with their ability to access public transport. Older people living in substandard housing may be unable to access decent housing due to: i) not having the material means to access decent housing or fix their own home, ii) not having the negotiation skills to fix housing problems with private or public landlords, or iii) through not having access to resources and information that may help in rectifying substandard housing. Housing is known to be highly influential in predicting health and a number of other outcomes for older people (for example Donald 2009); among younger people housing tenure has also been suspected of being a social stratifying factor in other ways and can be a key indicator of the type of neighbourhood (Tunstall et al 2011), and this may also extend to older people. Those unable to secure decent housing may also be those who are making difficult budgetary decisions elsewhere, for example in terms of consumer goods and financial products (explored later), but also in terms of other more basic decisions, such as on fuel and food. By including a measure of exclusion from decent housing, we are also therefore likely to be capturing those who are materially deprived in ways other than from consumer goods and financial products. We also include access to public transport in the same domain as housing, and specifically more structural barriers such as the cost, availability, reliability and frequency. For some, public transport is unavailable for other reasons, such as health reasons or because they do not need to use it, although we do not examine these here as reasons for exclusion from public transport. Instead, we treat those who have an unmet need for public transport and who do not use public transport for the reasons outlined above as being excluded. We consider exclusion from public transport as a key contributor to quality of life that also has cascade effects on other dimensions of social exclusion.

Exclusion from decent housing and public transport is of particular relevance for older people because age related characteristics, such as poor health or fixed incomes due to retirement, are likely to restrict the housing and transport choices available to older people; these same related

age characteristics are also likely to amplify the negative outcomes of exclusion on this domain among older people. Transport is also of particular interest in examining social exclusion among older people because pensioners are eligible for free or concessionary travel. Housing is also of particular interest because many older people are characterised as being 'asset rich' but 'income poor', with some owner occupying older householders unable to maintain their most valuable asset to a decent standard. Housing and public transport are combined, as both reflect proximal and distal elements of the local living environment and the ability of an older person to traverse this. In addition, both may require a similar combination of socioeconomic means or personal negotiation and organisational skills to prevent falling into exclusion – for example older people may require the same type of organisational skills in researching and planning what bus routes are available to reach a particular destination as they do in terms of researching and planning how to obtain assistance with a particular housing problem. Returning to social exclusion among older people being related to independence, and a reflection of whether the opportunities to maintain independence are open to all, the ability to traverse the local environment (through public transport) is a transparent factor in maintaining independence. Accessing decent, and safe housing, is also likely to be a key facilitator in maintaining independence, not least in terms of health (Donald 2009).

Looking at the individual indicators that form our domain of exclusion from decent housing and public transport, we observe little change between 2002 and 2008 in terms of housing, with the exception of a perceptible rise in experiences of water leaks. We find greater changes in terms of exclusion from public transport with the proportion who reported that public transport was too expensive, unreliable or infrequent increasing by 2-3% each. However, these rises were observed unevenly between age groups, and the overall rises were mainly attributable to those aged 50-59 reporting problems in terms of water leaks (5% rise among those aged 50-54), exclusion from public transport because it's deemed too expensive (9% rise among those aged 50-54, from 4% in 2002), and exclusion from public transport because it's deemed too infrequent (4% rise among those aged 50-54, from 6% in 2002).

Table 7: Indicators used to construct domain for exclusion from decent housing and public transport – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

			2002 (Wave 1)	2008 (Wave 4)
Problems With Public Transport	Too Expensive	No problem	97.0%	93.9%
		Problem reported	3.0%	6.1%
	None Available	No problem	93.7%	93.7%
		Problem reported	6.3%	6.3%
	Unreliable	No problem	95.4%	93.1%
		Problem reported	4.6%	6.9%
	Too Infrequent	No problem	95.1%	92.1%
		Problem reported	4.9%	8.0%
Problems with Accessing Decent Housing	Noisy Neighbours	No problem	93.0%	93.5%
		Problem reported	7.0%	6.5%
	Rising Damp	No problem	96.6%	96.8%
		Problem reported	3.4%	3.2%
	Water Leaks	No problem	96.2%	93.5%
		Problem reported	3.8%	6.5%
	Electrical Problems	No problem	98.6%	98.4%
		Problem reported	1.4%	1.6%

	Rot and Decay	No problem	98.7%	98.9%
		Problem reported	1.3%	1.1%
	Insects and other pests	No problem	96.4%	96.3%
		Problem reported	3.6%	3.7%
	Cold	No problem	96.1%	95.3%
		Problem reported	3.9%	4.7%
Sample size			8,998	7,550

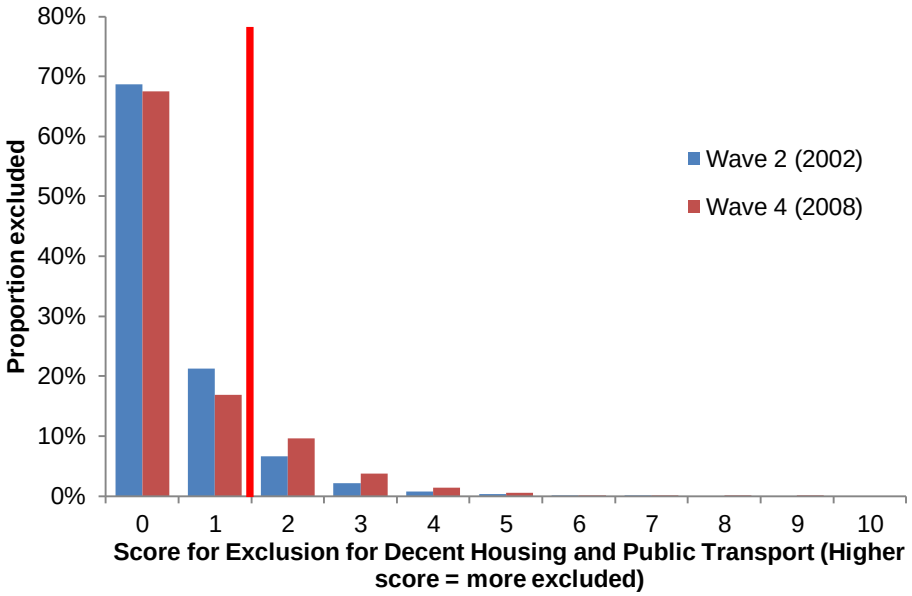


Figure 9: Exclusion from Decent Housing and Public Transport score and cut off point (2002 and 2008 samples).

In creating a score for exclusion from decent housing and public transport, respondents were awarded a point each for any of the problems included in table 7, with those who reported two or more problems classified as excluded[9]. The proportion of older people aged 50 and above classified as excluded rose from ten per cent in 2002 to 15.6 per cent in 2008. This rise, as shown in figure 10, can be mainly attributed to very high rises in the proportion aged 50-54 and 55-59 years characterised as being excluded on this dimension; in 2002 around 13% of those aged 50-59 were excluded on this dimension but by 2008 23% of those aged 50-59 were excluded on this dimension. This component of social exclusion is the only one of the seven examined in this report that declines with age, so that those in the oldest age groups are least likely to be excluded on this dimension.

[9] Missing data was not a problem in constructing this indicator – see later note.

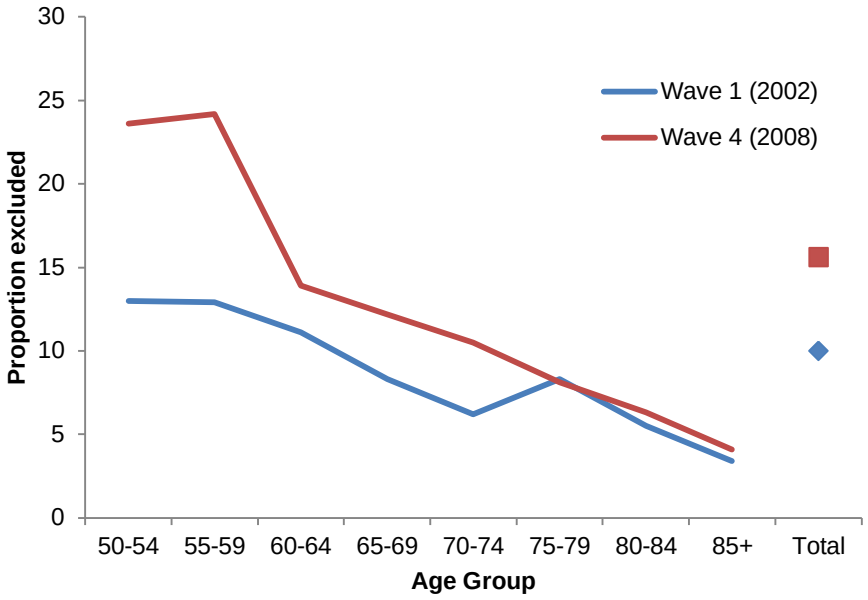


Figure 10: Proportion excluded from Decent Housing and Public Transport by age in 2002 and 2008.

2.9 Exclusion from Common Consumer Goods

The concept of exclusion from common consumer goods measures the ownership of goods that are owned by the majority of the population. Exclusion from common consumer goods is mainly included as a direct indicator of material poverty, although could also indicate other issues in terms of accessing local amenities, accessing the internet, or accessing advice or assistance from social relationships to help purchase these goods. Returning to early definitions of social exclusion reviewed in Chapter 1, this domain of social exclusion reflects a set of customs, material goods and social 'pleasures' that the majority of people are entitled to (Townsend 1979), and we may assume that some older people may be at high risk of exclusion because of material factors, but also because of the high risk of being excluded across other domains that are often also necessary to obtain these common consumer goods. Returning to the link between social exclusion and independence for older people, while remaining independent is not contingent on ownership of any one of the individual goods included here, exclusion on this domain may indicate that older people may not have the necessary socioeconomic resources to remain independent and enjoy sufficient quality of life, or may indicate that older people are disconnected from networks that could help maintain sufficient socioeconomic resources.

Common consumer goods here were defined as a fridge-freezer, TV, washing machine, microwave, CD player, mobile phone, and central heating. Defining indicators to reflect exclusion from common consumer goods is conceptually difficult due to the need to include relatively neutral items in terms of technological advancement with the need to reflect what is and is a common consumer good at any one point in time. We considered including computer ownership, but did not as computer ownership shifted to majority behaviour only between surveys (not 2002). Across time, we observed small increases in the ownership of all common consumer goods, although the largest rise was in mobile phone ownership, from 58.3 per cent to 80.2 per cent between 2002 and 2008. A substantial rise was also observed in the proportion reporting that they owned all of a

selected number of goods from six per cent in 2002 to sixteen per cent in 2008[10] (Table 8).

Table 8: Indicators used to construct domain for exclusion from common consumer goods – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

		2002 (Wave 1)	2008 (Wave 4)
Television	Own	99.1%	99.2%
	Don't Own	0.9%	0.8%
CD Player	Own	76.0%	74.6%
	Don't Own	24.0%	25.4%
Freezer	Own	95.4%	96.7%
	Don't Own	4.6%	3.3%
Washing Machine	Own	91.3%	93.6%
	Don't Own	8.7%	6.4%
Microwave Oven	Own	86.5%	92.6%
	Don't Own	13.5%	7.4%
All*	Own	6.0%	16.3%
	Don't Own	94.0%	83.7%
Central Heating	Own	93.5%	96.6%
	Don't Own	6.5%	3.4%
Mobile Phone	Own	58.3%	80.2%
	Don't Own	41.7%	19.7%
Sample size		8,998	7,550

* Including a television, CD player, freezer, washing machine, microwave oven, tumble dryer, dishwasher, computer, satellite television and a landline phone.

In developing a score for exclusion from common consumer goods, respondents were allocated a point for each of the goods that they reported having, with those with a score of four or less being defined as excluded on this domain. We observed a large increase in the proportion of older people reporting ownership of all seven goods, from two-fifths in 2002 to two-thirds in 2008 (figure 11). Consequently, we observed a substantial decline in the proportion excluded on this domain of social exclusion, from 9.9 per cent in 2002 to 3.4 per cent in 2008. Such a decline can lead us to expect that those remaining excluded from common consumer goods will potentially be those facing the most severe forms of poverty and socioeconomic disadvantage, as well as other forms of exclusion. A decline in exclusion from common consumer goods was observed across all age groups (figure 12), although was particularly marked among the oldest age groups, with, for example, the proportion of those aged 85 and above who were excluded on this domain falling from almost half (47.5%) to less than a quarter (21.9%).

[10] Including a television, CD player, freezer, washing machine, microwave oven, tumble dryer, dishwasher, computer, satellite television and a landline phone.

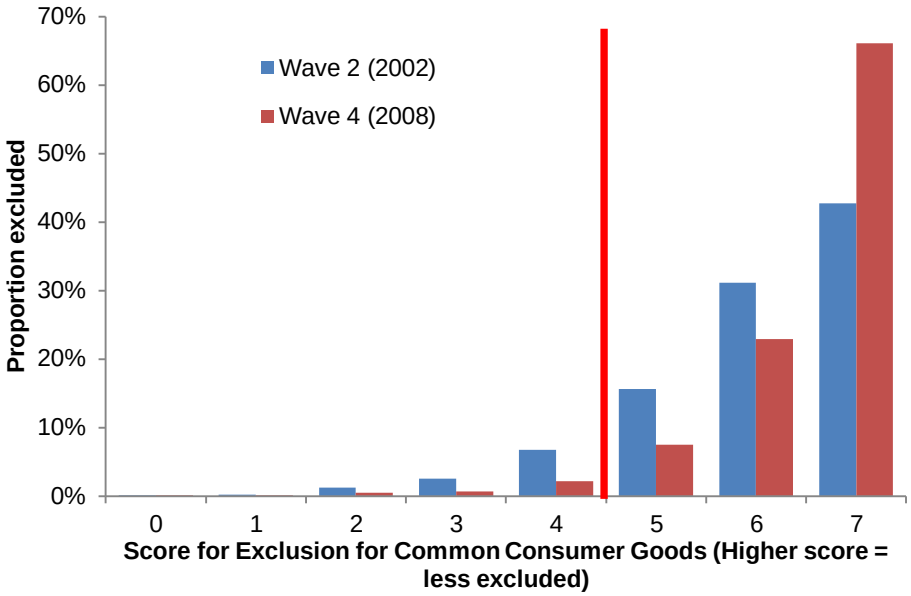


Figure 11: Exclusion from common consumer goods score and cut off point (2002 and 2008 samples).

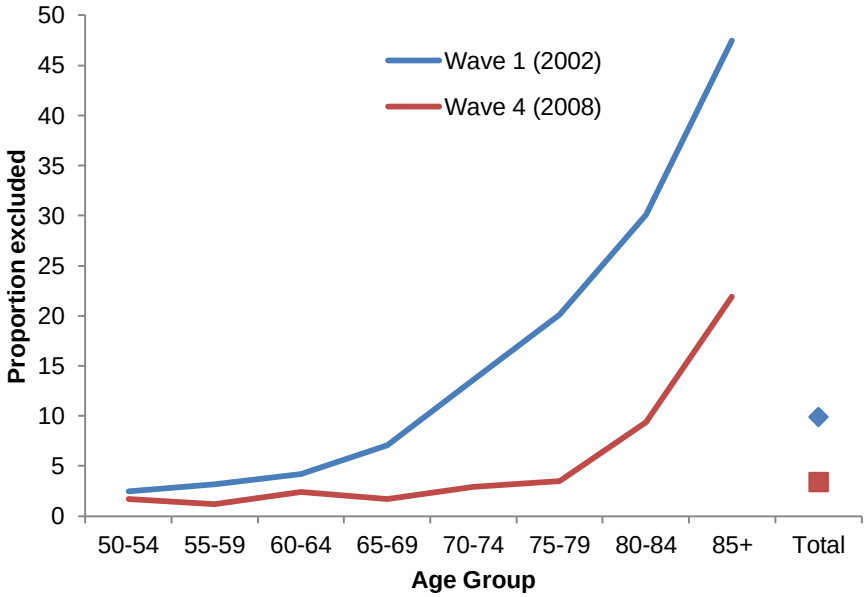


Figure 12: Proportion excluded from common consumer goods by age in 2002 and 2008.

2.10 Exclusion from Financial Products

People who are excluded from financial products are generally unable to access resources to help them manage their finances, either on a day-to-day basis or longer term. These resources can include relatively simple products such as current accounts, through to more complex long-term investments including annuities and life insurance. An inability to access and manage financial products could lead older people to fall into debt, to be unable to purchase common consumer goods, or to become excluded from common values and practices in another way. Additionally, exclusion from financial products can act as a marker of other domains of social exclusion, such as exclusion from local amenities. We could expect older people to be excluded from financial

products as they may be less able to access some financial products because of age or health related eligibility criteria, due to their low or fixed incomes being lower than certain thresholds needed to access these products, or because these products or services are unavailable in their local area. As was the case earlier for exclusion from common consumer goods, while failure to access any individual financial product alone is unlikely to impede the independence of older people, the concept of exclusion from financial products may signify an inability to weather financial shocks, which in turn could impede on independence.

Table 9: Indicators used to construct domain for exclusion from financial products – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

			2002 (Wave 1)	2008 (Wave 4)
Short-term Financial Product	Current Account	Reported	88.1%	91.5%
		Not Reported	11.9%	8.5%
Medium-term Financial Products	Savings Account	Reported	70.2%	69.2%
		Not Reported	29.8%	30.8%
	TESSA	Reported	16.4%	8.4%
		Not Reported	83.6%	91.6%
	ISA	Reported	45.9%	58.9%
		Not Reported	54.1%	41.1%
	Premium Bonds	Reported	35.8%	37.6%
		Not Reported	64.2%	62.4%
	National Savings	Reported	7.8%	5.6%
		Not Reported	92.2%	94.4%
	PEP	Reported	18.0%	9.5%
		Not Reported	82.0%	90.5%
	Stocks and Shares	Reported	32.0%	28.2%
		Not Reported	68.0%	71.8%
	Share Options	Reported	3.9%	4.0%
		Not Reported	96.1%	96.0%
	Share Club	Reported	0.8%	0.4%
		Not Reported	99.2%	99.6%
	Unit and Investment Trust	Reported	10.2%	9.0%
		Not Reported	89.8%	91.0%
	Bonds and Guilds	Reported	10.6%	9.4%
		Not Reported	89.4%	90.6%
	Other Financial Products	Reported	6.5%	5.9%
		Not Reported	93.5%	94.1%
Long-term Savings Products	Private Pension	Reported	77.7%	82.3%
		Not Reported	22.3%	17.7%
	Life Insurance	Reported	51.7%	42.7%
		Not Reported	48.0%	57.0%
		Not answered	0.3%	0.3%
	Sample size		8,998	7,550

Following the method developed by Barnes et al (2006), we measure financial exclusion from short, medium and long-term products; exclusion from short-term financial products is assessed using information on current accounts at a bank or building society; long-term financial exclusion is assessed through the inability to access (or be granted access) to current and future private pension income and life insurance; exclusion from medium-term financial products is assessed through considering whether respondents have access to products such as savings accounts, stocks and shares and other investments (table 9). A number of these indicators of financial exclusion did change between 2002 and 2008, with the most substantial declines observed in the

number of older people reporting that they have a TESSA (tax exempt special savings account) (8% decline to 8.4% in 2008), life insurance (9% decline to 42.7% in 2008), and stocks and shares (4% decline to 28.2% in 2008). Meanwhile, substantial increases were observed in the proportion of older people reporting ISAs (individual savings account) (13% increase to 58.9% in 2008) and private pensions (4.5% increase to 82.3%).

In developing a score for exclusion from financial products, respondents were awarded two points if they reported a long-term or short-term financial product respectively and a further point if they reported a medium-term financial product, giving a maximum potential score of 5 (table 10); over 70% of respondents scored 5 points at both 2002 and 2008. Older people were classified as being financially excluded if they scored two points or less, with a small decline observed in the number falling beneath this threshold from 7.6 per cent in 2002 to 6.8 per cent in 2008. Figure 13 highlights that the small overall decline in exclusion from financial products is attributable to declines in exclusion among older people aged 65 and above, with little change observed in exclusion status among those aged 50-64 years. Given that this cohort should be preparing for retirement using a variety of long, medium and short-term financial products, the lack of change in exclusion status on this domain among this age group may be considered particularly concerning to some.

Table 10: Distribution of scores for exclusion from financial products in 2002 and 2008 (un-weighted sample size and weighted proportions)

		Wave 1 (2002)	Wave 4 (2008)
Excluded	0	2.4%	1.0%
	1	1.5%	0.9%
	2	3.7%	4.9%
Not Excluded	3	13.2%	11.0%
	4	9.1%	8.7%
	5	70.1%	73.4%
	Sample Size	8,998	7,550

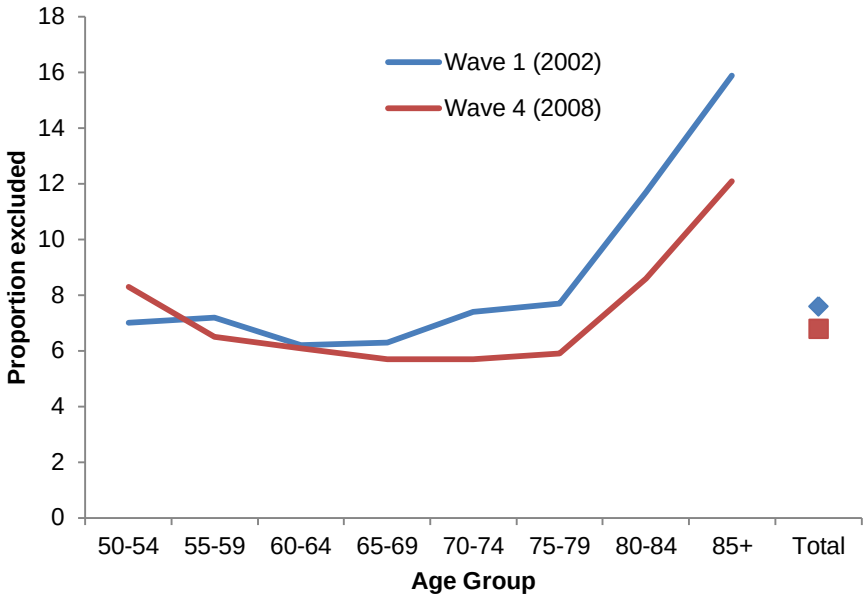


Figure 13: Proportion excluded from Financial Products by age in 2002 and 2008.

2.11 Further methodological notes: who's included in our sample?

In these analyses our sample contains those who completed a self-completion questionnaire, who were core study members, and for whom we were able to establish exclusion status across all seven domains. Many of the indicators used in constructing the domains of social exclusion are only collected in the self-completed section of the survey and we therefore we filter out those who did not submit a questionnaire. While all respondents were invited to submit a self-completed questionnaire, around 90% of Wave 1 respondent and 85% of those in Wave 4 did so. The ELSA study contains weights that are used in the cross-sectional analyses to account for the differential response patterns for those who did and did not submit a self-completed questionnaire. We do not include partners in this report, as is the convention in many analyses of ELSA (see Hussey et al 2010 for further methodological information on the survey). For our 2002 cross-sectional sample this resulted in a sample size of 8,988 and for 2008 a cross-sectional sample size of 7,550. For 2002 our sample represents 87 per cent of core study members who submitted a self-completed questionnaire and for 2008 the sample represents 91 per cent. In later longitudinal analyses, we also link information of individuals in 2002 with their information in 2008. This produces a working sample of 4,095 respondents representing 83% of cases who were present at both wave 1 (2002) and wave 4 (2008) and who completed the self-completed section at both sweeps).

2.12 Further methodological notes: what caveats should be placed on the analyses?

2.12.1 Attrition

In many longitudinal studies, attrition is a potential weakness and can compromise the representativeness of the data. Attrition occurs when individuals drop out of the study. Many studies of attrition find that those with disadvantaged characteristics are most likely to attrit (Hawkes & Plewis 2006, Banks et al 2010). To account for the differential patterns of attrition in the

survey by socioeconomic characteristics, the study depositors of ELSA constructed longitudinal attrition weights for individuals who were present throughout the study. The usage of weights in the analysis of ELSA data is designed to minimise the impact of attrition. For longitudinal analysis, we use the pre-derived wave 4 longitudinal weights that account for differences between sample members who participated in the 2002, 2004, 2006 and 2008 sweeps of data compared to the original core sample members who attrited or were subject to wave non-response (see Hussey et al 2010).

In this report, attrition poses a particular problem in that many of the factors that are used to define or predict social exclusion also predict attrition. For example, having a private pension is a proxy indicator of socioeconomic status, and we would expect those that don't have private pensions to be the most likely to attrit. However, having a private pension is also a component in measuring exclusion from financial products. We can expect those who are socially excluded to also be those who attrit from the study, particularly given the correlations between social exclusion with death and movement into institutional accommodation. When we examine the attrition patterns of those who were socially excluded, we find that those who were excluded from civic activities, financial products, local amenities and consumer goods were significantly more likely to attrit than those who were not excluded on these domains. While this does not present a limit to the cross-sectional analysis, it does represent a limitation to some of the work looking at patterns longitudinally. The usage of attrition weights will attenuate this effect to a certain extent. However, attrition does represent a caveat to these results, and as a result, we are likely to underestimate rates of social exclusion particularly related to material deprivation or low social capital.

2.12.2 Non-response and missing data

Missing data within waves is a further methodological concern in constructing our domains of social exclusion. Given that our indicators of social exclusion constituted our dependent (outcome) variables (for most of the report), we did not employ any specific techniques to control for missing data on these, beyond those outlined earlier in this chapter (see earlier notes on derivation of individual domains) due to issues pertaining to methodological appropriateness of doing so (see von Hippel 2007 for a discussion). However, we do also consider the predictors of social exclusion in later chapters, and employed multiple imputation models to generate missing values and preserve the sample size of our cross-sectional and longitudinal samples. We constructed 15 replicate sets each for the 2008 cross-sectional dataset, as well as another for the longitudinal dataset (see Royston 2004 for an overview of multiple imputation).

2.13 Further methodological notes: which methods were employed in these analyses?

In this report we use a combination of descriptive and regression techniques on weighted and multiply imputed data. Our selection of regression model here reflects the nature of our dependent variable – for continuous outcomes we employ ordinary least squared (OLS) regression models, for binary outcomes we employ binary logistic regression; and for categorical outcomes we employ multinomial logistic regression and ordinal logistic regression for ordinal variable.

The results presented from binary logistic regression models often represent odds ratios (referred to as OR in the text at times). These represent the relative probability of experiencing versus not experiencing a given condition in one group versus another. An odds ratio above one suggests that a group is more likely to experience a condition than is the case in a comparison group (the baseline), while an odds ratio below one suggests a lower relative probability of experiencing an event. It should be noted that odds ratios reflect the relative probability in one group versus another, but do not reflect the risk in the population of experiencing a given condition. We also present the results from ordinal logistic regression when looking at overall exclusion, with an odds ratio over one equating to a higher probability of being more severely excluded in one group relative to another. We also present the results from ordinary least squares (OLS) regression in our analyses of wellbeing score.

Finally, we also present results from fixed effects models, using binary logit or OLS regression. In the longitudinal analyses, even after controlling for individuals' prior experiences that may influence their exclusion experiences, there may be observable or unobservable variables omitted from the models, which may be correlated with one or more of the explanatory variables, as well as the outcome variable. These omitted variables can have a pernicious effect leading to spurious results in our model estimates. We attempt to overcome this potential source of bias through imposing a fixed effects framework, and make the assumption that these unobserved effects are time invariant. In this case it is changes over time among individuals that our models aim to identify through examining how a change in status (for example health) between the 2002 and 2008 sweeps impacts a change in social exclusion or other outcome over the same timeframe, with unobserved heterogeneity that is fixed over time being controlled for through fixed effects[11]. While none of our analyses in this report attempt to establish causality in terms of the associations we identify, imposing a fixed effects framework can be analogous to taking a 'step closer' to causality.

2.14 Further methodological notes: the characteristics of socially excluded people

In this report, not only are we interested in the prevalence of social exclusion, and how this may have changed between sweeps of the ELSA survey, but we are also interested in the characteristics of those who are most at risk of being socially excluded. This current chapter has already begun to explore the impact of age on the risk of social exclusion across different domains and in the proceeding chapters we extend this analysis to explore the impact of other characteristics. We explore the impact of age on the risk of exclusion initially in bivariate analysis where we explore a single characteristic at a time. However, we also know that many of the individual relationships we identify in bivariate analyses will be confounded by other characteristics, for example age effects may be partly attributable to health or other factors. Therefore, we explore these relationships simultaneously in multivariate analyses, so that we are able to describe and identify the association between a single characteristic and the risk of social exclusion, holding constant other potential confounding characteristics. Our choice of characteristics that we include in these analyses reflects those factors known to be associated with higher risks of disadvantage, particularly among older people (for example Barnes et al 2006,

[11] At this point we only analyse change between the 2002 and 2008 sweeps and not change across all four available ELSA sweeps.

Philipson and Scharf 2004), and can be grouped in terms of variables reflecting demographic factors, socioeconomic factors and health related factors. The characteristics of older people included in our 2002 and 2008 cross-sectional samples are included in table 11, and in the next chapter we outline how these characteristics were associated with the risk of being socially excluded in 2008.

Table 11: Control factors – cross-sectional descriptive information for 2002 and 2008 (un-weighted sample size and weighted proportions)

		2002 (Wave 1)	2008 (Wave 4)
Age Group	50-54	20.7%	13.8%
	55-59	18.8%	23.5%
	60-64	15.4%	18.3%
	65-69	13.8%	13.2%
	70-74	12.2%	11.2%
	75-79	9.5%	9.0%
	80-84	6.8%	6.1%
	85+	3.8%	4.9%
Gender	Male	47.1%	47.0%
	Female	52.9%	53.0%
Ethnicity	White	97.3%	96.6%
	Non-white	2.5%	3.4%
	Missing	0.2%	0.0%
Living Arrangements	Live Alone	24.0%	24.3%
	Couple No Children	52.0%	46.6%
	Children and No Partner, Other Household	6.2%	6.7%
	Couple with Children	17.8%	22.4%
Total Children	None	12.7%	11.6%
	One	14.2%	14.4%
	Two	37.9%	36.4%
	Three or More	35.3%	33.7%
	Missing	0.0%	3.8%
Total Siblings	None	21.7%	20.0%
	One	30.4%	30.8%
	Two	20.3%	20.3%
	Three or More	25.3%	27.8%
	Missing	0.3%	1.1%
Highest Educational Qualification	Degree or Higher	11.7%	17.1%
	NVQ Level 4 or equivalent	11.4%	7.7%
	NVQ Level 3 or equivalent	6.3%	6.6%
	NVQ Level 2 or equivalent	16.2%	12.0%
	NVQ Level 1 or equivalent	13.4%	11.7%
	No qualifications	40.9%	23.5%
	Missing	0.1%	21.5%
Economic Activity	Retired	47.7%	48.7%
	Employed	28.4%	30.8%
	Self-employed	5.9%	7.0%
	Unemployed	2.4%	2.0%
	Sick	6.3%	5.0%
	Looking after Family	9.3%	6.3%
	Missing	0.0%	0.0%
Self-rated Health	Very Good	30.0%	12.6%
	Good	40.2%	29.3%
	Fair	23.0%	31.6%
	Bad	6.9%	26.5%
	Missing	0.0%	0/0%
Fallen in past year	Not Fallen	40.7%	45.9%
	Fallen	18.3%	16.8%

	Not Asked[12]	39.4%	37.3%
	Missing	1.6%	0.0%
Physical Exercise	Regular Vigorous Physical Exercise	28.0%	2.8%
	Regular Moderate Physical Exercise	48.0%	47.4%
	Some Moderate Physical Exercise	16.4%	16.6%
	No Physical Exercise	7.5%	7.1%
	Missing	0.0%	0.0%
Depressed	Not Depressed	76.5%	78.2%
	Depressed	23.0%	21.6%
	Missing	0.5%	0.2%
Care Giver	Not a care giver	81.3%	87.2%
	Gives Care	18.7%	12.8%
Household Income Quintile	Lowest Quintile	18.5%	18.6%
	2	19.0%	18.9%
	3	19.5%	20.0%
	4	21.0%	20.3%
	Highest Quintile	21.2%	20.6%
	Missing	0.8%	1.8%
Housing Tenure	Outright Ownership	55.0%	59.2%
	Own with a mortgage	25.8%	22.1%
	Social Rented	15.3%	14.8%
	Private Rented	3.7%	3.4%
	Missing	0.2%	0.4%
Access to a car or van	No	16.9%	15.2%
	Yes	83.0%	84.8%
	Missing	0.0%	0.0%
Main source of income	Assets/other	4.8%	6.6%
	Benefits	8.9%	8.4%
	State pension	33.8%	29.1%
	Private pension	15.6%	19.3%
	Self-employment	5.3%	5.0%
	Employment	30.4%	31.3%
	Missing	1.1%	0.2%
Sample Size		8,998	7,550

[12] Those aged 50-59 were not asked about falls.

Chapter 3: Who was at risk of being socially excluded in 2008?

KEY MESSAGES

Who is at risk of social exclusion?

- In this chapter, we explore how factors measured in 2008 are associated with exclusion status measured in 2008. We find that different domains of social exclusion have a different set of risk factors that predict exclusion. For example, a history of falls is generally not a risk factor for many single domains of exclusion except for exclusion from local amenities, where those who had experienced a fall were 33 per cent more likely to be excluded than those who had not.

- If we were to ignore differences across individual domains, and focus on overall measures of exclusion, we find that people with the following characteristics are more likely to be excluded using a shorthand measurement of social exclusion:
- *Older*
- *Non-white*
- *Lived Alone/Lived with Children and No Partner/Lived without Partner*
- *Childless*
- *Off work sick*
- *Poor self-rated health*
- *No regular uptake of physical exercise*
- *Depressed*
- *Experienced a fall*
- *Poor: in the lowest quintile of equivilised household income*
- *Living in rented housing*
- *No car*
- *Living on benefits as the main source of income*

3. Who was at risk of being socially excluded in 2008?

3.1 Who was a risk of being socially excluded in 2008?

Introduction and overall exclusion trends

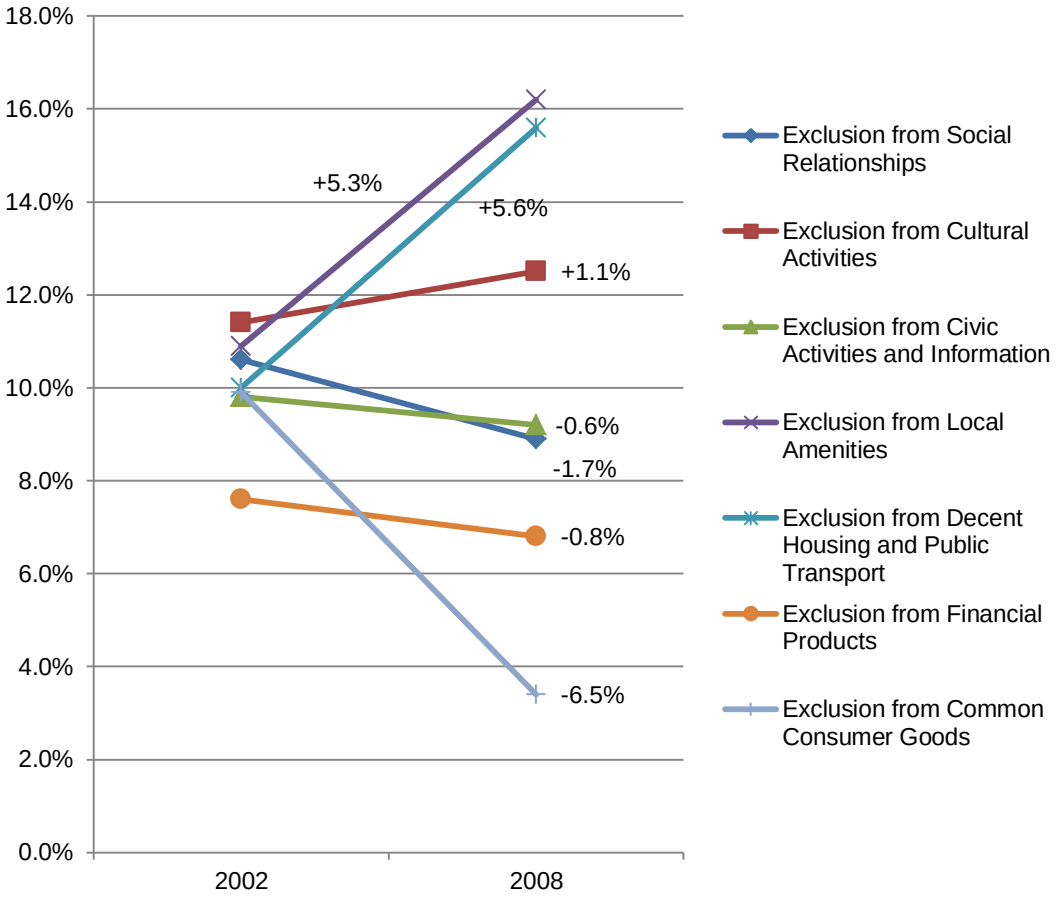
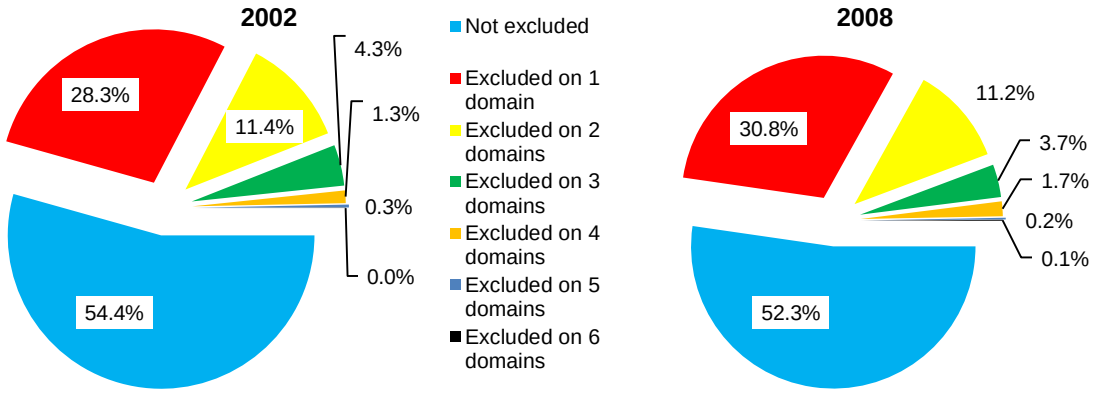


Figure 14: Proportion excluded from different domains of exclusion by age in 2002 and 2008.

In the previous chapter, we described the way in which social exclusion is measured in this report, using seven domains originally based on a framework developed by Barnes et al (2006). We showed that between 2002 and 2008, there was little change in the risk of exclusion for those aged 50 and above in terms of civic activities and access to information, social relationships, financial products and social relationships. Over the same period, there were substantial increases in the risk of exclusion from local amenities and exclusion from decent housing and public transport, as well as a substantial decrease in the risk of exclusion from common consumer goods (Figure 14). Overall, Figures 15a and 15b highlight that between 2002 and 2008, there was a modest two per cent increase in the proportion who were excluded in some form, with most of this increase confined to those who were excluded from one domain alone; there was actually a small decrease (1.4%) in the proportion who were excluded on two or more domains of social exclusion. Furthermore, it should be noted that Figures 15a and 15b both include the over 50 population; should we confine our interest to the population aged 65 and over, we would observe a modest

three per cent (2.8%) decline in the proportion of people who were excluded on at least one dimension of social exclusion.



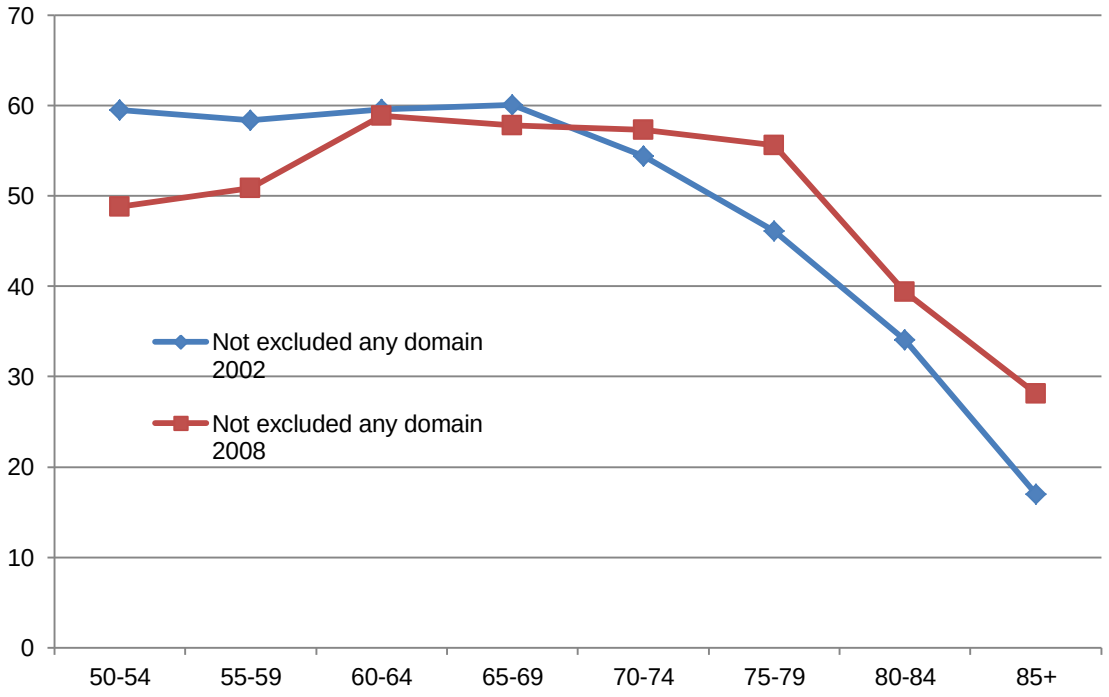
Figures 15a and 15b: Overall level of exclusion in 2002 and 2008. Un-weighted sample size: 2002=8,998, 2008=7,550.

We further examined the impact of age on different forms of exclusion, and observed that those in the oldest age groups (80-84, 85+) were at elevated risk of being excluded across most domains compared to those in younger age groups, with age exhibiting an approximate linear relationship with the risk of exclusion. Two exceptions existed in terms of the risk of exclusion from cultural activities, where age did not exhibit a linear association, and it was those in the youngest and oldest age groups who were most at risk of exclusion from this domain. Exclusion from decent housing and public transport exhibited a negative association with age, and increasing age was actually associated with a decreased risk of exclusion from this domain. However, there were differences in the way different age groups experienced levels of social exclusion in 2002 compared to 2008.

In this chapter, we extend this bivariate analysis further to examine other characteristics of older people – their demographic, socioeconomic and health characteristics – as well as to statistically test the strength of the observed associations. In addition, we also examine the overall risk of exclusion in 2008 across any domain. In the latter half of this chapter we construct regression models to examine the associations between these characteristics simultaneously, in order to mitigate any confounding effects. Given that social exclusion is a much broader term indicating a difference in values, as well as access to material resources, that are due, in part, to the exclusionary practices of the socially excluded (see, for example, Burchardt et al 2002b); we can also expect the predictors of social exclusion to be much wider than those predicting poverty among older people alone. The literature supports this notion, with measures of socioeconomic status (housing tenure, low income, and reliance on state benefits) predicting social exclusion alongside predictors that are not solely linked to socioeconomic status (older age, single person households, childlessness, and poor physical and mental health) among older people (Barnes et al 2006). Interestingly, the same study also found that factors that may be expected to be strongly associated with social exclusion, and in particular gender and ethnicity which can indicate both socioeconomic resource and historic societal position, particularly among older people, were not identified as strong explanatory factors. In this chapter, we choose to focus on both gender and

ethnicity, among other factors, as we believe that while these may not form strong predictors of overall levels of social exclusion according to the literature, they may nevertheless be important predictors of individual domains. Decent housing and access to public transport have also been found to be significant predictors of social exclusion among older people, and among the wider population (for example SEU 2006, Barnes et al 2006, Hoff 2008). As such, given that we identify this as a domain of social exclusion, we could expect this domain to be predictive of other domains of social exclusion.

Returning to the impact of age on exclusion, we observe in table 12 that age is statistically significantly associated with all the individual domains of social exclusion, and with the overall risk of being socially excluded. The higher risk of being excluded in most individual domains of exclusion also raises their risk of any form of social exclusion. Almost two-fifths (38%) of those aged 85 and older were excluded from two or more domains of exclusion in 2008 – this compared with one-in-eight (12.4%) of those aged 60-64 years and one-in-six of the total sample (16.9%).



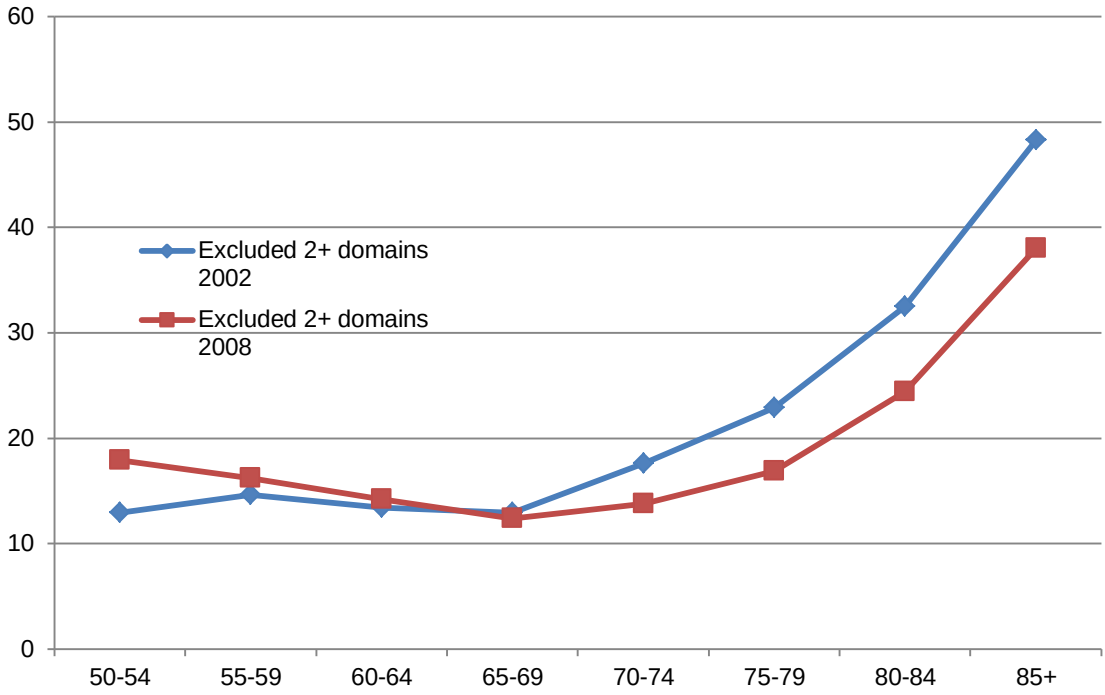


Figure 16a and 16b: Overall level of exclusion in 2002 and 2008 by age group. Un-weighted sample size: 2002=8,998, 2008=7,550.

We can also observe that those aged 60-79 had among the lowest risks of being excluded in any form in 2008 – this represents a departure from 2002 where those aged 50-59 also experienced the lowest risks of being excluded in any form (Figure 16a and 16b). People aged 50-54 years in 2008 were more likely to be socially excluded in any form than people in older age groups up to 80 years, with the rise in the risk of exclusion spread equally between a rise in people aged over 50 excluded on one domain of social exclusion alone (from 28% to 34% between 2002 and 2008 (not shown)) and who were excluded on two or more domains (from 13% to 19.5%). Conversely, there was a decline between 2002 and 2008 in the proportion aged 85+ who were excluded on any domain, from 83.0 per cent to 71.9 per cent. While public policy has focussed to a greater extent on tackling social exclusion among children and families, and older people and neighbourhoods to a lesser extent, this analysis highlights a need for a lifecourse approach that also includes working age people (Dewilde 2003). We find evidence here that the future cohort approaching retirement may be more socially excluded than previous cohorts. We describe the risk of exclusion by other characteristics of older people in the following sections.

3.2 Demographic characteristics and the risk of social exclusion in 2008

We find that older women are at a significantly greater risk of exclusion from cultural activities, civic activities and access to information, and financial products (table 12 below, where blue shaded cells represent bivariate statistically significant associations). Older men conversely, are at a greater risk of exclusion from social relationships and decent housing and public transport. In terms of the overall risk of social exclusion, women were at a small, although statistically significantly higher risk of experiencing some form of social exclusion (48.9% compared to 46.3% among women). Being non-white was also associated with a higher risk of experiencing some form

of exclusion compared to being white (59.8% compared to 47.3%), with most of this difference attributable to non-white people's elevated risks of experiencing exclusion from cultural activities (20.4% compared to 12.2%), exclusion from civic activities and access to information (14.8% versus 9.0%), and especially exclusion from financial products (21.0% versus 6.3%).

Statistically significant differences in the risk of exclusion were patterned by the number of siblings an older person had, although these differences were eclipsed by the differences in exclusion patterns by the number of children older people had. Unsurprisingly, respondents with no siblings, but particularly no children, were at greater risk of exclusion from social relationships – almost a third of older people with no children were excluded from social relationships compared to less than one-in-twenty older people with three or more children (32.4% versus 4.9%). Older people with no children were also those at elevated risk of exclusion from common consumer goods – over one in ten people with no children were excluded on this domain compared to less than two per cent of those with three or more children (10.4% compared to 1.8%). Consequently, older people with no children were at greater risk of experiencing some form of exclusion, with over three-fifths experiencing some form of exclusion (60.1%), compared to less than half of those with any number of children.

While gender, ethnicity, children and siblings did statistically significantly pattern exclusion across a number of domains, living arrangements statistically significantly patterned the risk of exclusion across all seven individual domains. Those who lived alone, or who lived in households with children and no partner and other households combined, were at substantially elevated risk of experiencing social exclusion across all domains; the one exception was exclusion from decent housing and public transport, where those in couple households with children were also at risk of exclusion on this domain. This heightened risk across individual domains led to almost two-thirds of those living alone, and those who lived in households with children and no partner and other households combined, being excluded in some form (63.3% and 64.7% respectively), compared to less than half of those in couple households and couple households with children (38.5% and 44.7% respectively). Furthermore, the risk of experiencing exclusion on three or more domains was over four times higher for older people living in the two at-risk households (13.1% and 15.2% respectively) compared to older people living in the two low risk households (1.9% and 2.7% respectively).

Table 12: Proportion excluded by demographic characteristic in 2008 (weighted proportions). Total sample size (7,550), see table 11 for overall prevalence of characteristic in sample.

	Exclusion from social relationships	Exclusion from cultural activities	Exclusion from civic activities and access to information	Exclusion local amenities	Exclusion from decent housing and public transport	Exclusion from financial products	Exclusion from common consumer goods	Not excluded	Excluded from one domain	Excluded from two domains	Excluded from three or more domains
Gender											
Male	10.6%	10.4%	7.1%	15.6%	17.0%	5.8%	3.7%	53.7%	30.7%	10.0%	5.6%
Female	7.4%	14.5%	11.1%	16.8%	14.3%	7.5%	3.2%	51.1%	30.8%	12.2%	5.9%
Age Group											
50-54	8.3%	17.5%	7.4%	13.3%	23.6%	8.4%	1.7%	48.8%	33.3%	11.9%	6.0%
55-59	7.8%	12.8%	6.6%	12.6%	24.2%	6.5%	1.2%	50.9%	32.9%	11.3%	4.9%
60-64	6.7%	11.8%	7.6%	13.0%	13.9%	6.1%	2.4%	58.9%	26.9%	9.8%	4.4%
65-69	7.9%	10.4%	9.2%	13.2%	12.2%	5.7%	1.7%	57.8%	29.8%	8.3%	4.1%
70-74	6.9%	10.1%	10.5%	15.5%	10.5%	5.7%	3.0%	57.3%	28.9%	9.4%	4.4%
75-79	8.4%	12.8%	11.6%	17.3%	8.1%	5.9%	3.5%	55.6%	27.6%	11.8%	5.0%
80-84	15.1%	10.6%	14.5%	32.5%	6.3%	8.6%	9.4%	39.4%	36.3%	16.0%	8.3%
85+	25.0%	12.6%	19.1%	41.4%	4.1%	12.1%	21.9%	28.1%	33.9%	19.1%	18.9%
Ethnic Group											
White	8.8%	12.2%	9.0%	16.2%	15.8%	6.3%	3.6%	52.7%	30.7%	11.1%	5.5%
Non-white	12.5%	20.4%	14.8%	16.7%	18.5%	21.0%	1.7%	40.2%	32.5%	15.2%	12.1%
Total Children											
None	32.4%	10.7%	9.1%	19.4%	16.6%	7.3%	10.4%	39.2%	32.4%	17.5%	10.9%
One	7.9%	10.8%	8.7%	14.4%	15.6%	5.7%	4.6%	53.9%	31.1%	10.8%	4.2%
Two	5.3%	12.4%	7.4%	13.9%	14.7%	4.3%	2.1%	57.7%	29.5%	9.3%	3.5%
Three +	4.3%	13.9%	10.4%	17.4%	16.9%	9.3%	1.8%	51.5%	31.2%	11.1%	6.2%
Missing	16.4%	13.1%	17.8%	24.8%	9.6%	12.6%	5.9%	41.8%	33.0%	12.7%	12.5%
Total Siblings											
None	15.0%	11.8%	10.0%	18.3%	11.9%	5.5%	6.1%	50.7%	29.7%	12.7%	6.9%
One	8.0%	11.0%	7.1%	14.7%	15.5%	5.6%	3.7%	55.4%	30.5%	9.4%	4.7%
Two	6.9%	13.8%	8.2%	14.5%	15.3%	6.7%	2.4%	54.1%	31.4%	9.6%	4.9%
Three +	6.9%	13.9%	11.2%	17.4%	18.4%	9.0%	2.1%	49.3%	31.2%	13.3%	6.2%
Missing	11.9%	11.1%	24.8%	24.2%	22.1%	14.6%	2.8%	36.8%	36.8%	11.4%	15.0%
Living Arrangements											
Live Alone	20.3%	14.6%	16.9%	26.1%	13.4%	12.5%	9.7%	36.7%	32.3%	17.9%	13.1%
Couple No Children	3.6%	10.2%	6.6%	12.4%	13.3%	3.2%	1.1%	61.5%	29.2%	7.4%	1.9%
Children and No Partner, Other Household	21.6%	21.9%	12.0%	22.9%	20.8%	17.2%	4.6%	35.3%	31.4%	18.1%	15.2%
Couple with Children	3.9%	12.2%	5.6%	11.5%	21.2%	5.1%	1.1%	55.3%	32.1%	9.9%	2.7%

Notes: Blue shaded cells indicate significant associations at the 5% level

3.3 Socioeconomic characteristics and the risk of social exclusion in 2008

Across many of the socioeconomic factors included in table 13, a consistent story emerges that those who possess characteristics that would be considered disadvantageous are also at higher risk of experiencing social exclusion across a number of domains. If social exclusion among older people is indicative of a process of losing independence, these results suggest that socioeconomic resources are an important factor in maintaining this independence.

In the case of highest qualification, we observe a generally linear pattern in the risk of exclusion across most domains, with those with degree level qualifications possessing the lowest risk of exclusion and those with no qualifications the highest risk – the exception being exclusion from decent housing and public transport, where those with NVQ Level 3 or equivalent qualifications have the highest risk of exclusion. In examining economic activity, those who were categorised as sick were much more likely than other groups to be classified as excluded across all domains – for example, almost half of those who were sick were excluded from local amenities (45.1%). In total, over 80 per cent of people who were sick were excluded on at least one domain (82.3%), and almost a quarter were excluded on three or more (24.2%). Income exhibited a similar linear association with exclusion as highest qualification, with those in the lowest quintile of equivilised household income at greatest risk of exclusion. This increased risk even extends to exclusion from social relationships, which could be considered a domain that is 'income neutral', where there is ostensibly little need for income to support these relationships; this increased risk appears to support the theoretical basis for relationships between material and non-material disadvantage.

Almost two-thirds of older people in the highest quintile of income were not excluded in any form compared to less than two-fifths of people in the lowest quintile (64.3% versus 38.7%). We also observed similar relationships in terms of car ownership, housing tenure, and the main source of income. In terms of the latter two factors, being in social housing or having benefits as the main source of income were particularly associated with a high risk of social exclusion with close to three quarters of people in these categories being excluded from at least one domain of social exclusion (73.5% and 77.2% respectively).

Table 13: Proportion excluded by socioeconomic characteristic in 2008 (weighted proportions). Total sample size (7,550), see table 11 for overall prevalence of characteristic in sample.

	Exclusion from social relationships	Exclusion from cultural activities	Exclusion from civic activities and access to information	Exclusion local amenities	Exclusion from decent housing and public transport	Exclusion from financial products	Exclusion from common consumer goods	Not excluded	Excluded from one domain	Excluded from two domains	Excluded from three or more domains
Highest Qualification											
Degree or Higher	6.9%	11.0%	2.8%	14.4%	17.8%	3.5%	1.9%	58.1%	29.6%	9.3%	3.0%
NVQ Level 4 or equivalent	6.9%	13.2%	4.2%	13.6%	13.7%	2.9%	1.5%	59.2%	28.3%	9.8%	2.7%
NVQ Level 3 or equivalent	9.0%	13.2%	6.7%	13.4%	19.7%	3.8%	1.7%	53.7%	31.6%	10.3%	4.4%
NVQ Level 2 or equivalent	6.0%	12.9%	6.9%	11.2%	13.9%	4.3%	2.4%	57.6%	31.0%	8.4%	3.0%
NVQ Level 1 or equivalent	8.9%	13.8%	9.3%	17.6%	11.7%	6.4%	4.4%	52.0%	31.2%	12.2%	4.6%
No qualifications	13.0%	12.4%	17.9%	22.5%	11.9%	12.8%	7.1%	43.4%	31.3%	14.7%	10.6%
Missing	8.3%	12.5%	8.6%	14.6%	20.4%	7.0%	2.0%	51.8%	31.5%	10.6%	6.1%
Economic Activity											
Retired	9.8%	10.5%	11.1%	18.5%	10.3%	6.8%	5.2%	53.6%	29.3%	10.9%	6.2%
Employed	6.2%	11.8%	5.3%	10.0%	19.4%	3.6%	1.3%	56.8%	31.6%	9.1%	2.5%
Self-employed	4.5%	9.8%	4.2%	9.7%	23.6%	3.0%	1.6%	56.9%	32.1%	9.0%	2.0%
Unemployed	17.8%	15.2%	8.9%	14.0%	22.7%	12.5%	4.1%	42.5%	35.3%	14.3%	7.9%
Sick	21.4%	31.2%	20.7%	45.1%	27.4%	25.3%	3.1%	17.7%	30.4%	27.7%	24.2%
Looking after Family	7.2%	18.5%	10.9%	14.7%	16.5%	10.2%	2.7%	46.5%	35.0%	12.1%	6.4%
Household Income Quintile											
Lowest Quintile	15.1%	17.5%	17.0%	21.6%	17.2%	17.2%	6.8%	38.7%	30.3%	18.3%	12.7%
2	9.0%	13.7%	11.9%	19.6%	13.0%	8.4%	4.4%	48.7%	32.1%	12.4%	6.8%
3	8.5%	14.1%	9.6%	17.9%	14.1%	4.5%	2.5%	51.9%	31.3%	11.6%	5.2%
4	7.0%	11.2%	5.4%	12.8%	18.1%	3.3%	2.1%	56.0%	32.6%	8.1%	3.3%
Highest Quintile	5.0%	7.0%	3.5%	10.0%	15.8%	1.9%	1.8%	64.3%	27.9%	6.5%	1.3%
Missing	15.7%	8.7%	4.3%	16.4%	11.5%	6.9%	3.2%	56.3%	29.0%	8.9%	5.8%
Housing Tenure											
Outright Ownership	7.2%	10.1%	7.6%	14.4%	11.8%	2.4%	2.5%	59.2%	29.6%	8.2%	3.0%
Own with a mortgage	5.5%	13.9%	5.7%	11.3%	20.5%	4.4%	0.9%	54.0%	33.5%	9.5%	3.0%
Social Rented	18.3%	18.4%	20.0%	29.0%	22.9%	25.1%	10.0%	26.5%	31.4%	24.4%	17.7%
Private Rented	17.5%	16.5%	12.5%	24.1%	17.3%	17.1%	7.2%	37.9%	31.6%	15.6%	14.9%
Use of Car											
No	22.4%	11.0%	20.3%	35.9%	14.3%	18.4%	12.5%	28.7%	31.1%	21.0%	19.2%
Yes	6.5%	11.7%	7.2%	12.7%	15.8%	4.8%	1.8%	56.6%	30.7%	9.1%	3.6%
Main Source of Income											
Assets/other	10.3%	7.9%	3.5%	12.9%	15.6%	3.7%	2.9%	58.5%	29.9%	8.7%	2.9%
Benefits	19.7%	28.8%	19.8%	33.7%	25.4%	27.2%	6.4%	22.8%	30.2%	24.5%	22.5%
State pension	11.5%	12.4%	15.3%	21.6%	10.0%	9.3%	6.1%	47.3%	30.8%	13.6%	8.3%
Private pension	6.6%	8.7%	3.8%	13.3%	12.8%	1.0%	2.1%	62.0%	29.9%	6.2%	1.9%
Self-employment	2.8%	8.3%	7.6%	6.5%	17.3%	4.1%	1.6%	61.6%	30.9%	5.6%	1.9%
Employment	5.8%	12.2%	5.6%	10.7%	19.7%	3.8%	1.5%	56.1%	31.5%	9.9%	2.5%

3.4 Health characteristics and the risk of social exclusion in 2008

As may be expected, those with poorer health were more likely to be socially excluded than those with better health (table 14). Conceptually, this may be expected, particularly if we return to the model of social exclusion being related to a loss of independence. The relationship between health factors and exclusion appears particularly strong for exclusion from local amenities, a domain representative of the ability of older people to independently traverse their local neighbourhood; for example, those who were in 'bad' health were five times more likely to be excluded on this domain than those who were in very good health (31.1% versus 6.1%), while those who undertook no regular exercise were four times more likely to be excluded from local amenities than those who undertook regular physical exercise (43.2% versus 9.9%). Mental health was also predictive over most domains of social exclusion, with only close to a third of those who were depressed not excluded in any form (34.3%) compared to over half of those who were not depressed (57.3%).

Unusually, care giving did statistically significant predict many domains, and those that did revealed a relationship exhibited an unexpected trend with those who undertook caring duties being at a lower risk of exclusion across many of the indicators. However, had the variable used reflected differences in the number of hours, the type of care, and the relationship between carer and dependent, different results may have been obtained. Later results from fixed-effects models also alter this picture.

Table 14: Proportion excluded by health characteristic in 2008 (weighted proportions). Total sample size (7,550), see table 11 for overall prevalence of characteristic in sample.

	Exclusion from social relationships	Exclusion from cultural activities	Exclusion from civic activities and access to information	Exclusion local amenities	Exclusion from decent housing and public transport	Exclusion from financial products	Exclusion from common consumer goods	Not excluded	Excluded from one domain	Excluded from two domains	Excluded from three or more domains
Self-rated Health											
Very Good	6.0%	7.5%	3.0%	6.1%	16.6%	2.0%	1.4%	66.2%	26.8%	5.6%	1.4%
Good	6.8%	9.6%	6.7%	10.2%	14.1%	3.5%	2.6%	59.6%	29.8%	8.5%	2.1%
Fair	7.6%	11.1%	8.0%	13.3%	13.3%	6.0%	3.0%	55.8%	30.8%	9.6%	3.8%
Bad	14.2%	19.7%	16.4%	31.1%	19.5%	13.9%	6.0%	33.5%	33.6%	18.8%	14.1%
Fallen in past year											
Not Fallen	8.7%	10.2%	9.3%	15.1%	10.2%	5.6%	3.8%	56.4%	29.7%	9.8%	4.1%
Fallen	11.5%	14.4%	14.1%	26.6%	11.6%	9.4%	7.1%	46.1%	28.7%	14.2%	11.0%
Not Asked	8.0%	14.6%	6.9%	12.9%	24.0%	7.2%	1.4%	50.1%	33.1%	11.5%	5.3%
Physical Exercise											
Regular Vigorous Physical Exercise	6.2%	9.5%	5.8%	9.9%	17.5%	3.1%	1.7%	59.9%	29.7%	8.0%	2.4%
Regular Moderate Physical Exercise	8.4%	12.5%	7.9%	12.6%	15.1%	5.6%	2.7%	55.1%	30.6%	10.3%	4.0%
Some Moderate Physical Exercise	11.9%	15.6%	14.2%	26.1%	15.4%	11.8%	5.3%	40.4%	33.4%	15.9%	10.3%
No Physical Exercise	16.1%	18.2%	20.3%	43.2%	11.1%	19.0%	11.2%	30.7%	30.4%	19.1%	19.8%
Depressed											
Not Depressed	7.2%	9.9%	7.0%	12.4%	14.8%	5.1%	2.8%	57.3%	30.4%	9.1%	3.2%
Depressed	15.0%	22.0%	17.0%	30.2%	18.3%	13.2%	6.0%	34.3%	32.1%	18.8%	14.8%
Care Giver											
Not a care giver	9.3%	12.3%	9.6%	16.7%	15.0%	7.0%	3.7%	52.0%	30.9%	11.2%	5.9%
Gives Care	6.1%	13.9%	6.5%	13.3%	19.6%	5.9%	1.5%	54.2%	30.1%	10.9%	4.8%

3.4 Who was at risk of social exclusion in 2008?: Results from Multivariate Models

Earlier sections of this chapter have revealed a number of groups that could be at higher risk of social exclusion, including older people, materially disadvantaged people, people living alone, and people in poorer health. A number of these characteristics are known to confound one another – for example older people are also often those with poor health due to their increased risk of developing non-communicable diseases. Examining the effects of health or age, for example, while controlling for other characteristics, necessitates the construction of multivariate regression model, and in the remainder of this chapter we describe the results from a regression model that examines the association between exclusion status in 2008 and contemporaneous characteristics in 2008. In table 15, we present the results from binary logistic models (for single domains of social exclusion) and ordinal logistic regression models (for analysis of overall exclusion) as odds ratios.

3.4.1 Results from Multivariate models: Demographic Factors

Age, ethnicity, living arrangements, and the total number of children a respondent reported were all significant predictors of overall exclusion, while the number of siblings and gender were not significant predictors of overall exclusion although were of individual domains. Relative to the 50-59 year age group, those aged 60-79 years were significantly less likely to be classified as being excluded on an additional domain (with the highest category coded as three or more domains of exclusion). For example, those who were aged 70-74 years were approximately 40% less likely than those aged 50-54 years to report any form of exclusion compared to not being excluded, and were similarly 40% less likely to report being excluded on two or three domains than being excluded on one or no domains of exclusion (and so on). Older age was predictive of a lower risk exclusion from decent housing and public transport and marginally predictive of a lower risk of exclusion from financial products once other factors had been accounted for. However, being aged 85+ was associated with a 92 per cent increase in the odds of being excluded from social relationships (OR: 1.921), and over two-fold rise in the odds of being excluded from local amenities (OR: 2.686). Older women were around half as likely to be excluded from social relationships and common consumer goods (OR: 0.434 and OR: 0.503 respectively), although were more likely to be excluded from cultural activities (OR: 1.437).

Non-white older people were over three times as likely to be excluded from financial products as white older people, and the relationship changed little between sweeps (OR: 3.16 in 2008). Non-white people were also around twice as likely to be excluded from social relationships (OR: 2.150) and civic activities and access to information (OR: 1.958). Consequently, non-white older people were also around 50% more likely to report a more severe category of exclusion when examining overall exclusion (OR: 1.508). That ethnicity was statistically significantly associated with exclusion is surprising given that few non-white older people are included in the ELSA study and that our measure of ethnicity is a crude one that ignores differences between ethnic groups. These results also appear to show ethnicity as a relatively important predictor of exclusion in cross-sectional analyses, which was not the case in earlier work by Barnes et al (2006). Nevertheless, the observed findings of non-white people being at greater risk of financial exclusion chimes with the literature on financial exclusion more widely (see, for example, Devlin 2005; Devlin 2009).

The number of siblings and number of children reported were both significant predictors of exclusion from social relationships – those who reported having either children or siblings were significantly less likely to report exclusion on this domain. Having children also lowered the odds of exclusion from common consumer goods, with a linear relationship observed between a higher number of children and lower risk of exclusion on this domain (table 15). However, the results also suggested that those with more children, relative to childless people, were more likely to be excluded from cultural activities and financial products; the mechanism underlying these latter trends is worthy of further investigation beyond the scope of this report.

As was described in table 12, living alone was a risk factor for social exclusion, and many of the associations described earlier remained, even after controlling for other factors. Living alone appeared to be a significant barrier to participation in social relationships, civic activities and access to information, local amenities, and financial products – those living with a partner and no children enjoyed lower levels of exclusion on these domains, as much as 70% lower in the case of

social relationships (OR: 0.308). For the most part, there was little difference in the magnitude of the coefficients for those living alone compared to those living in households with children with no partner or those living with no partner in another form of household; the exception to this was exclusion from social relationships, where those in the latter form of household were around twice as likely as those living alone to be excluded (OR: 2.057).

	Exclusion from Social Relationships	Exclusion from Civic Activities and Access to Information	Exclusion from Cultural Activities	Exclusion from Local Amenities	Exclusion from Decent Housing and Public Transport	Exclusion from Financial Products	Exclusion from Common Consumer Goods	Overall Exclusion
Exclusion from Social Relationships		1.736***	1.455*	0.846	1.075	1.102	2.749***	
Exclusion from Civic Activities	1.825***		0.862	1.630***	1.165	1.173	1.113	
Exclusion from Cultural Activities	1.542**	0.907		1.397**	1.297*	1.419*	0.590	
Exclusion from Local Amenities	0.853	1.620***	1.390**		1.346**	1.353*	1.057	
Exclusion from Decent Housing and Public Transport	1.073	1.195	1.288*	1.340**		1.301	1.014	
Exclusion from Financial Products	1.182	1.155	1.389*	1.304	1.281		2.339**	
Exclusion from Common Consumer Goods	2.576***	1.062	0.631	1.102	0.845	2.372***		
Age Group (Base 50-54)								
55-59	1.135	0.860	0.718*	0.928	1.070	0.762	0.878	0.915
60-64	1.079	0.885	0.758	0.999	0.530***	0.637	1.775	0.680***
65-69	1.488	0.946	0.708	0.989	0.469***	0.606	1.378	0.669***
70-74	1.012	0.924	0.691	1.155	0.405***	0.552	2.219	0.631***
75-79	1.367	0.769	0.816	1.063	0.291***	0.375**	2.645	0.570***
80-84	1.528	0.751	0.590	2.240***	0.212***	0.440	4.568**	0.852
85+	1.921*	0.881	0.685	2.686***	0.137***	0.455	8.678***	1.251
Gender (Base: Male)								
Female	0.434***	1.301*	1.437***	0.903	0.835*	1.126	0.503***	0.912
Ethnicity (Base: White)								
Non-white	2.150*	1.958*	1.338	0.776	0.784	3.162***	0.415	1.476*
Living Arrangements (Base: Live Alone)								
Couple, no children	0.308***	0.652**	0.908	0.789*	0.998	0.612**	0.382***	0.597***
Children, no partner/ other	2.057***	0.674*	1.232	1.121	1.128	1.290	0.652	1.218
Couple with children	0.556**	0.592**	0.842	0.871	1.111	0.709	0.697	0.727***
Number of Children (Base: None)								
One	0.207***	1.265	1.182	0.791	1.071	1.210	0.760	0.596***
Two	0.168***	1.232	1.460*	0.886	0.975	1.026	0.423***	0.578***
Three or more	0.124***	1.447	1.460*	0.981	1.131	1.778*	0.307***	0.653***
Number of Siblings (Base: None)								
One	0.528***	0.827	0.905	1.024	1.089	1.170	1.157	0.883
Two	0.395***	0.883	1.119	0.955	0.918	1.107	0.847	0.828*
Three	0.424***	1.042	1.009	1.241	1.100	0.976	0.808	0.947
Four or more	0.307***	1.122	0.907	1.075	1.019	1.273	0.699	0.865
Highest Qualification (Base: Degree/ Higher)								
NVQ Level 4	1.157	1.613	1.268	0.934	0.681*	0.880	0.832	0.951
NVQ Level 3	1.519*	2.435***	1.077	0.865	1.044	1.122	0.746	1.174
NVQ Level 2	0.852	2.171***	0.941	0.592***	0.733*	0.963	0.994	0.803*
NVQ Level 1	1.132	2.673***	0.998	0.826	0.683**	1.146	1.306	0.968

No Qualifications	1.240	4.220***	0.716*	0.730*	0.666**	1.588	1.226	1.054
Economic Activity (Base: Retired)								
Employed	1.444	0.813	1.225	1.089	1.112	0.636	0.559	1.074
Self-employed	0.798	0.635	1.239	1.354	1.705**	0.558	0.828	1.300*
Unemployed	1.811	1.008	1.253	1.071	1.103	1.135	0.793	1.253
Sick	1.759*	1.045	1.626*	2.329***	0.995	1.100	0.271*	1.993***
Looking After Family	1.390	0.944	1.516*	1.037	1.136	1.182	0.953	1.355**
Self-rated Health (Base: Very Good)								
Good	1.009	1.902**	1.237	1.464*	0.950	1.585	1.209	1.267**
Fair	0.976	1.757*	1.312	1.675**	1.003	2.071*	1.236	1.355***
Poor	1.248	2.167***	1.750***	2.810***	1.536**	2.171*	1.366	2.295***
Fallen in past year (Base: Not Fallen)								
Fallen	0.976	1.125	1.183	1.331**	1.128	1.186	1.223	1.278***
Not Asked[$]								1
Physical Exercise (Base: Regular Vigorous Exercise)								
Regular Moderate Exercise	1.107	0.900	1.136	0.940	0.867	1.208	1.008	0.972
Some Moderate Exercise	0.964	0.978	1.032	1.389**	0.855	1.448	1.222	1.110
No Exercise	0.909	1.155	1.126	2.246***	0.551**	1.875*	1.437	1.412**
Depression (Base: Not Depressed)								
Depressed	1.430**	1.390**	1.591***	1.467***	1.011	0.930	1.383	1.516***
Care Giver (Base: Not a Care Giver)								
Care Giver	0.901	0.868	1.082	1.029	1.228*	1.021	0.942	1.085
Household Income Quintile (Base: Lowest)								
2	0.843	0.789	0.875	1.102	0.873	0.642**	0.925	0.765**
3	1.127	0.819	0.928	1.322*	0.916	0.464***	0.561*	0.860
4	1.093	0.662*	0.734*	1.189	1.160	0.486**	0.710	0.846
Highest Income	1.041	0.577*	0.472***	1.166	0.892	0.379***	0.824	0.675***
Housing Tenure (Base: Outright Ownership)								
Own with a Mortgage	1.062	0.862	1.286*	0.938	1.188	1.659*	0.708	1.181*
Social Rented	1.080	1.063	1.031	0.916	2.112***	4.140***	1.673*	1.967***
Private Rented	1.713	1.040	1.157	1.323	1.323	4.683***	2.054*	1.986***
Use of Car (Base: No)								
Yes	0.625***	0.918	0.971	0.507***	1.076	0.793	0.501***	0.565***
Main Source of Income (Base: Assets/ Other)								
Benefits	1.017	2.004*	2.044**	0.954	1.090	1.596	0.874	1.551**
State Pension	0.891	2.030*	1.401	0.953	1.239	1.095	0.473	1.218
Private Pension	0.691	1.085	1.361	0.918	1.191	0.377*	0.570	1.013
Self-employment	0.407*	3.907***	1.238	0.543*	0.739	2.368	1.747	0.927
Employment	0.584	2.293*	1.500	0.914	0.968	1.280	1.836	1.091
N	7550	7550	7550	7550	7550	7550	7550	7550

Exponentiated coefficients; 95% confidence intervals in brackets
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ [$]Not entered in model as collinear with (young) age

Table 15: Exponentiated coefficients (Odds Ratios) from binary logistic and ordinal logistic (overall exclusion) models based on weighted estimates.

3.4.2 Results from Multivariate models: Socioeconomic Factors

Education appeared to be a key facilitator of participation in civic activities and accessing information, with those with no qualifications over four times as likely to be excluded on this domain (OR: 4.220). However, having higher qualifications was not protective against exclusion across all domains. In fact higher education exhibited the opposite trend in terms of exclusion from cultural activities, exclusion from local amenities, and exclusion from decent housing and public transport, with those with no qualifications at a significantly lower risk of exclusion from these domains than those with degree level qualifications (OR: 0.716; OR: 0.730; OR: 0.666 respectively).

Income exhibited a more consistent trend, and being in the highest income quintile was associated with significantly lower odds of experiencing exclusion from civic activities and access to information, cultural activities, and common consumer goods. Overall, relative to those in the lowest equivilised household income quintile, those in the highest income quintile were almost 33 per cent less likely to report a more severe category of exclusion (OR: 0.675). As was described earlier in table 13, those whose economic activity was hindered by sickness were at particular risk of exclusion across a number of domains. Relative to retired people, those who were unable to work because of ill health were significantly more likely to be excluded from social relationships, cultural activities, local amenities and were overall twice as likely to report a more severe category of exclusion (OR: 1.993). However, those who did not work because of sickness did enjoy an advantage through a lower risk of exclusion from common consumer goods than retired people (OR: 0.271).

Housing tenure, car ownership and the main source of income were also statistically significant predictors of exclusion (see table 15). For example, relative to those who reported outright ownerships, those in social housing were almost seventy per cent more likely to be excluded form common consumer goods (OR: 1.673), were twice as likely to be excluded from decent housing and public transport (OR: 2.112), and over four times as likely to be excluded from financial products (OR: 4.140); similar results were also obtained for private rented housing.

3.4.3 Results from Multivariate models: Health Factors

Relative to those who rated their health as ‘very good’, those who rated their health as ‘poor’ were statistically significantly more likely to be classified as excluded across five of the seven domains, and consequently those in ‘bad’ health were over twice as likely to be classed in a more severe category of overall social exclusion (OR: 2.295). As was observed in table 14, being a care giver was, for the most part, insignificant in terms of predicting social exclusion, while having experienced a fall in the previous year was associated only with a rise in the odds of being excluded from local amenities (OR: 1.331). Poor mental health, and specifically depression, was associated with a statistically significantly increased risk of exclusion across four of the seven domains of social exclusion under examination (social relationships, civic activities and access to information, cultural activities and local amenities), and a 52 per cent rise in the overall risk of being classified in a more severe category of exclusion (OR: 1.516). Other results for the effect of physical exercise on the risk of exclusion can be observed in table 15.

3.4.3 Results from Multivariate models: Interrelationships between domains of social exclusion

All statistically significant associations between the different domains of social exclusion exhibited positive relationships, with exclusion in one domain predicting exclusion in another. These significant relationships are summarised in table 16 by the magnitude of the odds ratio of the relationships. From tables 15 and 16, we can observe that the strongest association is between exclusion from social relationships and exclusion from common consumer goods – relative to not being excluded, being excluded from either domain raised the odds of exclusion in the other by over 2.5 times. Similar associations were observed between a number of domains, even after controlling for a number of other factors, reinforcing the theory that social exclusion is a multifaceted concept, and the theory of the interdependence between material and non-material deprivation. Of interest is the finding that it was exclusion from cultural activities which was statistically significantly associated with the highest number of other domains of social exclusion (4). From a policy-making perspective, these results suggest that interventions to reduce the level of exclusion in any one single domain may not be entirely successful without addressing the interrelationships between different domains of social exclusion.

Table 16: Summary of significant associations between domains of social exclusion (see table 15 for odds ratios).

Common Consumer Goods	⇦⇨	Social Relationships
Common Consumer Goods	⇦⇨	Financial Products
Civic Activities and Access to Information	⇦⇨	Social Relationships
Civic Activities and Access to Information	⇦⇨	Local Amenities
Social Relationships	⇦⇨	Cultural Activities
Cultural Activities	⇦⇨	Financial Products
Cultural Activities	⇦⇨	Local Amenities
Cultural Activities	⇦⇨	Decent Housing and Public Transport
Decent Housing and Public Transport	⇦⇨	Local Amenities

3.5 Who is at risk of being socially excluded in 2008?

The results in this chapter give a snapshot of the characteristics of those who were socially excluded in 2008. Based on these results, if we were to select a representative population aged 50 and above, using a single summary measure of social exclusion we would expect people with the following characteristics to be more excluded than others:

- Older
- Non-white
- Lived Alone/Lived with Children and No Partner/Lived without Partner
- Childless
- Off work sick
- Poor self-rated health
- No regular uptake of physical exercise
- Depressed
- Experienced a fall
- Poor: in the lowest quintile of equivilised household income
- Living in rented housing
- No car
- Living on benefits as the main source of income

It is also perhaps no coincidence that the these characteristics listed above are also those associated as risk factors for a loss of independence among older people, being representative of people with poorer health, lower peer support, people who face discrimination, people who are dependent on the state for income or who are on low incomes. Nevertheless, different domains of social exclusion each had a different set of predictors, which are outlined more fully in this chapter. However, these results give a snapshot at one point in time and do not allow us to speculate on how social exclusion status changes within individuals and the way that these characteristics influence social exclusion status across time. To investigate this, we undertake longitudinal analysis, which we present in the next chapter.

Chapter 4: How does exclusion status change over time among individuals?

KEY MESSAGES

How does exclusion status change over time among individuals?

- People were more likely to become more socially excluded that less socially excluded over time between 2002 and 2008. This differed substantially by age group and individual domain of social exclusion.
- Overall, people who were older in 2002 were much more likely than those who were younger to become more excluded than less excluded across most domains of social exclusion.
- Greater numbers of people became more excluded than less excluded in terms of local amenities and exclusion from decent housing and public transport.
- Approximately half of people excluded from social relationships, local amenities, and civic activities and access to information in 2002 remained excluded in 2008.
- When we examined characteristics measured in 2002 and their associations with social exclusion status in 2008, we found that people who had the following characteristics were had a higher risk of reporting a more severe category of overall disadvantage than their counterfactual:
- *Experienced disadvantage in 2002*
- *Older*
- *Lived Alone*
- *Poor self-rated health*
- *Depressed*
- *Poor: in the lowest quintile of equivilised household income*
- *Living in rented housing*
- *No car*

- However, when we examined changes in characteristics between 2002 and 2008, we found that people who assumed caring responsibilities, who started to live alone, who became too sick to work, who developed poorer self-rated health, people who became depressed, and people who took up less exercise were more likely to become multiply disadvantaged. We therefore emphasise the importance of the relationship between physical and mental health on the one hand, and the subsequent effects on social exclusion.

4. How does exclusion status change over time among individuals?

4.1 How does exclusion status change over time among individuals? Introduction

In this chapter, we present analyses of how individuals' experience of social exclusion changed between 2002 and 2008. As discussed earlier, the social exclusion agenda has recently fallen to the policy wayside somewhat, a reflection of recent focus on more material deprivation as opposed to a more holistic assessment of the factors that shape an individual's experiences and wellbeing. In this chapter we explore how individuals' experience of social exclusion changed between 2002 and 2008.

In conducting the analysis in this chapter, we encounter age, cohort, and period effects (see for example Bynner & Joshi 2007). We do not attempt to disentangle these effects in a statistical way in this chapter, and acknowledge that many of the changes occurring may be driven by a combination of all three effects, particularly given the relatively short period between sweeps of information gathering. Longitudinal differences may be representative of all three effects, and while in the narrative of this chapter we refer to these differences as age effects, we acknowledge that these differences may occur because of growing older, belonging to a different cohort of people, or because of social change between sweeps. This chapter is guided by the following questions:

1. How did individuals' social exclusion status change between 2002 and 2008?
2. How did individuals' characteristics in 2002 shape their experience of social exclusion in 2008?
3. How did changes in individuals' characteristics between 2002 and 2008 shape their experience of social exclusion in 2008?

To address these questions we use three different approaches; to address the first question we use descriptive methods; to address the second question we use regression techniques similar to those presented at the end of chapter 3; to address the final question, we employed a fixed effects framework, described in section 2.13.

4.2 How did exclusion status change between 2002 and 2008 among individuals? (summary)

Overall, among the 4,095 included in our sample[13], we find that 24.0 per cent experienced an increase in the number of domains from which they were excluded compared to 19.0 per cent who experienced a decrease in the number of domains from which they were excluded. On aggregate therefore, a greater number of people became more excluded than less excluded as they aged in the six years between 2002 and 2008; 38 per cent of the sample were excluded on at least one domain in 2002 compared to 43 per cent in 2008. Patterns of overall exclusion status differed significantly by the age of the respondent in 2002. Among those who were aged 50-59 years in 2002, there were approximately equal numbers of people becoming less excluded as there were people becoming more excluded (20.5% and 22.1% respectively). With each older age group, the

[13] Our sample includes older people present at both the 2002 and 2008 sweeps.

differential between the number becoming more and less excluded increased, so that among those aged 80 and above in 2002, over a third became more excluded overall between 2002 and 2008 (34.8%) compared to a fifth who became less excluded (19.3%).

The ways individuals experienced social exclusion over time also differed by individual social exclusion domain. There were two domains of social exclusion that appeared particularly susceptible to change among individuals between 2002 and 2008 - exclusion from local amenities and exclusion from common consumer goods. A substantially greater proportion of people moved from being not excluded to being excluded from local amenities between 2002 and 2008, than moved from being excluded to being not excluded (11.8% compared to 3.4%); in terms of exclusion from common consumer goods the opposite trend was observed with greater numbers moving from being excluded to not (4.0%) than moving from not excluded to being excluded (1.2%). In addition, although there were more moderate differences in the numbers becoming excluded versus not excluded over time for many of the individual domains of social exclusion, differences did occur when disaggregating by age group. Furthermore, examining such changes does not necessarily illuminate the degree to which exclusion is persistent among individuals between 2002 and 2008; we provide some indication of this in figure 17 which shows the proportion excluded from a given domain in 2008 by exclusion status from the same domain in 2002. For example, figure 17 shows that over half (51.6%) of those excluded from social relationships in 2002 remained excluded in 2008 suggesting that exclusion from this domain is relatively persistent over time.

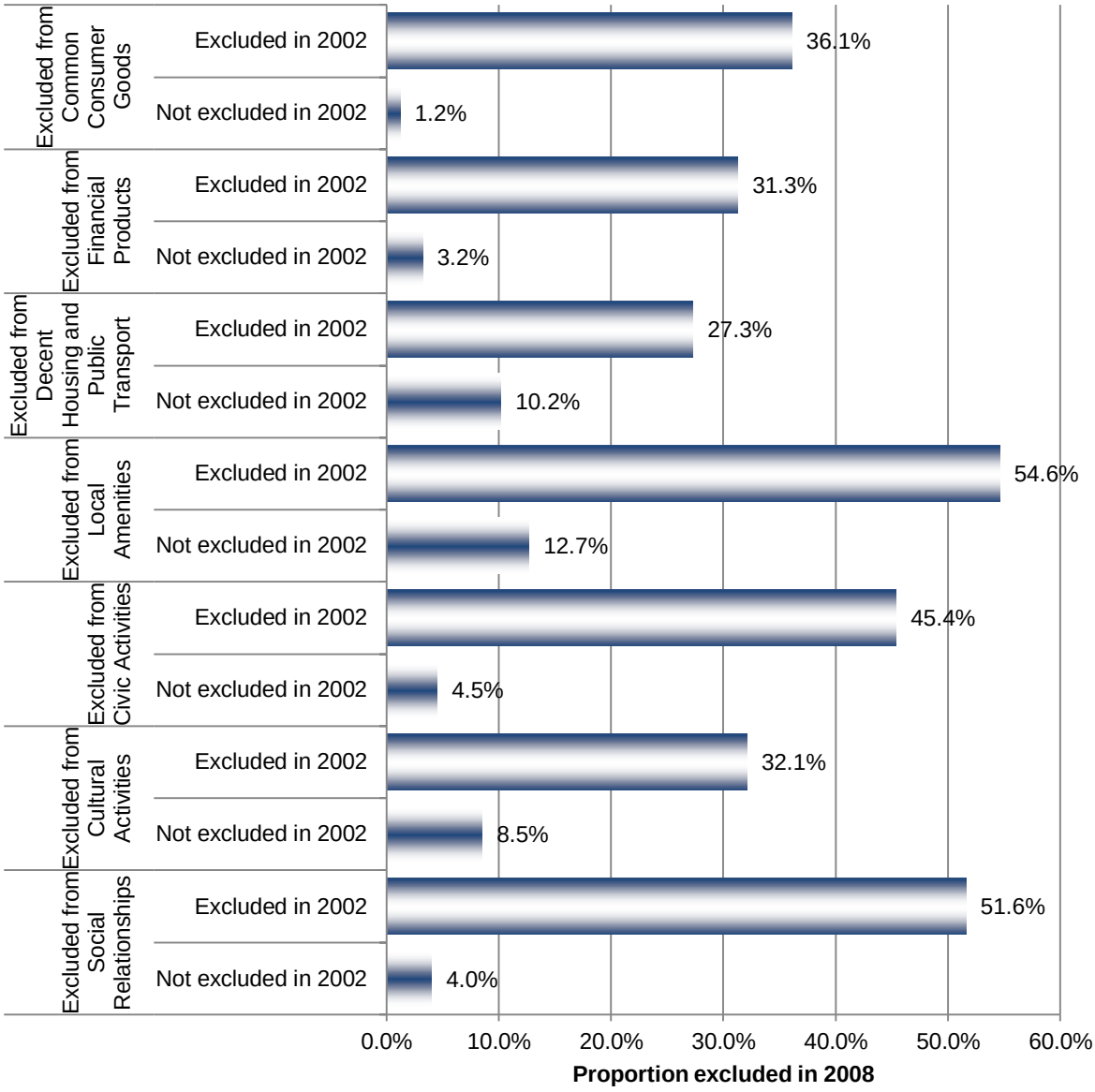


Figure 17: Proportion excluded in 2008 by exclusion status on same domain in 2002. Unweighted sample size: 4,095.

4.2.1 Exclusion from social relationships

As described earlier in chapter 2, exclusion from social relationships includes examining relationships with friends, partners, children, and other family members. Of any age group, respondents aged 80 years and above in 2002 were most likely to experience transitions into the excluded category and were also the most likely to remain excluded from social relationships at 2002 and 2008. Those in the youngest age groups (pre-retirement and newly retired ages) are slightly more likely to experience improvement in their social relationships than to experience a decline. This could suggest that for many, retirement brings new opportunities to expand one's social networks.

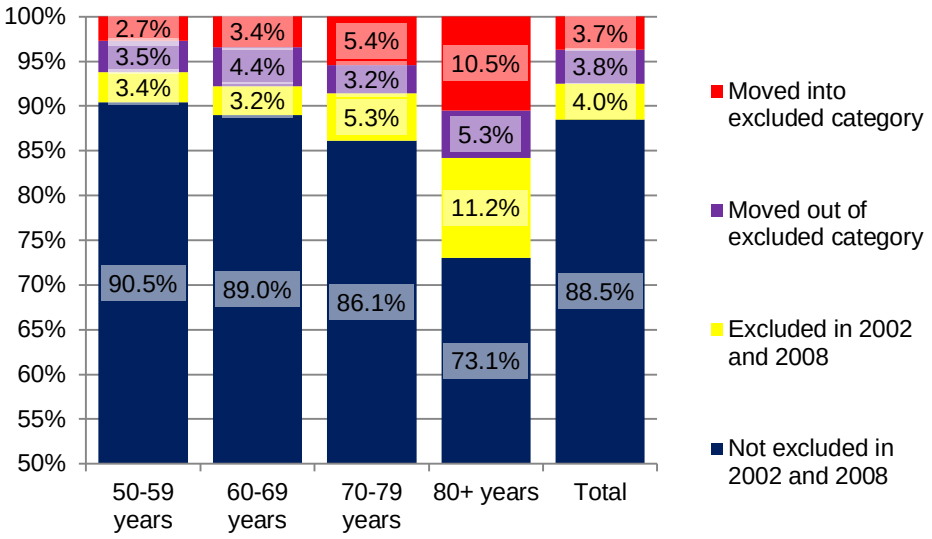


Figure 18: Exclusion from Social Relationships – Longitudinal changes by age group. Total sample size 4,095. Weighted by longitudinal study weights.

Partnership status was a key driver in explaining exclusion from social relationships. Those without a partner in both sweeps were most likely to be excluded from social relationships at both points (12.9%, compared to 4% of the overall sample who were excluded from social relationships at both points), while those who lost a partner were highly likely to transition to be excluded from social relationships (9.2%, compared to 4% of the overall sample who became excluded from social relationships between 2002 and 2008). Furthermore, commencing new partnerships, was a relatively rare event, with approximately one per cent of all respondents (five per cent of respondents who were unpartnered at wave 1) beginning new relationships; this compared to six per cent of respondents whose partnership ended (through death or separation) over the same period. Older age groups (those aged 75+ in 2002) were much less likely to report a partner at both sweeps than younger respondents.

The presence of children was also an important explanatory component in dictating whether or not respondents were classed as being socially excluded on the basis of social relationships. Those with children were less likely than those without children to be classed as excluded from social relationships both at 2002 and 2008. However, unlike the presence of a partner, reports of the existence of children did not vary significantly by respondents' age.

Given that partnership status and the presence of children are both relatively static factors between sweeps, it could be assumed that changes in the relationship with friends and immediate family (excluding children) are key drivers in dictating transitions into and out of exclusion from social relationships with age. When we examine the impact of respondents reporting the loss of relationships with immediate family (not children) or friends between 2002 and 2008, we find that 14% and 24% of respondents who reported these losses respectively became excluded on the basis of social relationships. Similarly, when we examine changes in the number of children, immediate family (not children), and friends, that respondents report that they are close to, among those who transitioned into being excluded on social relationships, 53%, 58% and 67%

respectively reported a lower number of close relationships[14]. This could ostensibly suggest that the impact of losing friends is a key driver of exclusion from social relationships, and may highlight the importance of keeping resources and spaces that promote friendships and social relationships between older people in avoiding social exclusion.

The alternative way of examining patterns of exclusion of social relationships is to explicitly assess the degree to which individuals who were excluded in 2002 remain excluded in 2008. We previously observed in Figure 17 that over half of people aged 50 and over excluded in 2002 remained excluded in 2008 (51.6%); of those aged 65 and over this climbed to 55.5%. Previously, we observed some of the risk factors for exclusion from social relationships in 2008 included being depressed and living alone – these were also markers for being persistently excluded from social relationships, with over three fifths of those who were depressed and excluded in 2002 remaining excluded in 2008 (60.1%), and a similar level of those who lived alone (64.1%). However, we also observed that older men were at greater risk of exclusion from social relationships in 2008 than older women, although when we examine the persistence of being excluded from social relationships, a higher proportion of older women who were excluded from social relationships in 2002 remained excluded in 2008 (61.9%) than older men (45.4%). Nevertheless, a greater proportion of older men than older women were excluded from social relationships at both 2002 and 2008 (5% versus 3%), and older men were more likely to experience this form of exclusion at some point in their lives. Overall, the level of persistence of exclusion from social relationships was higher than was the case for the majority of other domains of social exclusion.

While this index of exclusion from social relationships includes a number of indicators of a variety of social relationships, it should also be recognised that not all of these have been open to all older people. LGBT people, for example, will be disproportionately represented as socially excluded due to life course experiences that traditionally did not involve family building or cohabiting partnerships (see Potter et al 2011); other single or childless people will also be disproportionately classified as socially excluded, although may have healthy social relationships. Furthermore, older people with one close and stable social relationship could be defined as excluded, although may not feel excluded from social relationships in themselves. While it is tempting to construct an index of exclusion from social relationships that does not include partnerships or children as an alternative, this is also an unsatisfactory resolution as it negates the importance of these relationships. Nevertheless, what this analysis does indicate is that for many of those who do experience any form of transition in exclusion status from social relationships, changes in friendships are a key driver of these changes. As people age, for the younger age groups (50-69), these changes are more likely to represent gaining friends than losing friends, although for the oldest age group these changes are more likely to be negative.

4.2.2 Exclusion from cultural activities

When we adopt a longitudinal approach to the analyses, we find that 81.8% of respondents were not excluded at either 2002 or 2008, while 3.4% were excluded at both points; the remainder transitioned in and out of the excluded category in roughly equal numbers (7.2% of respondents

[14] Among those who reported these relationships in 2002.

moved out of the excluded category while 7.6% moved into the excluded category). Transitions in and out of exclusion on the basis of cultural activities were not statistically significantly patterned by age group.

We also explore the persistence of being excluded from cultural activities, showing earlier in Figure 17 that just under a third of people excluded from cultural activities in 2002 remained excluded in 2008 (32.1%). This proportion was higher among those who appeared at elevated risk of exclusion in earlier cross-sectional analyses (Chapter 3) - at 43.6% among those who classified their health as poor in 2002; it was also marginally higher among women (35.3%), although the difference was negligible for those in the lowest income group (32.5%).

4.2.3 Exclusion from civic activities and access to information

When we examine longitudinal movements, we see that exclusion status did not change for over nine out of ten of the cohort, with almost 89 per cent not excluded at both points and 3 per cent being excluded at both points. A slightly higher proportion transitioned into the excluded category than transitioned out by 2008. The oldest group were particularly at risk of moving into the excluded category, confirming earlier trends, with 9 per cent of those aged 80 and older in 2002 becoming excluded on this dimension by 2008, compared with only 3 per cent who moved out of the excluded category. This suggests that not only are people in the oldest age group slightly more likely to be excluded initially, but they are also more likely than younger age groups to become excluded from civic activities and access to information with age. Conversely, for those in the youngest age group (50-59 years), greater numbers moved out of the excluded category than moved in (4.6% compared to 2.7%).

The results show that although exclusion from civic activities and access to information is relatively fixed, yet this is not the case for the oldest age groups, who are at particular risk of transitioning into an excluded category. Overall, compared to other domains of social exclusion, those who were excluded from civic activities and access to information in 2002 were highly likely to remain excluded in 2008 (45.4% of those excluded in 2002 remained so in 2008); among those aged 65 and over this rose to 55.9%. These descriptive analyses support concerns that people in the oldest age groups are those who are least likely (or able) to actively participate in initiatives associated with civic participation, such as the ‘big society’, as they age. In addition, the also suggest that once people become excluded from civic activities and access to information, they are highly likely to remain excluded.

4.2.4 Exclusion from local amenities

When we examine longitudinal patterns, we find that a substantially higher proportion (around three times higher) of the cohort transitioned into the excluded category than moved away from it in terms of exclusion from local amenities. The excluded category in this case represented those who reported difficulties in accessing two or more services. Higher levels of movement into the excluded category was observed across all age groups, although those in the oldest age group were most likely to report increased difficulties in accessing amenities leading them to become excluded from local amenities (35.5%) compared to those who became less excluded (18.8%).

Among the sample as a whole, there was a higher incidence of reporting difficulties in accessing shopping services (local shops, supermarket and shopping centre combined) and access to a hospital between 2002 and 2008. We also observed that those who were excluded in 2002 were also highly likely to remain excluded in 2008 – over half of those excluded from local amenities in 2002 remained excluded in 2008 (54.6%), rising to over three-fifths of those aged 65 and over in 2002 (61.5%). Therefore, not only were older people at a relatively high risk of becoming excluded from local amenities; once excluded they were highly likely to remain so. While this form of exclusion may reflect a loss of independence and worsening health to some extent, it may also be representative of other factors including neighbourhood change.

4.2.5 Exclusion from decent housing and public transport

Similar proportions of our longitudinal sample became more excluded as became less excluded over time overall, although differences occurred once we disaggregated the results by age group. Those aged 50-69 in 2002 were more likely to have moved into the excluded category than to have moved out (11.5% versus 9.9%), although for those aged 70 and above, the pattern switched; for example among those aged 80 and above in 2002, six per cent became less excluded and 1.5% per cent became more excluded. When we examine this further we find that this is due to the younger group primarily developing problems with transport and less so in terms of housing. This domain of social exclusion was most fluid, with just over a quarter of those who were excluded in 2002 remaining excluded in 2008 (27.5%).

4.2.6 Exclusion from financial products

Longitudinally, while exclusion from financial products was relatively stable between sweeps compared to other domains of exclusion, there still remained considerable movement between categories of exclusion. There were almost identical numbers moving into the excluded category as were moving out of the excluded category; however, those in the oldest age group were most likely to move into the excluded category (9.3% of those aged 80+), and the youngest age group the least likely to (2.1% of those aged 50-59). Exclusion from financial products was not especially persistent compared to other domains of social exclusion, with just over three-in-ten (31.3%) of those excluded from financial products in 2002 remaining so in 2008. However, the level of persistence was higher among those who were at risk of exclusion from financial products, with over two-fifths of those in social housing and excluded from financial products in 2002 remaining excluded by 2008 (40.3%).

There were surprising fluctuations in older people's usage of financial products; for example fifteen per cent of the sample did not report having a current account at both points, and 6% who reported a current account in 2002 no longer did so in 2008. While reporting errors may account for part of this effect, the results nevertheless show a surprising degree of instability in the use of financial products by older people. One of the most unstable financial products in terms of consistency of reports between sweeps was life insurance, with almost a third of the cohort either no longer reporting any life insurance (23%) or reporting that they had taken up life insurance (7%) between 2002 and 2008.

4.2.6 Exclusion from common consumer goods

We find that people of all age groups were more likely to move from being excluded to being not excluded in terms of exclusion from common consumer goods between 2002 and 2008. However, those in younger groups were much more likely to be not excluded at both points, while those in the oldest age group were the least likely to (figure 19). Over a third of people excluded from common consumer goods in 2002 remained so in 2008 (36.1%); this level of persistence rose slightly among men (39.8%) and older people who lived alone (42.3%) both of which were groups identified at risk of exclusion on this domain in earlier analyses (chapter 3).

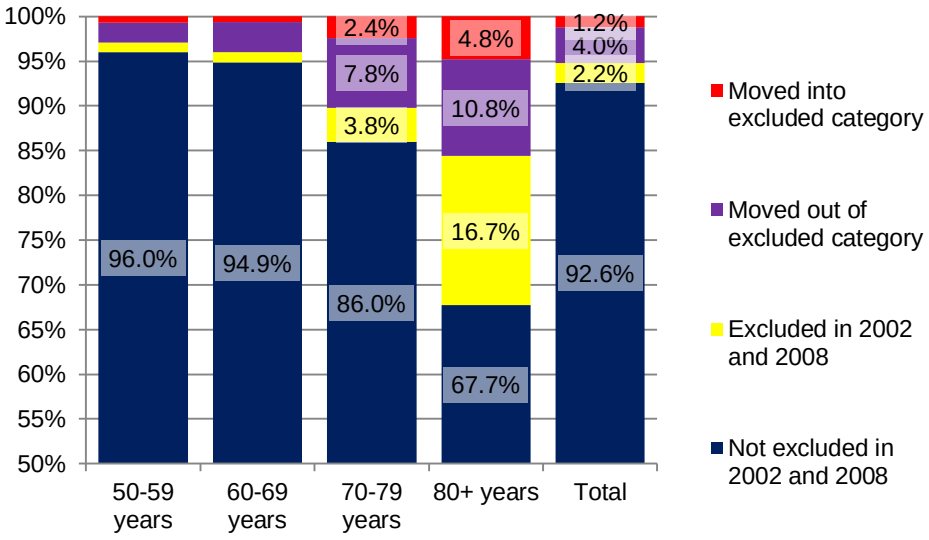


Figure 19: Exclusion from Common Consumer Goods – Longitudinal changes by age group. Total sample size 4,095. Weighted by longitudinal study weights.

4.2.7 Overall risk of exclusion

We find that people of all age groups were likely to become more excluded than less excluded over time. As with this individual domains of social exclusion, those who were older in 2002 were more likely to become more excluded between 2002 and 2008 than those who were younger. Less than one-in-five older people aged 80+ in 2002 were not excluded in any form between 2002 and 2008; this compared to over two-fifths of older people aged 50-59 years. Across all age groups, over a fifth became more excluded between 2002 and 2008. Overall, these results show that those in the oldest age groups were at a substantially higher risk of becoming more excluded over time (with age); however, earlier cross-sectional results also indicate that successive cohorts aged 80+ were also less excluded (in contrast to the 50-59 year cohort), with a 5% increase in the proportion not excluded in any form among those aged 80-84 years, and a 11% rise among those aged 85+. Therefore, despite the oldest old becoming less excluded among successive cohorts (essentially beginning from a more positive base), this age group appears to remain at higher risk than younger age groups of becoming more excluded over time.

If we alternatively examine the persistence of social exclusion through tracking those who were excluded in 2002, we find that almost two thirds of those who were excluded on at least one domain of exclusion in 2002 remained excluded in 2008 (64.3%), rising to almost seven-in-ten of

those aged 65 and over (69.2%). Should we examine the equivalent numbers for those who were excluded on two domains, we find that almost half (47.4%) of those excluded on two or more domains in 2002 remained excluded on two or more domains of social exclusion in 2008 (57% for those aged 65 and over). While these results do not signify that the exclusion was on the same domain across time, they do suggest that exclusion as a state is relatively 'sticky' – older people who experience difficulties in one aspect of their lives are vulnerable to experiencing future difficulties, either in terms of the same aspect or another. Put another way, once people begin to lose an enabler of independence in one part of their lives, this can signify a similar loss in the future.

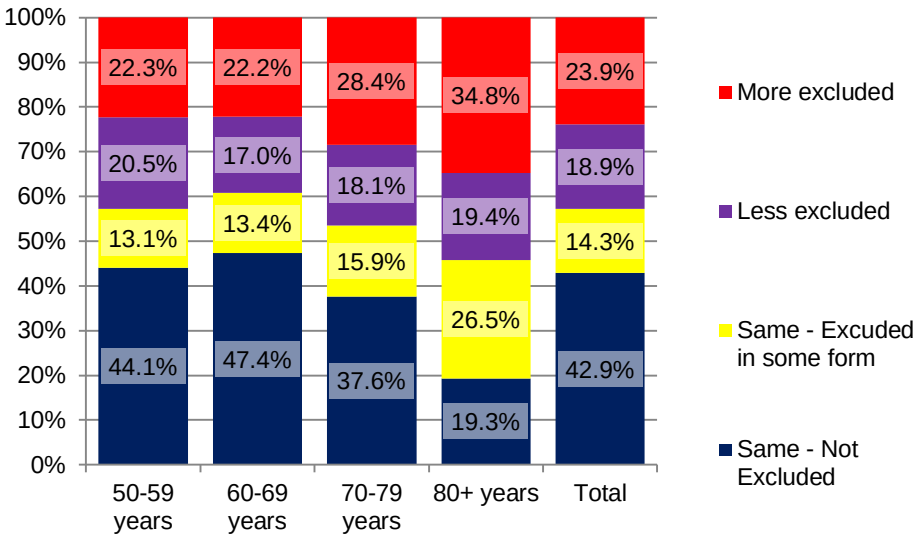


Figure 20: Overall levels of exclusion – Longitudinal changes by age group. Total sample size 4,095. Weighted by longitudinal study weights.

4.3 How did individuals' characteristics in 2002 influence their social exclusion patterns in 2008?

Earlier in this report we presented results from a regression model that included exclusion status in 2008 with contemporaneous characteristics also measured in 2008 (table 15). These results presented a snapshot of which characteristics were associated with exclusion at a given point in time; for example we observed that older people with no qualifications were over four times as likely to be excluded from civic activities and access to information as older people with degree level qualifications. However, these results do not necessarily show how these characteristics can shape future experiences of social exclusion within individuals. To do this, we construct a model that uses older peoples' characteristics in 2002 and examine their associations with exclusion status in 2008, the results of which are presented in table 17.

4.3.1 How did individuals' previous experience of social exclusion in 2002 influence their social exclusion patterns in 2008?

Table 17 highlights the way in which exclusion from consumer goods in 2002 most strongly predicted exclusion from the same domain in 2008 (OR: ~19), followed by the same trend for exclusion from civic activities (OR ~14) and exclusion from social relationships (OR: ~12); this suggests that individuals who were excluded on these domains in 2002 were most likely to remain so in 2008. Exclusion from financial products in 2002 was associated with an elevated odds of exclusion from cultural activities in 2008 (OR: 1.784); in turn exclusion from social relationships in 2002 was associated with an increased likelihood of exclusion from financial products in 2008 (OR: 2.512) as well as exclusion from common consumer goods (2.692). People who were excluded from local amenities in 2002 were also more likely to be excluded from common consumer goods in 2008 (OR: 2.348), although exclusion from common consumer goods was actually associated with a decreased risk of exclusion from decent housing and public transport (OR: 0.536), the only instance where exclusion on one domain was associated with a significantly reduced likelihood of exclusion in another. Finally, older people who were excluded from civic activities and access to information in 2002 were twice as likely to be excluded from social relationships in 2008 (OR: 1.988). While relatively complex and disparate (figure 21), these results clearly demonstrate the interrelationships between material and non-material domains of exclusion across time, giving weight to the concept of social exclusion. We can also observe that many of the relationships between domains have a degree of plausibility. For example, we find that exclusion from financial products in 2002 significantly predicts exclusion from cultural activities in 2008, with both domains in some way reflecting accessing, storing or spending disposable income. In turn, we can also hypothesise how exclusion from social relationships in 2002 can predict later exclusion from financial products, given that older people often rely on friends and family to assist with their finances as they age (Arksey et al 2008).

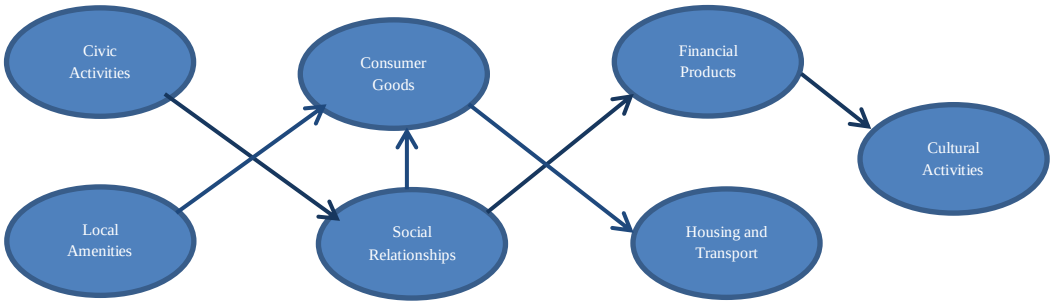


Figure 21: Significant longitudinal relationships between domains of social exclusion from fully adjusted models (see Table 18); Arrows = 'exclusion in 2002 predicts exclusion in 2008 from'

4.3.2 How did individuals' demographic characteristics in 2002 influence their social exclusion patterns in 2008?

Women who participated in ELSA in 2002 were associated with a 33% lower risk of experiencing exclusion from social relationships in 2008 (OR: 0.669), although had a 32% higher risk, relative to

men, of being excluded from cultural activities in 2008. However, neither men nor women who were present at both 2002 and 2008 were more likely than one another to be excluded overall from any domain of social exclusion, or to be multiply disadvantaged. These results mirror earlier cross-sectional results, which may be expected given that gender is, for most, fixed over time and that there were large numbers of men and women in the longitudinal sample. The one exception to the cross-sectional results was that earlier results suggested men were at greater risk of exclusion from common consumer goods, which was not statistically significant in the longitudinal sample, and may reflect the relatively small number that were excluded on this domain in the longitudinal sample.

We also examine whether particular types of men and women were more likely than other to be socially excluded, through including interaction terms in our models (not shown). We test interaction terms for gender with age and with living arrangements, believing that the effect of gender is likely to vary by both of these factors, although find that these additional terms are not statistically significant. Finally, we examine the change among some of the individual components that make-up our domain of exclusion from social relationships. We observe no distinct trend in terms of the indicators of exclusion from common consumer goods. However, when we examine changes in the indicators of exclusion from social relationships, we find significant trends in terms of gender. Women were significantly more likely than men to experience the loss of a partner between 2002 and 2008, although the impact of this loss did not elevate the risk of exclusion from social relationships. Men, however, were significantly less likely than women to report that they had friends at both sweeps of ELSA, and were more likely to report the loss of friends between both time periods. While the measurement of exclusion from social relationships includes the presence as well as the quality of social relationships, these results indicate that men experience greater difficulties in maintaining relationships with friends in particular, more so than women. Greater provision of social activities that involve older men as well as older women may be one way of reducing the risk of exclusion from social relationships among older men. This has been identified as a priority among older divorced and single men in particular in other research (for example Davidson et al, 2003), although the results here, and particularly the lack of significance of the interaction term between gender and living arrangements, suggests that this is challenge applicable to all older men. This is especially pertinent given the significance of being excluded from social relationships on other domains of social exclusion.

Ethnicity was not a significant predictor of exclusion in longitudinal models, although the small sample size of non-white people in our longitudinal sample is likely to be the cause. Furthermore in ELSA, the size of the small ethnic minority sample prevents further analyses of the non-white population to analyse which non-white groups are particularly at risk of social exclusion; it is highly unlikely that any risk is distributed equally across non-white groups, and different white ethnicities may also be excluded at differential rates. Further qualitative investigations or a specific study design that oversamples non-white older people may illuminate whether this finding applies to all non-white groups among the older population, and the possible underlying mechanisms. Other studies which do either include a large sample or purposively examine differences between ethnic groups do find systematic differences in the outcomes of different ethnic groups among the older population (for example Campbell & McLean 2002; Grewal et al 2004; Scharf, Phillipson & Smith

2005), suggesting that our analyses are likely to have overlooked a number of differences by ethnicity in the risk of social exclusion.

In our longitudinal models, to accommodate a smaller sample size we adjust our age categories to ten year age groups. Our longitudinal framework allows us to cautiously interpret the effect of age as a predictor of exclusion, and we can observe that those who begin the study at an older age are more likely to be excluded from social relationships, local amenities, and common consumer goods, even after controlling for a number of factors that could explain these effects, including health status and exclusion status in 2002. Age effects were particularly prominent for exclusion from consumer goods, with those who were aged 80 years or older over ten times more likely to be excluded than those aged 50-59 years (OR: 10.91) and those aged 70-79 in 2002 more than five times more likely to be excluded in 2008 (OR: 5.091). However, as with earlier cross-sectional results, those in the oldest age group were less likely to be excluded from decent housing and public transport. Overall, however, those who were in the older age groups were more likely than those in younger age groups to be experience a more severe degree of exclusion. People in the 80+ age group were around three times as likely to experience a more severe degree of exclusion than those aged 50-59 (OR: 2.969) and those aged 70-79 around 50% more likely to do so (OR: 1.532). While in these models we control for initial health status in 2002 through measures of self-rated health, history of falls, physical activity reports, and depression, the higher risk of transitioning into an excluded category may be partially driven by changes in these variables between sweeps, as well as other events that older people may be at greater risk of experiencing; we begin to address this through constructing fixed effects models later in this chapter. We also tested for interactions between age group in 2002 and self-rated health in 2002, and age group and gender, believing that both of these factors would serve to amplify the effect of age, although we find no evidence to support this (not shown).

Living alone in 2002 continues to be a marker of an increased likelihood of exclusion in 2008. Those living in couple households with no children were significantly less likely to experience exclusion from social relationships and civic activities and access to information (OR: 0.493 and OR: 0.574 respectively) even after controlling for previous exclusion status and other potential confounders. These results are particularly convincing given the amount of controlling factors included in these models. We also investigated whether the effect of living arrangements varied across different groups through testing for interaction terms in models, although in the main we found that additional interaction terms did not significantly contribute to explaining social exclusion status. Other demographic factors, namely the number of children and siblings reported in 2002, were restricted to being significant predictors of social relationships alone; given that relationships with siblings and children form a part of this domain, this is unsurprising.

	Exclusion from Social Relationships	Exclusion from Civic Activities and Access to Information	Exclusion from Cultural Activities	Exclusion from Local Amenities	Exclusion from Decent Housing and Public Transport	Exclusion from Financial Products	Exclusion from Common Consumer Goods	Overall Exclusion
Characteristic in 2002								
Exclusion from Social Relationships	11.74***	1.198	1.356	1.122	1.467	2.512**	2.692**	3.655***
Exclusion from Civic Activities	1.988**	13.61***	1.254	1.083	1.356	0.769	0.642	3.163***
Exclusion from Cultural Activities	1.375	1.067	4.390***	1.321	1.178	1.003	0.574	2.086***
Exclusion from Local Amenities	1.121	0.850	1.132	5.366***	0.980	1.185	2.348**	2.482***
Exclusion from Decent Housing and Public Transport	0.911	1.133	1.249	1.271	2.885***	1.000	1.361	1.861***
Exclusion from Financial Products	0.965	1.287	1.784*	0.690	0.988	5.006***	2.126	1.922***
Exclusion from Common Consumer Goods	1.525	1.096	0.777	1.087	0.536*	0.904	18.62***	1.971***
Age Group (Base 50-59)								
60-69	1.350	1.595*	1.267	1.172	0.756	1.052	1.356	1.142
70-79	2.627**	1.724	1.460	1.691*	0.575*	0.942	5.091**	1.532**
80+	3.890***	2.026	1.844	3.954***	0.165**	1.961	10.29***	2.969***
Gender (Base: Male)								
Female	0.669*	1.046	1.317*	1.001	0.841	1.433	0.687	0.978
Ethnicity (Base: White)								
Non-white	1.985	1.351	1.397	1.880	0.740	2.283	2.420	1.436
Living Arrangements (Base: Live Alone)								
Couple, no children	0.493**	0.574**	1.154	0.834	0.912	1.091	0.705	0.754**
Children, no partner	1.251	0.766	1.287	0.757	0.810	1.785	0.257*	0.859
Couple with children	0.810	0.512*	0.983	0.666*	1.156	1.052	0.474	0.837
Other household	1.101	0.371	1.446	0.865	1.346	0.924	1.624	1.110
Number of Children (Base: None)								
One	0.410***	1.057	1.252	0.890	1.296	1.153	1.353	0.880
Two	0.285***	1.031	1.654*	0.940	1.025	0.958	0.648	0.784*
Three	0.205***	0.985	1.601	0.930	1.178	1.408	0.549	0.823
Four or more	0.213***	1.109	1.625	1.127	1.027	1.714	0.789	0.858
Number of Siblings (Base: None)								
One	0.894	1.064	0.824	0.892	1.436*	1.468	1.177	1.060
Two	0.638*	0.915	1.006	0.751	1.247	1.600	1.444	1.001
Three	0.550**	1.208	0.938	0.938	1.355	1.553	0.633	1.027
Highest Qualification (Base: Degree/ Higher)								
NVQ Level 4	0.854	1.575	1.313	0.756	1.404	1.147	0.446	1.008
NVQ Level 3	0.687	3.089*	1.401	1.006	1.643*	0.909	0.505	1.289
NVQ Level 2	0.589*	2.507*	1.249	0.675*	1.187	0.714	0.606	0.925
NVQ Level 1	0.870	2.335*	1.109	0.780	1.000	0.961	0.538	0.934

No Qualifications	0.758	3.478***	0.935	0.733	0.974	1.148	0.644	0.960
Economic Activity (Base: Retired)								
Employed	1.565	0.839	1.498	1.324	1.051	0.654	2.227	1.242
Self-employed	1.071	0.961	1.260	1.416	0.746	0.545	1.310	1.139
Unemployed	2.974*	0.845	1.456	0.917	1.087	1.058	1.971	1.414
Sick	1.606	0.956	1.338	1.079	0.600	0.759	0.798	0.939
Looking After Family	1.446	1.148	1.218	0.825	0.988	0.720	1.153	1.046
Self-rated Health (Base: Very Good)								
Good	1.407	1.207	1.444**	1.360*	0.841	1.363	1.068	1.228*
Fair	1.331	1.428	1.891***	2.057***	1.273	1.319	1.067	1.679***
Poor	1.059	2.193*	2.402**	2.227**	1.272	1.464	0.573	1.982***
Fallen in past year (Base: Not Fallen or Not Asked)								
Fallen$	1.063	0.863	1.049	1.179	1.281	0.747	0.730	1.059
Physical Exercise (Base: Regular Vigorous Exercise)								
Regular Moderate Exercise	0.818	0.993	0.826	0.936	0.899	1.497	0.641	0.865
Some Moderate Exercise	0.672	1.390	0.961	1.289	0.877	1.760	0.779	1.172
No Exercise	0.396*	0.977	0.776	1.602	0.692	1.635	0.992	0.946
Depression (Base: Not Depressed)								
Depressed	1.997***	1.147	1.249	1.230	1.166	1.303	1.002	1.374***
Care Giver (Base: Not a Care Giver)								
Care Giver	0.842	0.918	0.814	0.998	0.778	0.921	0.612	0.820*
Household Income Quintile (Base: Lowest)								
2	0.891	0.579*	0.944	1.055	0.865	0.504*	0.786	0.699**
3	1.269	0.876	1.102	0.897	0.777	0.623	0.456*	0.807
4	1.119	0.621	0.818	0.997	1.014	0.668	0.533	0.764*
Highest Income	0.849	0.493*	0.628	0.932	0.864	0.277**	0.239*	0.629***
Housing Tenure (Base: Outright Ownership)								
Own with a Mortgage	0.805	1.053	1.241	0.971	1.233	1.843*	1.137	1.176
Social Rented	1.243	0.881	1.137	0.931	1.869***	2.794***	1.790	1.563***
Private Rented	1.956	0.995	1.933*	1.513	1.365	3.086*	0.574	1.757*
Use of Car (Base: No)								
Yes	1.066	0.995	0.821	0.642**	1.131	0.602*	0.838	0.733**
Main Source of Income (Base: Assets/ Other)								
Benefits	1.262	0.828	1.036	1.441	1.545	3.844	1.460	1.341
State Pension	0.887	0.912	1.512	1.396	0.790	3.867	0.575	1.132
Private Pension	0.695	0.799	1.518	1.214	0.878	2.250	0.800	1.054
Self-employment or Employment	0.893	1.103	1.818	0.973	0.962	3.617	1.115	1.150
N	4085	4085	4085	4085	4085	4085	4085	4085

Table 17: Exponentiated coefficients (Odds Ratios) from binary logistic and ordinal logistic (overall exclusion) models based on weighted estimates. Longitudinal models with characteristics in 2002 as predictors of exclusion status in 2008

4.3.3 How did individuals' health characteristics in 2002 influence their social exclusion patterns in 2008?

When we examine these health related variables measured in 2002 as predictors of social exclusion in 2008, we find that depression in 2002 is associated with a higher risk of exclusion from social relationships in 2008, with older people who were depressed in 2002 twice as likely to be excluded from social relationships in 2008 (OR: 1.997). These results suggest that depression is a good marker of older people who are unable to maintain quality relationships with partners, family, or friends. Depression did not statistically significantly predict other domains of social exclusion in these data, although our sample size and representativeness of our working sample may partially account for this as the results suggested depressed people did have an elevated (non-significant) risk of experiencing social exclusion across a range of domains. Overall, however, depression in 2002 was associated with an elevated risk of experiencing a more severe category of social exclusion (OR: 1.374).

Poor self-rated health in 2002 continued to be significantly associated with higher risks of exclusion from cultural activities and particularly exclusion from local amenities and exclusion from civic activities and access to information, regardless of previous exclusion status in 2002. This also translated into a higher risk of overall exclusion (being excluded or multiply excluded on any domain). In terms of the latter result, those with poor health were almost twice as likely to fall into a more severe category of exclusion as those with very good health (OR: 1.980). These data suggest that health is strongly associated with exclusion, with poorer physical health associated with an increased risk of inability to access amenities and participate in civic structures – older people in poor health in 2002 were twice as likely to experience exclusion on these domains as those who were in very good health.

The amount of physical exercise older people took in 2002 was generally not predictive of social exclusion status in 2002. However, one unexpected result was observed in that those who did not exercise in 2002 were less likely than those who engaged in regular vigorous physical exercise to be excluded from social relationships. Further investigation, beyond the scope of this report, should identify the underlying mechanism of this trend; later analyses in this chapter present clearer results of the effects of physical activity. Similarly an unexpected result occurred among those who gave care in 2002, who appeared to be at a lower risk of falling into a more severe category of exclusion in 2008 compared to those who did not give care in 2002; as was outlined earlier, such a result should be interpreted with caution due to the crude nature of our measurement of care giving, which does not account for the amount of care given, the relationship between carer and recipient, and the possibility that other unobserved factors may be leading to spurious results; as in the case of physical exercise we present results that provide a clearer indication of the effect of care giving later in this chapter. A history of falls in 2002 was not significantly associated with social exclusion in 2008, although sample size may be a responsible factor.

4.3.4 How did individuals' socioeconomic characteristics in 2002 influence their social exclusion patterns in 2008?

Older people living in rented housing in 2002 are at an elevated risk of experiencing social exclusion in 2008 than those in owner occupied housing, particularly those in socially rented housing (table 17). For those in socially rented housing relative to owner occupiers, this risk is significant with respect to accessing decent housing and public transport (OR: 1.869), and accessing financial products (OR: 2.794), and also translates into a higher overall risk of experiencing more severe exclusion (OR: 1.757). These results are particularly convincing given the amount of controlling factors included in these models. We also investigated whether the effect of housing tenure varied across different groups through testing for interaction terms in models, although found no evidence of significant interactions.

Earlier cross-sectional results in terms of economic activity and main source of income were not replicated in our longitudinal models. In particular, those who were prevented from working because of sickness or whose main source of income was from benefits in 2008 were at particular risk of experiencing exclusion across a number of domains in cross-sectional models, although these groups in 2002 were at no greater risk of being excluded in 2008 once other factors had been accounted for. Other variables reflecting socioeconomic status in 2002 were significant predictors of social exclusion in 2008. Those with no or low qualifications were at increased risk of experiencing exclusion from civic activities and access to information compared to those with degree level qualifications – those with no qualifications being over three times as likely to be excluded on this domain (OR: 3.478). Meanwhile car ownership was associated with a reduced chance of being excluded from local amenities (OR: 0.642), although not exclusion from decent housing and public transport.

Compared to people in the lowest household income quintile, people in the highest quintile of income were at a reduced risk of experiencing exclusion from civic activities and access to information (OR: 0.493), common consumer goods (0.277) and exclusion from financial products (0.239). This latter form of exclusion could be considered particularly worrying, as it suggests that those with the lowest incomes are least able to manage their money in a way that could protect from further hardship. Overall, people in the highest quintile of income were over 30 per cent less likely than those in the lowest income quintile to experience a more severe category of social exclusion (OR: 0.629).

4.4 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of social exclusion?

In the previous set of results, we presented how individuals' characteristics in 2002 predicted social exclusion status in 2008. Many of these results confirmed earlier trends in terms of descriptive analyses and findings from cross-sectional models, as well as being consistent with the literature. However, some findings continued to defy conventional wisdom. For example, care giving continued to be a largely insignificant predictor of social exclusion, and furthermore, appeared to operate in the opposite way as might be expected according to the results in table,

being associated with a decreased risk of social exclusion. While the previous set of results in table 17 described how people's characteristics in 2002 predicted exclusion status in 2008, isolating how a change in characteristics over this period influences a change in social exclusion status may provide more conclusive evidence of the way that individual characteristics shape experiences of social exclusion. To do this, we construct fixed effects logistic regression models modelling our individual domains as well as a binary indicator of whether an individual was multiply excluded or not (excluded on two or more domains). Fixed effects models also provide a useful basis for overcoming concerns of omitted variables which may influence exclusion experiences whose omission may lead to spurious results; we make an assumption that any such variables that are unobserved in our model, although potentially influential in patterning social exclusion such as personality type, are fixed between 2002 and 2008. With a fixed effects design, we look at variation within individuals - imposing a fixed effects framework means that our interest is confined only to those individuals who experienced a change in exclusion status between 2002 and 2008, and to individual characteristics that could change over this period. Therefore in addition to having a reduced sample size, our fixed effects regression models do not explicitly model characteristics such as number of children, number of siblings, gender and ethnicity that did not exhibit changes (within our sample) between these periods – our understanding of the effects of these characteristics is confined to earlier results presented in tables 15 and 17[15]. We present the results of our regression models as odds ratios in table 18, and describe some of the results below.

4.4.1 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from social relationships?

Between 2002 and 2008, older people who moved from living alone to living as part of a couple with no children had over an 80 per cent reduction in the odds of becoming excluded from social relationships in our fixed effects models. The fixed effects design means that we control for unobserved variables that may drive these results, such as personality traits, that could be considered unlikely to change dramatically among older people over the relatively short observation period. However, those who moved from living alone to living with children but no partner were over eight times more likely to become excluded from social relationships (OR: 8.878; not shown in table 18). Moving from living alone to living with children but no partner among those aged 50+ could indicate the incidence of a crisis either in the lives of the older person or their (adult) child, placing a pressure on social relationships. Reducing the frequency of physical exercise was also associated with an increased risk of experiencing exclusion from social relationships – for example those who undertook regular moderate exercise were twice as likely to experience exclusion on this domain as those who were exercising vigorously on a regular basis. This latter result may highlight the way in which exercise is a part of maintaining social relationships for many older people, reinforcing that exercise may have a wider effect on the wellbeing than simply on physical health alone. However, overall these analyses suggest that it is a change in household composition that was one of the most important predictors of a change in exclusion status with respect to social relationships.

[15] Researchers in the future may wish to examine the influence of these factors through examining changes within populations separately (e.g. men and women) and comparing these results.

4.4.2 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from cultural activities?

There were few significant changes in people's characteristics that patterned changes in exclusion from cultural activities, although becoming a care giver over this time did significantly raise the odds of this form of exclusion by approximately 70 per cent (OR:1.700). This result is significant as it suggests that the transition into a caring role does have negative implications on social exclusion that were not highlighted in earlier analyses. Possibly mechanisms include difficulties in accessing leisure activities because of a lack of time, a lack of support for carers, a lack of disposable income because of care related costs (which may not be fully captured by the household income quintile alone) or because of a lack of leisure facilities that may be accessible to those with care needs. A similar result can also be observed when examining the result for economic activity, where beginning to look after a family was associated with an increased risk of becoming excluded from cultural activities.

Becoming excluded from local amenities was also associated with a 60 per cent rise in the odds of becoming excluded from cultural activities (OR: 1.567). Becoming excluded from cultural activities and becoming excluded from local amenities may be considered markers of where neighbourhoods are no longer meeting the accessibility needs of older people.

These findings control for unobserved factors such as different tastes or personality traits that are simultaneously associated with both exclusion from cultural activities and with independent variables included in the models such as education or age.

4.4.3 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from civic activities and access to information?

Becoming depressed between 2002 and 2008 doubled the risk of becoming excluded from civic activities and access to information (OR: 2.189), as did becoming excluded from local amenities (OR: 2.000) while becoming unable to work because of sickness tripled the odds of becoming excluded (OR: 3.205). These three findings indicate the way in which good physical and mental health, as well as the presence of local amenities, helps prevent exclusion from civic activities and access to information. The fixed effects design means that we control for unobserved and unmeasured factors that may have influenced the results in earlier models. Declines in physical and mental health, as well as declines in the accessibility of local amenities, each impede the accessibility of opportunities to participate in civic activities. However, such declines in health need not necessarily lead to exclusion from civic activities in practical terms, as new efforts to help older people with physical limitations access volunteering activities emerge.

4.4.4 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from local amenities?

Becoming excluded from local amenities between 2002 and 2008 was significantly associated with changes in exclusion status across other domains. Those who became excluded from civic activities and access to information, cultural activities and financial products were more likely to

also become excluded from local amenities (OR: 1.637; OR: 1.987; OR: 1.930 respectively). However, the small number who became excluded from common consumer goods within this sample were associated with a lower risk of exclusion (OR: 0.332), as was the case for those with no qualifications relative to those with degree level qualifications (OR: 0.101); the explanatory mechanism for the latter two results is unclear. Self-rated health on the other hand did exhibit expected trends, with those developing fair health or poor health substantially more likely than those with very good health to become excluded from local amenities (OR: 2.830, OR: 5.227) – clearly health is an important facilitator of accessing local amenities, and it is particularly significant that earlier descriptive results uncovered that it was difficulties in accessing hospital (as well as shopping facilities) that had risen between sweeps. As with all our models included in table 18, our fixed effects model examining changes in exclusion status from local amenities controls for factors that could influence both exclusion status and other factors such as health, that are not otherwise included in the model – this means that we control for the possibility that those with poorer health, for example, have a higher prior risk of being excluded from local amenities through other factors.

4.4.5 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from decent housing and public transport?

There were few significant changes in people's characteristics that patterned changes in exclusion from decent housing and public transport, although becoming a care giver over time did significantly raise the odds of this form of exclusion by approximately 44 per cent (OR:1.435). The fixed effects design means that we control for unobserved and unmeasured factors that may have influenced the results in earlier models, which may have rendered the effect of giving care as insignificant in earlier results.

	Exclusion from Social Relationships	Exclusion from Cultural Activities	Exclusion from Civic Activities and Access to Information	Exclusion from Local Amenities	Exclusion from Decent Housing and Public Transport	Exclusion from Financial Products	Exclusion from Common Consumer Goods	Overall Exclusion
Exclusion from Social Relationships		0.743	0.939	0.842	0.932	0.688	1.405	
Exclusion from Cultural Activities	0.898		0.679	1.637*	1.040	0.575	1.926	
Exclusion from Civic Activities	1.035	0.652		1.987*	0.867	0.803	2.171	
Exclusion from Local Amenities	0.654	1.567*	2.002*		1.059	1.710	0.197**	
Exclusion from Decent Housing and Public Transport	0.897	1.032	0.694	1.244		1.351	1.520	
Exclusion from Financial Products	0.555	0.835	0.800	1.930*	1.008		4.059*	
Exclusion from Common Consumer Goods	0.954	0.688	1.338	0.332**	1.445	1.213		
Age Group (Base 50-59)								
60-69	0.584	0.809	0.808	1.343	0.923	0.866	0.728	0.839
70-79	0.307	0.972	1.116	2.154	0.844	1.226	0.106	0.900
80+	0.437	0.799	2.398	4.731*	0.621	1.896	0.0382*	0.945
Gender (Base: Male)								
Female	1	1	1	1	1	1	1	1
Ethnicity (Base: White)								
Non-white	1	1	1	1	1	1	1	1
Living Arrangements (Base: Live Alone)								
Couple, no children	0.191*	0.852	0.506	0.546	1.172	0.180**	1.292	0.315**
Children, no partner/ Other	8.878*	2.044	0.952	0.594	0.640	0.694	9.669	0.593
Couple with children	0.228	0.690	1.151	0.368	1.104	0.193	-	0.401
Number of Children (Base: None)								
One	1	1	1	1	1	1	1	1
Two	1	1	1	1	1	1	1	1
Three	1	1	1	1	1	1	1	1
Four or more	1	1	1	1	1	1	1	1
Number of Siblings (Base: None)								
One	1	1	1	1	1	1	1	1
Two	1	1	1	1	1	1	1	1
Three	1	1	1	1	1	1	1	1
Highest Qualification (Base: Degree/ Higher)								
NVQ Level 4	1.264	0.857	0.632	0.386	0.765	0.397	1.889	0.665
NVQ Level 3	1.421	0.567	0.676	0.172*	0.603	0.470	1.426	0.613
NVQ Level 2	1.891	0.538	1.539	0.206*	0.531	0.880	1.554	0.693
NVQ Level 1	1.787	0.372	1.194	0.238	0.419	3.154	17.27	0.592
No Qualifications	1.081	0.389	0.954	0.101**	0.381	1.506	5.016	0.346
Economic Activity (Base: Retired)								

Employed	0.959	0.744	1.252	0.421*	1.122	0.966	1.638	0.781
Self-employed	1.370	1.989	0.489	0.451	1.194	1.794	8.550	1.852
Unemployed	0.986	1.840	2.787	0.537	0.806	1.764	0.903	1.342
Sick	0.610	1.347	3.205*	1.002	1.144	3.366*	0.0712*	2.602**
Looking After Family	0.411	1.818*	0.905	1.398	0.964	2.018	14.29**	1.232
Self-rated Health (Base: Very Good)								
Good	0.843	0.868	1.155	1.636	1.115	1.253	0.468	1.070
Fair	1.289	0.890	1.126	2.830***	0.995	1.405	0.438	1.073
Poor	1.430	1.090	1.350	5.227***	1.173	0.696	0.326	1.761
Fallen in past year (Base: Not Fallen or Not Asked)								
Fallen[$]	1.281	0.999	1.065	1.105	1.044	1.140	1.896	1.141
Physical Exercise (Base: Regular Vigorous Exercise)								
Regular Moderate Exercise	1.903*	1.191	0.821	0.944	1.002	0.637	5.354**	0.859
Some Moderate Exercise	2.508*	1.085	0.774	1.088	1.315	1.434	7.383**	1.039
No Exercise	2.269	1.364	1.006	2.269*	1.153	1.646	30.09***	1.933*
Depression (Base: Not Depressed)								
Depressed	0.937	1.264	2.189**	1.315	0.842	0.682	1.652	1.455*
Care Giver (Base: Not a Care Giver)								
Care Giver	1.323	1.700**	1.342	0.819	1.435*	1.349	3.885*	1.914**
Household Income Quintile (Base: Lowest)								
2	1.233	1.105	1.242	1.317	0.896	1.287	3.164*	0.869
3	0.765	0.775	1.402	0.950	0.757	1.137	2.345	0.706
4	0.675	0.876	1.719	1.496	0.789	1.445	4.358	0.884
Highest Income	0.846	0.849	1.980	1.404	0.608	2.675	5.181	0.867
Housing Tenure (Base: Outright Ownership)								
Own with a Mortgage	0.739	1.041	0.872	0.963	0.857	0.384	1.262	0.826
Social Rented	0.942	2.271	0.393	0.155**	2.274	7.012	1.00e-09	0.672
Private Rented	0.0730*	1.524	0.997	0.423	1.700	2.273	3.785	0.606
Use of Car (Base: No)								
Yes	0.581	1.525	0.839	0.681	0.580	2.297*	0.642	0.846
Main Source of Income (Base: Assets/ Other)								
Benefits	0.994	1.226	1.726	0.712	0.648	1.367	0.575	0.675
State Pension	1.035	0.869	3.164	0.666	0.794	1.368	5.451	0.838
Private Pension	1.208	0.712	2.013	1.037	1.057	0.292	2.079	0.934
Self-employment or Employment	0.889	0.755	2.452	0.711	0.929	0.597	2.274	1.121
N	614	1166	624	1200	1390	446	402	1130

Table 18: Exponentiated coefficients (Odds Ratios) from binary logistic and ordinal logistic (overall exclusion) fixed effects models based on weighted estimates. Longitudinal models with a change in characteristic as predictors of changes in exclusion status between 2002 and 2008

4.4.6 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from financial products?

Between 2002 and 2008, older people who moved from living alone to living as part of a couple with no children had over an 80 per cent reduction in the odds of becoming excluded from financial products (OR: 0.180). Such a result may suggest that forming new partnership may prompt some to organise their financial affairs, alternatively could suggest that some financial products are more open to those in couple relationships, or could indicate an improvement in socioeconomic status with partnership and hence new eligibility for financial products. Whatever the case, the results do suggest that older people living alone are at high risk of exclusion on this domain. The fixed effects design controls for unobserved factors that may simultaneously influence living arrangements and exclusion from financial products, such as personality traits or money management skills, which are not, for the most part, expected to vary over time. Similarly, older people who were sick were more likely to become excluded, although unexpectedly those who gained use of a car were also more likely to become excluded on this domain (table 18).

4.4.7 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of exclusion from common consumer goods?

Between 2002 and 2008, we observed comparatively little change in exclusion status on this domain, and consequently our sample is composed of 201 individuals. Such a small sample lends itself towards spurious results, and while we find that exercising less, a lower income, and becoming a care giver are associated with a greater risk of exclusion on this domain as might be expected, we also uncover other significant results that we are unable to explain, although are a likely artefact of the small sample (table 18).

4.4.8 How did changes in individuals' characteristics between 2002 and 2008 influence their risk of being multiply excluded?

When we examine the overall risk of being excluded, through comparing the risk of being multiply excluded (being excluded from two or more domains) compared to being excluded on a single domain or not at all, changes in four characteristics become apparent as risk factors of exclusion. Older people who start to live alone, who become unable to work because of sickness, who take less exercise, and who become depressed, were also those with elevated risks of becoming multiply excluded. For example, older people who became depressed were 46 per cent more likely to become multiply excluded (OOR: 1.455). Perhaps most significant was the result that becoming a care giver increased the risk of multiple exclusion almost two-fold (OR: 1.914); this result is of interest as it was not a relationship that was identified using alternative methods. Moving to live alone from living as part of a couple with no children (not shown directly in table 18), was associated with a threefold rise in the odds of multiple exclusion – for a large portion of the 50+ age group such a transition would be a reflection of widowhood. As with all our fixed effects models, these results control for the effect of unobserved potentially confounding variables, including personality traits such as resilience, which may be associated with the independent variables included in our models and experiences of exclusion.

4.4.9 Explaining differences between fixed effects and non-fixed effects models

When comparing the results between tables 17 and 18, different factors appear to be significant according to the different model specifications that were used. For example in table 17, depression appeared to be a significant predictor of social relationships, although within the fixed effects specification, it was no longer significant. In the event of such an instance, we can attribute such an effect to the influence of another underlying factor associated with both depression and exclusion from social relationships, such as low self-esteem or substance abuse, which may be driving the apparent link between depression and social exclusion. Similarly, the association between exclusion from financial products and a higher risk of exclusion from cultural activities observed in table 17 was no longer present in table 18, suggesting that another unobserved factor associated with both forms of exclusion, such as consumption patterns or disposable income (as opposed to equivilised income which is included as a controlling factor) may have been responsible for the apparent association. Conversely, we have also noted instances where factors that were not significant in earlier model specifications became significant in fixed effects models, such as the assumption of caring duties being a risk factor for becoming socially excluded. Here, we can assume that unobserved factors that we did not control for in previous models, for instance stress in this case, were fixed and we were able to observe a true association.

4.5 How does exclusion status change over time among individuals? Summary and discussion

In this chapter we demonstrate that a greater number of people aged 50 and above became more excluded than less excluded with age – 24 per cent of people became more excluded while 19 per cent became less excluded. While the results in part depict a negative trend, they also demonstrate that social exclusion is neither inevitable nor irreversible with older age. Notwithstanding, compared to those in younger age groups, people who were in older age groups in 2002 were more likely to become excluded and less likely to become 'not excluded' across most domains of social exclusion. This varied across domains in terms of magnitude, with age less predictive for some domains, and varied in terms of direction and magnitude for exclusion from decent housing and public transport, with those in older age groups more likely to move from being excluded than those in younger age groups. For four out of the seven domains of social exclusion, approximately equal numbers of older people aged 50+ became more excluded as became less excluded between 2002 and 2008. For exclusion from common consumer goods, greater numbers of people became less excluded over time, although for exclusion from local amenities and exclusion from decent housing and public amenities, greater numbers became more excluded between 2002 and 2008.

However, these analyses illustrated only part of the picture, and we were also interested in the extent to which individuals who were social excluded in 2002 remained so in 2008. We found that this persistence of social exclusion differed by characteristic and by domain of social exclusion, although exclusion from social relationships, local amenities, and civic activities and access to information was particularly persistent across time among individuals, with approximately half of people excluded on these domains in 2002 remaining excluded in 2008. Should policy-makers be interested in addressing persistent social exclusion, the results presented here could suggest that

a focus on these three domains may be the most effective approach, albeit with further research needed to substantiate this conclusion.

When we constructed regression models to examine how characteristics in 2002 were associated with social exclusion status in 2008, we found that being excluded in 2002 was one of the strongest predictors of exclusion status in 2008 after controlling for other factors – this was particularly the case for exclusion from common consumer goods, civic activities and access to information, and social relationships. We uncovered a number of significant predictors across different domains. We found that older men were more likely to be excluded from social relationships, even after controlling for previous exclusion status, whereas older women were more likely to be excluded from cultural activities. Men and women were not significantly different in their risk of overall exclusion, although it is too simplistic to conclude that older women do not carry the burden of disadvantage, having lived a lifetime in a marginalised societal position. The models reveal the net effect of gender, but it should also be noted that older women, and not older men, who are more likely to be in poverty, to live alone, to suffer from dementia (Bamford 2011a), and to suffer from other non-communicable diseases (for example ILC-UK 2011).

Being older was associated with an increased chance of being classified in a more severe category of exclusion than being in a younger age group – those aged 80+ in 2002 were almost three times more likely to be in a more severe category of exclusion in 2008 than those aged 50-59 years. Living arrangements were also predictive – those who lived alone in 2002 were at a higher risk of being disadvantaged in terms of social relationships and civic activities and access to information in 2008. This is to be expected to some extent given that partnership status is one component of the index of exclusion from social relationships. However, the deleterious effect of living in a single person household extends to exclusion from civic activities also; widowhood and the consequential loss of societal position may be one explanatory factor (see Serra et al 2011 for a discussion regarding the case of centenarians).

As might be expected for this group, health in 2002 was a significant predictor of exclusion status in 2008, both in terms of physical and mental health. Depression in 2002 was associated with a two-fold increase in the odds of being excluded from social relationships while poorer self-rated health was associated with a decreased ability to participate in community life and civic structures. Returning once again to the notion of social exclusion as exclusion from shared values and behaviours (Burchardt et al 2002b), our evidence adds to the case that people who are happy and healthy are more likely to participate in society (Cattel 2001), and therefore those who are not are less likely to participate and ultimately more likely to become socially excluded. Our analysis here shows that for older people, the effect of poor self-rated health is to raise the risk of exclusion from services and amenities in particular, while the effect of poorer mental health raises the risk of exclusion from social relationships. The evidence also leads us to question the case for considering health as another dimension of social exclusion in some respects, particularly if a lifecourse approach to health is taken, and if an emphasis is placed on considering social exclusion as a divorce from shared values and wisdom, including those involving healthy lifestyles and behaviours. Health can also involve accessing the right services and information. Nevertheless, in these analyses, physical health and mental health are considered as predictors of exclusion, as opposed to a dimension of exclusion in their own right.

People with a more socioeconomically disadvantaged profile were generally more likely to be excluded, although living in social housing and having a low equivilised household income were particularly associated with a high risk of exclusion; people who shared either of these factors in 2002 were associated with a higher risk of exclusion from financial products in 2008. Exclusion from financial products for both of these materially disadvantaged groups suggests a perpetuating cycle where stable savings and/or credit products are either redundant in function, underutilised, or unavailable to low income groups, who may become more reliant on less secure avenues for savings products and money management, or discouraged from saving altogether. Living in social housing in 2002 was also associated with a higher risk of exclusion from decent housing and public transport, while low income was also associated with a higher risk of exclusion from civic activities and access to information and common consumer goods. These results suggest that housing tenure is a good predictor of older people who will experience difficulties in either accessing information about financial products or difficulties in being granted access to financial products, as well as those who are likely to experience difficulties in accessing good housing or public transport.

Finally, our most interesting results derive from our fixed effects models, which focus changes in characteristics as predictors of changes in exclusion status, thereby controlling for potential confounding variables that are unobserved, such as resilience or other personality traits. Those who became depressed, who lived alone, who became too sick to work, who took less exercise, or who took on caring responsibilities between 2002 and 2008 were more likely to become excluded on two or more dimensions or more of exclusion. Changes in self-rated health also predicted changes in specific domains of social exclusion (exclusion from local amenities). These results point to some of the factors that lead to greater numbers of people to become more than less excluded between 2002 and 2008. All of these could be considered age related factors, with people who are older more likely to experience changes into these categories. In fact, while most of the other characteristics included in models, such as highest qualification or housing tenure, are subject to change, the levels of change expected could be considered relatively minimal compared to changes in health characteristics. Here, we find that changes in health are closely associated with social exclusion status among older people. Later results in chapter 5 also provide evidence of some of the potential outcomes that existing health inequalities can lead to among older people - inequalities that exhibit widespread persistence (Marmot 2010).

Our analyses highlight which factors are important in predicting future patterns of social exclusion among older people; however, it is beyond the scope of this report to discuss all the factors individually that were included in our models. Furthermore, many other factors that are likely to be significant explanatory factors are likely to be absent from our models, for example other health related factors, sexual orientation, a number of neighbourhood level variables, and many others. The effects of many of these are controlled for in our fixed effects models, although we are unable to observe their baseline effect in ordinary logistic models. However, what our analyses do demonstrate successfully is the complexity of both measuring and analysing social exclusion. Very few factors were statistically significantly associated with all domains of social exclusion, with different factors associated with different domains using different analytical approaches. This, therefore, highlights the challenge in understanding how to reduce levels of overall, multiple or severe exclusion because the risk factors vary in terms of magnitude and direction in predicting

different domains of social exclusion. Having said this, physical and mental health, as well as living arrangements, appear as relatively consistent predictors of social exclusion; these can also be considered proxy measures for independence and social care needs, giving some weight to linking social exclusion and independence for older people.

While the analysis contained in this report serves as a progression of earlier work by Barnes et al (2006), and examines certain aspects in a novel way, there is also a danger that the generalised approach will have overlooked certain interesting and policy-relevant results. It is hoped that the results presented here will serve as a springboard for more in-depth and complex analysis of social exclusion, which may mean examining individual domains singly. Further research, using different analytical approaches, is also necessary given the risk of reverse causality that may serve to caveat several of the results presented here.

Nevertheless, we can conclude that levels of social exclusion overall appear to be rising (although largely driven by a new cohort of older people aged 50-54 years), and that for most domains, as people age they are more likely to become excluded, with physical and mental health status, gender, assumption of caring responsibilities, housing tenure, highest qualification, and living arrangements, among others, significantly moderating the risk of becoming excluded with age. Ordinarily, each of these factors would usually lend themselves to a separate policy intervention or targeting strategy, as is reflected in the structure of central government (or local authority) departments. However, it is perhaps this very approach that has led to rises in overall levels of exclusion, as well as some quite substantial rises in the number excluded in individual domains. If successive governments view tackling social exclusion as a policy priority, this analysis highlights that because of the complexity of the relationships identified here, and the absence of factors that are consistent in the magnitude, direction and significance in their association across individual domains, a strategy that does not reflect this complexity is unlikely to impact overall levels of social exclusion. To some extent, the formation of a dedicated unit to tackle Social Exclusion under the previous government was illustrative of the necessary holistic approach, although the apparent rise in levels of exclusion among those aged 50 and above over this time suggests that the execution of this approach may have needed modification. It should, however, be emphasised that among those aged 65 and over, who would (conventionally) be the focus of policies aimed at reducing social exclusion, cross-sectional analyses did suggest a decline in levels of exclusion. In particular, the rise in social exclusion among those aged 50-54 years is of concern, and may signal the need for a lifecourse approach in lowering rates of social exclusion, where policies do not address the needs of children, young people or older people in isolation, but view issues facing people of different ages as being interconnected. In the next chapter, we progress to analyse the impact of social exclusion across a selection of outcomes.

Chapter 5: What impact can social exclusion have on people's lives?

KEY MESSAGES

- ***What impact can social exclusion have on people's lives?***
- Being excluded across three domains of social exclusion in 2002, relative to not being excluded was associated with the following outcomes in 2008:
- *Lower quality of life score (CASP-19)*
- *Lower self-perceived social status*
- *Greater self-perceived financial uncertainty*
- *Feeling lonely*
- *Cutting meals*
- *Experiencing difficulties in carrying out the activities of daily living or instrumental activities of daily living and not receiving assistance with these*

- *Becoming* excluded from social relationships between 2002 and 2008 was associated with an increased likelihood of becoming lonely between sweeps, becoming more uncertain about the future financially, and in developing a lower quality of life score.
- *Becoming* more excluded from civic activities and access to information, cultural activities, and local amenities were associated with lower quality of life scores.
- *Becoming* more excluded from decent housing and public transport was also associated with an increased likelihood of becoming lonelier between 2002 and 2008.

- We found no evidence of an impact from the recession on social exclusion status, although this is likely to reflect the time of the survey, with 2008 was too early to observe the likely effects on older people.

5. What impact can social exclusion have on people's lives?

5.1 What impact can social exclusion have on people's lives? Introduction

The previous government recognised that poorer health could lead to social exclusion (ODPM 2005, p40), although were not as explicit in recognising that social exclusion could lead to poorer health. Being socially excluded, as well as being a negative state in itself, could lead to a number of negative outcomes, many of which are likely to have financial implications for individuals and society. For example, exclusion from social relationships could adversely affect a person's wellbeing and sense of loneliness, which could impact both on their physical and mental health, both of which have substantial cost implications. In a similar way, social exclusion and living in poverty have been implicated as factors in raising levels of stress among people, which can have adverse health outcomes (Cattel 2001). In more recent analyses of social exclusion among older people, social exclusion was operationalized through indicators reflecting low income and income inequality, non-take-up of benefits, premature death, low disability-free life expectancy, fear of crime, lack of access to a car, and lack of internet access (Aldrige et al 2011). Social exclusion can also have more subjective effects, altering a person's sense of their place in society and expectations and aspirations for the future. Social exclusion could also impede a person's negotiation skills, resulting in socially excluded people failing to obtain the services they needs, as well as being actively excluded from these services by the practices of the social excluded. Additionally, this report has highlighted an irrefutable link between material poverty and non-material disadvantage; consequently we would expect social exclusion to raise the risk of poverty and material disadvantage. Many of these factors can be simultaneously regarded as predictors, markers, and outcomes of living in social exclusion, and as was raised earlier, the riddle of the chicken and the egg, common also to other disciplines (for example Demography (Kiernan, 2002), is a consideration of our analyses of social exclusion. The use of fixed effects techniques here can be regarded as one step towards overcoming such a debate.

In this chapter we aim to further understand recent influences on, and outcomes of, social exclusion on older people. Here we are particularly interested in the way that people may react to the experience social exclusion through changes in their health and wellbeing, their self-perceived social status, their experience of poverty and unmet need in terms of services, and their experience of loneliness. In the previous chapter, we highlighted the difficulties in creating interventions that aim to reduce levels of overall, multiple or severe exclusion because of the way that different sets of risk factors predicted different individual domains of exclusion. Another consideration when considering the impact of interventions that aim to reduce levels of multiple or severe exclusion is that not all domains of social exclusion may have the same deleterious effect across different outcomes – in much the same way that different sets of risk factors predict different domains, these domains will have different outcomes. Our analysis in this chapter helps to unpick this issue further. However, we begin this chapter with analysis that attempts to examine the exogenous economic circumstance as a predictor of social exclusion.

5.2 Are older people recession proof with respect to social exclusion?

The financial crisis of recent years, and resulting recession, needs little introduction. Initially caused by the collapse of the US sub-prime housing market, the subsequent fiscal effects in the UK from the banking bailouts and economic slowdown, not to mention the long-term pressure of population ageing, resulted in a substantial shortfall between government spending and revenue. This shortfall was estimated to have reached £155 billion in 2009/10. This budget deficit embedded itself in the public consciousness and culminated in a change of government and a raft of public spending cuts, as part of the government's Spending Review, announced in October 2010. Our ELSA data was collected between June 2008 and July 2009, much earlier than the Spending Review of October 2010. However, a number of events reflecting the financial crisis preceded the ELSA interview period: there had already been a run on the Northern Rock bank in 2007, the first time in over a century that this had happened and led to the nationalisation of the bank; UK house prices had begun to fall sharply; income from dividends and investments had begun to reduce; and by September and October 2008 the US and UK governments, among others, had begun to step in to rescue failing banks including the Royal Bank of Scotland. While the full scale of cut backs were yet to be felt among ELSA respondents in the 2008-2009 interview period, some effects would have been observed including insecurity and falling revenue from private pensions and investments as well as the beginning of a raft of job losses. These events could have led to higher levels of social exclusion, and possibly in particular exclusion from financial products and common consumer goods, as well as higher levels of exclusion from social relationships due to the stress that the financial crisis brought on for many.

We investigate this issue through examining differences in levels of social exclusion by interview date for ELSA respondents. We analyse differences with interview date measured continuously (by month), as well as partition interview date to reflect those interviewed before October 2008, and those interviewed after – October 2008 is selected as a point where the full effects of the financial crisis were visible. We initially insert a covariate reflecting interview date into regression models, and find little evidence of an effect except upon exclusion from decent housing and public transport, with those who were interviewed after October 2008, the height of the financial crisis, being 19% more likely to be excluded on this dimension (not shown). Further evidence was discovered that may signify that levels of social exclusion rose as a result of the financial crisis in that those who were interviewed after October 2008 were 17% more likely to be multiply or severely excluded than not excluded compared to those who were interviewed before November 2008. We found no evidence when using a continuous variable reflecting interview date.

We interrogated this result further, as it is known that the date of interview time can be related to area and personal characteristics. For example some participants needed up to 20 calls to secure an interview in the original wave 1 sweep (Taylor et al 2003, p23), which will not only influence when participants were interviewed, but also reflect participant characteristics. Given that subsequent interviews were timed to be approximately two years after the original interview date (for example Scholes et al 2009, p43), there may be unobserved selection effects in terms of who was selected into the October 2008 and post-October 2008 samples. When we perform propensity score matching, where we include a greater number of variables to predict interview date, we find that the possible effects of recession described above disappear. Therefore, our results do not

appear to capture an effect of interview date, used as a proxy for the early effects of the recession, on levels of social exclusion using these data. Certainly, some of the descriptive data described earlier, such as the fall in the proportion of older people eating out, or the decrease in the number of older people investing in long-term, although non-essential, financial products such as life insurance, did suggest that older people had falling levels of disposable income (between sweeps). The likely reason that an observed 'recession' effect was not detected when modelling the data is that the interview point occurred too early. The next wave 5 (2010/11) sweep of data collection will have occurred after the 2010 Spending Review, when the scale of cuts were outlined. However, even this point may be too early to detect the full long-term impact, given that unemployment level continued to rise during 2011 (ONS, 2011), and other economic indicators also continued to exhibit worsening patterns.

5.3 What impact can social exclusion have on people's lives?

5.3.1 Quality of Life and Social Exclusion

Advances in longevity as well as social changes in occupational, gender, and marital status (to name but a few) have required researchers from across a number of disciplines to revisit and theorise what quality of life for older people should signify and include (Wiggins et al 2004), and one measure growing in prominence is the CASP-19 measure (Hyde et al 2003). CASP-19 is a measure of quality of life among older people that explicitly aims to measure quality of life, as opposed to influences on quality of life, through measuring satisfaction across domains of Control, Autonomy, Self-realisation, and Pleasure (CASP) through a total of nineteen indicators (Hyde et al 2003). These indicators consist of questions designed to measure respondents' agreement with a number of statements, for example 'I feel life is full of opportunities' or 'I enjoy being in the company of others', on a scale of zero (never experience) to three (often experience). Respondents' quality of life can range from a minimum score of zero (no quality of life) to fifty-seven (full quality of life). Studies examining the predictors of CASP-19 have found that quality of life is patterned by a number of individual and neighbourhood characteristics including the density and quality of social networks, the experience of recent stressful life events, poor pension provision and other measures of household wealth, living in rented accommodation, being older, living in a deprived area, and living in an area lacking basic services (Wiggins et al 2004; Demakakos et al 2010). In this study, we would therefore expect social exclusion to be strongly associated with quality of life given that social exclusion is conceptualised across domains that include both material and non-material deprivation, including social relationships and basic services.

Annotated output from modelling exclusion status in 2002 as a predictor of CASP-19 score in 2008 (table 19) illustrates that a number of domains of social exclusion are indeed associated with lower CASP-19 scores. In particular, holding other factors constant, being excluded from social relationships in 2002 is associated with a score that is two points lower than for those who were not excluded, exclusion from decent housing and public transport is associated with a score that is one point lower, exclusion from cultural activities a score that is two points lower, with exclusion from local amenities having the largest effect being associated with a score that is three points lower (table 19). When we examine overall exclusion status, the differences appear even more

pronounced, with those who were excluded from three or more domains of exclusion in 2002 having CASP-19 scores in 2008 that were over seven points lower than for those who were not excluded on any domain.

When we introduce a fixed effects structure to the data, we observe that becoming excluded from social relationships, civic activities and access to information, and cultural activities were each associated with approximately a one point decline in CASP-19 score (table 22); exclusion from local amenities continued to have a larger effect with those who became excluded on this domain experiencing a two point decline in wellbeing score. Unsurprisingly, therefore, a change in multiple exclusion status was also associated with a significant difference in CASP-19 score, with those becoming excluded from three or more domains experiencing a three point decline in CASP-19 score. However, the results suggest that it is exclusion from relationships, cultural activities, opportunities to participate in civic structures, and especially exclusion from local amenities that are most likely to lead to lower quality of life, and not exclusion from domains reflecting material conditions (although other indicators reflecting socioeconomic status are included in the models). In addition, the coefficients for the influence of social exclusion on wellbeing were larger than the coefficients for most other predictors contained in the models. These results control for unobserved variables that could otherwise influence our results in relation to wellbeing scores, such as resilience, outlook on life, pessimism, anxiety, and other characteristics and events.

Table 19: Exclusion status in 2002 as a predictor of selected outcomes in 2008 (weighted estimates). (annotated output – models contain all predictors included in table 18)

							Unmet need for assistance with ADL/IADL (base: difficulty with ADL/IADL and receiving help)	
Exclusion status 2002	**CASP-19 Score**		**Self-Perceived Bottom 50% social status**	**Top Decile Self-perceived Financial Insecurity**	**Feel Lonely Often in the Past Two Weeks**	**Cut Meals because of money worries**	**No difficulties in carrying out ADL/IADL**	**Difficulty in carrying out ADL/IADL and not receiving help**
Exclusion from Social Relationships	-2.032***		1.515*	0.960	1.430	0.925	0.876	0.955
Exclusion from Civic Activities	-0.225		1.143	1.030	1.124	2.408	0.897	1.061
Exclusion from Cultural Activities	-1.936***		1.328*	0.828	1.681**	1.899	0.782	0.915
Exclusion from Local Amenities	-2.958***		0.783	1.196	1.370	0.935	0.533**	1.160
Exclusion from Decent Housing and Public Transport	-1.121**		1.277	1.232	1.151	1.003	0.660*	0.865
Exclusion from Financial Products	-0.593		1.228	0.938	1.139	5.123***	0.659	0.724
Exclusion from Common Consumer Goods	-0.104		1.166	1.148	1.360	0.984	0.930	1.001
N	4085		4085	4085	4085	4085	4085	4085

With the exception of results for CASP-19: exponentiated coefficients; 95% confidence intervals in brackets; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; full output available on request

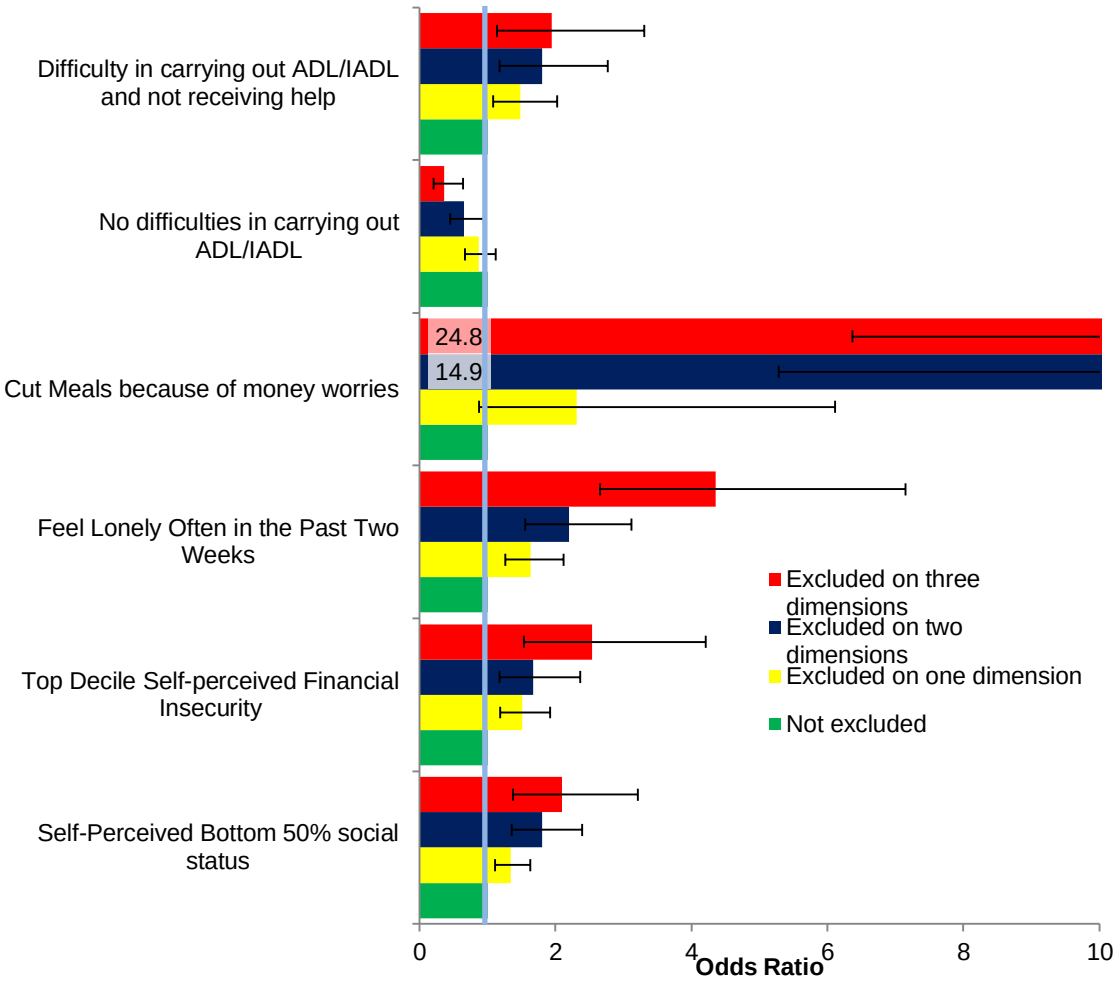


Figure 22: Exclusion status in 2002 as a predictor of selected outcomes in 2008 (weighted estimates). (annotated output – models contain all predictors included in table 18)

This bar chart presents the results from four fully adjusted binary logistic regression models as odds ratios (Models 2-5; see main report for further details), and risk ratios from one multinomial logistic regression model (Model 1). Where the bars are above one, this indicates that people who are socially excluded are more likely to experience a given outcome than people who are not excluded. For example, the odds of an older person who was excluded on three or more domains of exclusion in 2002 reporting feeling lonely in 2008 was 4.35 times higher than among those who were not excluded on any domain.

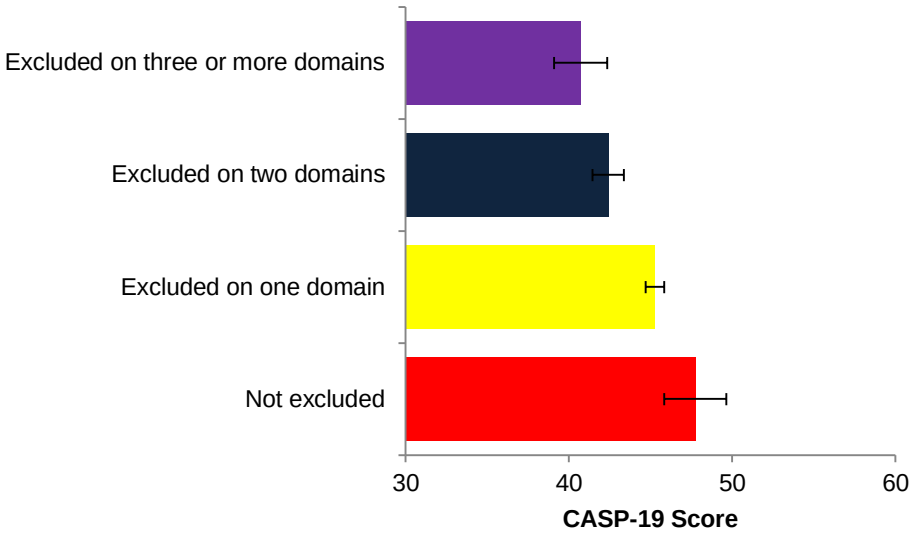


Figure 23: Exclusion status in 2002 as a predictor of CASP-19 in 2008 (weighted estimates with all covariates set to the baseline). (annotated output – models contain all predictors included in table 18)

Table 20: Change in exclusion status between 2002 and 2008 as a predictor of change in selected outcomes (weighted estimates). (annotated output from fixed effects models – models contain all predictors included in table 18)

	Self-Perceived Bottom 50% social status	Top Decile Self-perceived Financial Insecurity	Feel Lonely Often in the Past Two Weeks	Unmet need for help with ADL/IADL
Exclusion from Social Relationships	1.160	1.810*	3.339**	1.203
Exclusion from Civic Activities	1.212	1.488	1.573	0.715
Exclusion from Cultural Activities	1.033	0.964	1.282	0.663
Exclusion from Local Amenities	0.991	1.365	1.190	0.847
Exclusion from Decent Housing and Public Transport	0.845	1.087	2.093*	0.872
Exclusion from Financial Products	0.906	1.012	0.648	0.887
Exclusion from Common Consumer Goods	1.919*	0.692	0.786	0.475
N	1512	1276	1058	1190

Exponentiated coefficients; 95% confidence intervals in brackets; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; full output available on request

Table 21: Change in exclusion status between 2002 and 2008 as a predictor of change in selected outcomes (weighted estimates). (annotated output from fixed effects models – models contain all predictors included in table 18)

	Self-Perceived Bottom 50% social status	Top Decile Self-perceived Financial Insecurity	Feel Lonely Often in the Past Two Weeks	Unmet need for help with ADL/IADL
Baseline: None				
Excluded from one domain	0.897	1.170	1.343	0.715*
Excluded from two domains	1.150	1.393	2.083*	0.714
Excluded from three or more domains	1.360	1.909	2.840*	0.464
N	1512	1276	1058	1190

Exponentiated coefficients; 95% confidence intervals in brackets; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; full output available on request

Table 22: Change in exclusion status between 2002 and 2008 as a predictor of change in CASP-19 score (weighted estimates). (annotated output from fixed effects models – models contain all predictors included in table 18)

	CASP-19	CASP-19
Exclusion from Social Relationships	-0.898*	
Exclusion from Civic Activities	-1.070***	
Exclusion from Cultural Activities	-0.928*	
Exclusion from Local Amenities	-1.736***	
Exclusion from Decent Housing and Public Transport	-0.314	
Exclusion from Financial Products	-0.437	
Exclusion from Common Consumer Goods	-0.215	
Baseline: None		
Excluded from one domain		-0.556**
Excluded from two domains		-1.823***
Excluded from three or more domains		-3.284***
N	8189	8189

5.3.2 Self-perceived social status and Social Exclusion

Given that in theoretical terms, becoming socially excluded is expected to reflect the exclusionary practices of the socially included; we could expect those who are socially excluded to consequently have lower self-esteem than those who are not socially excluded. The majority who have been socially excluded are likely to have become so involuntarily, at least initially, which may alter their perception of their social status. We investigate this through examining a variable collected in ELSA where respondents were asked to indicate where they were placed in society in terms of being better or worse off on a scale of zero to one hundred. Those who were faring the worst were those defined as having 'the least money, least education, and the worst jobs or no jobs' while those who were faring the best were those described as having 'the most money, most education, and the best jobs'.

Most people placed themselves in the top half of society, although 18 per cent of our longitudinal sample placed themselves in the bottom half of society in 2002, and 21 per cent did so in 2008. We would expect a higher proportion of those who were socially excluded in 2002 to rate themselves within the bottom half of society in 2008, and explore these relationships using a full set of controls (outlined earlier in table 18). Annotated results are presented in table 19 and figure 22[16], which show that exclusion from social relationships in 2002 and exclusion from cultural activities were both associated with a greater likelihood of low perceived social status in 2008 (OR: 1.515 and OR: 1.328 respectively). Unusually, despite social status having been defined in socioeconomic terms, domains reflecting more material aspects of exclusion in 2002 were not significant predictors of social status in 2008. Nevertheless, in considering overall exclusion, relative to those who were not excluded on any domain of exclusion, people who were excluded on three or more domains of social exclusion in 2002 were three times more likely to have a low perceived social status; those excluded from two domains almost twice as likely (OR: 1.803), and those excluded from one domain 34 per cent more likely (OR: 1.344).

A number of other factors are likely to explain these patterns that influence both social status and social exclusion that are not captured within our set of controls, and as was the case in earlier analyses we construct fixed effects models to overcome this possible source of error. A fixed effects structure also allows us to infer how changes in social exclusion status are associated with

[16] Full output available on request.

changes in self-perceived social status. In the fixed effects models, we do not observe changes in overall exclusion status, or changes in exclusion from social relationships and cultural activities (found to be significant in ordinary logistic regression), to be significantly associated with developing a low perceived social status. However, those who became excluded from common consumer goods over the study period were also more likely to have low self-perceived social status (OR: 1.919).

5.3.3 Self-perceived financial uncertainty and Social Exclusion

Financial uncertainty among ELSA respondents was measured through responses to questions on the chances that 'at some point in the future' they would not have enough financial resources to meet their needs. These responses were then grouped, and those who were in the top decile of certainty that they would not have enough financial resources (most financially uncertain) were compared to those who were more certain that they would have enough financial resources. We could expect those who are socially excluded to be at greater risk of financial uncertainty because of the links between social exclusion and material disadvantage. However, we could also expect some impact from the relationship between social exclusion and wellbeing described earlier, and the potential for poorer wellbeing to translate into a more negative outlook for the future. In addition, socially excluded older people may have fewer social resources from which they can draw in times of crisis.

We find little evidence that any single indicator of social exclusion is associated with a more uncertain (self-perceived) financial future, although do find that experiences of social exclusion combined in 2002 are associated with a higher odds of financial uncertainty in 2008. Specifically, being excluded on three or more domains in 2002 was associated with a 2.5-fold rise in the risk of financial uncertainty in 2008, compared to not being excluded on any domain (OR: 2.538); significant differences were also observed for those excluded on two or one domains (figure 22). When we examine change within individuals using our fixed-effects models, we observe that those who became excluded from social relationships were 80 per cent more likely to be uncertain about their financial future (OR: 1.810). This could indicate the contribution of social relationships in helping older people plan and manage their financial security. Becoming excluded from social relationships could, for example, be a proxy indicator for an incidence of widowhood or divorce, which may have catastrophic consequences on older people's future financial security. These latter results control for unobserved factors that may influence both social relationships and uncertainty about the financial future, which in this case could revolve around a number of personality factors such as anxiety or confidence for example.

5.3.4 Experiences of Loneliness and Social Exclusion

Current government policy has ostensibly shifted away from social exclusion, with some focus now given to loneliness and isolation. Independent of policy, loneliness is also associated with poorer mental health, and can be a marker of poor social support necessary to help older people live independently. Here we examine the way that social exclusion status in 2002 can predict experiences of loneliness, and find that experiences of cultural exclusion are statistically

significantly associated with loneliness in 2008, with those excluded 68 per cent more likely to have reported being lonely in the past two weeks before the ELSA interview than those who were not excluded on this domain. Overall experiences of exclusion in 2002 were also significantly associated with exclusion in 2008 (figure 22). When we control for unobserved factors (including personality traits, a likely set of predictors of loneliness), and examine the way that changes in exclusion status in fixed effects models are associated with changes in reports of loneliness between the 2002 and 2008 sweeps, we find that those who became excluded from social relationships were three times more likely to report becoming lonely in 2008 (OR: 3.339). This is an expected finding to some degree, highlighting that negative changes in social relationships are significantly associated with becoming lonely. We also find that those who report becoming excluded from housing and public transport also report becoming lonely between 2002 and 2008 (OR: 2.093), a possible indication of the importance of accessing public transport on the mental health of older people and particularly in maintaining personal contacts. Finally, those who became more excluded in general were also those who became more lonely; for example those who became excluded from three domains were almost three times more likely to become lonely by 2008 (OR: 2.844, table 21).

5.3.4 Experiences of Material Poverty and Social Exclusion: Cutting Meals

Those who are socially excluded may be expected to experience material hardship in the form of cutting meals more than those not excluded. Respondents who cut or skip meals because of financial pressures may not only be lacking socioeconomic resources, but may also be lacking social support, necessitating drastic measures. Cutting meals in 2008 was associated with prior exposure to exclusion from financial products in 2002, as well as overall experiences of exclusion (table 19 and figure 22). However, only a very small number of ELSA respondents in our longitudinal sample reported changes of behaviour in terms of cutting or skipping meals between 2002 and 2008, and we were therefore unable to interrogate the results further using fixed effects models.

5.3.4 Experiencing Unmet Social Care Needs and Social Exclusion

The final outcome of social exclusion we examine is an indicator of unmet need for those who experience difficulties in carrying out the Activities of Daily Living (ADL) or the Instrumental Activities of Daily Living (IADL). We initially distinguish three groups – those with no difficulties in carrying out ADL/IADLs, those with difficulties and who receive some form of help, and those who experience difficulties and receive no help; we are particularly interested in distinctions between the latter two groups. While we could expect those who are socially excluded to be at greater risk of experiencing difficulties in carrying out ADLs/IADLs given the links between health and exclusion identified earlier, we may also expect differences within this group. We would expect socially excluded people to experience unmet need for assistance in carrying out ADLs/IADLs following on from lower levels of social support and greater difficulties in negotiating assistance and, where applicable, in paying for assistance.

Experiencing some form of exclusion in 2002, relative to not experiencing exclusion, was significantly associated with a higher likelihood of experiencing unmet need for assistance with ADLs/IADLs in 2008 compared to receiving assistance with care needs. Those who were excluded from three or more domains were over 90 per cent more likely to experience unmet need compared to those not excluded (OR: 1.941) – similar results were also observed for those excluded from two domains or one domains although these results were not attributable to a one single domain of social exclusion. For computational reasons, we combine the categories of having no care needs or receiving assistance with care needs in our fixed effects models and compare the impact of being socially excluded with those with care needs and not receiving assistance; having done so we observe few statistically significant results, although the process of combining categories may be a factor in this non-significant result.

5.4 What impact can social exclusion have on people's lives? Summary and Conclusions

In chapter 1 we discussed the way in which the concept of social exclusion has, to a certain extent, been side-lined in the current policy environment. This has left a gulf, in the terminology to describe people who are excluded in various aspects of their lives. Often these aspects overlap, although this is not a prerequisite; for example, it is possible for people to be excluded from social relationships or civic activities, but not on any other aspect of their lives. The current policy environment appears to favour the material aspects of exclusion, and less so the other aspects, particularly those that are most associated with non-material wellbeing that can serve as markers of social isolation and loneliness. Both loneliness and social isolation are particularly important to older people, as they can lead to a loss in independence, autonomy, control, self-realisation, and pleasure – ultimately some of the key ingredients that form quality of life. Poor quality of life should be a government priority from a moral perspective; however, there may also be an economic case to be made for maintaining and improving people's quality of life, given that low quality of life is associated with a range of negative health outcomes (for example Bilotta et al 2011).

Our results here demonstrate that the experience of social exclusion is associated with a lower quality of life. Older people who become excluded from social relationships, cultural activities, civic activities and access to information, local amenities and decent housing and public transport were more likely to also experience a decline in their quality of life than older people who did not report becoming excluded on these domains. We also found that the experience of social exclusion significantly patterned self-perceived social status, financial uncertainty and unmet social care needs – across all three of these outcomes being multiply excluded or severely excluded in 2002 (excluded from three domains or more) was associated with lower self-perceived social status, greater financial uncertainty, and a higher chance of having care needs but not receiving assistance with these in 2008, compared with not being excluded across any domain. By far the most persuasive evidence of the damaging outcomes of social exclusion came when examining the impact of exclusion on loneliness. When we constructed a fixed effects regression model, which allows us to control for unobserved variables through examining differences within individuals, we observed that becoming excluded from social relationships increased the likelihood of reporting loneliness between 2002 and 2008 by a multiple of three, compared to remaining not

excluded. Overall, becoming excluded from three or more domains of exclusion was also associated with almost a three-fold increase in the risk of reporting becoming lonely. These results highlight the possible conflation between new and old policy directions in terms of social exclusion and the more recent focus on social isolation.

The results in this chapter add to the evidence that social exclusion among older people is associated with a range of deleterious outcomes, although as discussed in the concluding chapter, we are careful not to overstate these results, which do not amount to causality per se, although do highlight some of the likely outcomes of social exclusion. Furthermore, as we also discuss in the next concluding chapter, we are likely to underestimate the effects of being socially excluded and while we explore the outcomes of being socially excluded mainly from a health perspective, with many of the outcomes related to a loss of autonomy and independence, the outcomes of exclusion are likely to be much more pervasive than is the case presented in this chapter; further research is needed to unpack many of these relationships.

Chapter 6: Conclusions and policy implications – does social exclusion still matter for older people?

6.1 Social exclusion among older people

In this report, we analysed evidence from the English Longitudinal Study of Ageing collected in 2002 and 2008 to examine how patterns of social exclusion changed across time and within individuals across this period. Using a framework originally developed by Barnes et al (2006), we conceptualised social exclusion among older people as being exclusion from one of seven individual domains: i) social relationships; ii) cultural activities; iii) civic activities and access to information; iv) local amenities; v) decent housing and public transport; vi) common consumer goods; and vii) financial products. People become socially excluded through the exclusionary practices of the socially excluded, leading to a detachment in the common values and practices between the socially included and excluded (Barry 2002). Social exclusion has been disproportionately explored through the lens of children and young people, and socially excluded people are those who are unable to reach their full potential across several lifecourse domains. For older people, social exclusion is viewed from a different theoretical standpoint and pertains more to maintaining independence and autonomy than to achieving one's potential[17] – each of the domains outlined above can be viewed as a necessary component for keeping older people independent and autonomous. It is also no coincidence that autonomy is also identified as key to maintaining and preserving quality of life (Hyde et al 2003). Keeping older people independent and autonomous could be regarded as a societal obligation from a moral and human rights perspective, several studies also highlight the fiscal benefits that prolonged independence among older people can lead to (for example Kneale 2011b). While the nature of social exclusion and the intended outcomes of policies aimed at reducing social exclusion, can be viewed as apolitical in one sense, as we discussed in Chapter 1, social exclusion as a term has largely fallen by the policy wayside. This has left a void in terms of policies that explicitly aim to simultaneously improve material and non-material aspects of older people lives (or claim to do so), and certainly a void in terms of policies that aim to reduce levels of social exclusion.

[17] Although, maintaining independence and autonomy could be viewed as necessary components to fulfilling one's potential regardless of lifecourse stage.

KEY FINDINGS

1. Levels of Social Exclusion rose slightly between 2002 and 2008 among older people aged 50 and above. In 2002, 54.4 per cent were not excluded on any domain, reducing to 52.3 per cent in 2008.

2. Younger 'older' people (50-59) have higher rates of social exclusion compared to previous cohorts of the same age. Among those aged 50-54 years, 12.9 per cent were excluded on two or more domains in 2002 compared to 17.9 per cent in 2008.

3. Rates of exclusion from decent housing and public transport and local amenities rose sharply between 2002 and 2008 among the population aged 50 and above as a whole – by over 5 per cent to 15.6 per cent in the case of the former and 16.2 per cent in the case of the latter.

4. As people age, their chances of becoming socially excluded are higher than their chances of moving out of exclusion or becoming less excluded – 23.9 per cent of people became more excluded between 2002 and 2008. However, social exclusion isn't inevitable with advancing age, and many older people experience an improvement in social exclusion status – 18.9 per cent of people became less excluded, including 19.4 per cent of those aged 80 and over. In addition, many of the indicators of social exclusion are not fixed, in unexpected ways.

5. Approximately half of people who were excluded from social relationships, local amenities, and civic activities and access to information in 2002 remained excluded in 2008.

6. People with earlier experiences of social exclusion (in 2002) are more likely to report poorer wellbeing, lower self-perceived social status, greater financial uncertainty, feeling lonely, cutting meals because of financial difficulties, and receiving no assistance with the activities of daily living among those who experienced difficulties (in 2008). For example, the odds of an older person who was excluded on three or more domains of exclusion in 2002 reporting feeling lonely in 2008 was 4.35 times higher than among those who were not excluded on any domain.

7. People who became more excluded between 2002 and 2008 were also at greater risk of reporting a lower quality of life score and of becoming lonely over this time. Between 2002 and 2008, becoming excluded from social relationships, civic activities and access to information, cultural activities, and local amenities was

associated with a lower wellbeing score; becoming excluded from social relationships and decent housing and public transport was associated with becoming more lonely between sweeps. For example, becoming excluded from local amenities over the study period was associated with a 1.7 point decrease in quality of life score (CASP) over the study period. Becoming excluded from decent housing and public transport was associated with a two-fold increase in the odds of becoming lonely.

8. Older men were more likely to be excluded from social relationships; older women were more likely to be excluded from cultural activities. In 2008, women had a 57 per cent lower odds of being excluded from social relationships compared to men although had 44 per cent higher odds of being excluded from cultural activities.

9. Older people from ethnic minorities are more likely to be excluded from financial products. In 2008, the odds of an older person from an ethnic minority being excluded from financial products were three times higher than the odds of a white older person.

10. Exploring disadvantage from a multifaceted perspective is useful as material and non-material domains of exclusion predict one another. For example, we identified links between exclusion from social relationships in 2002 and later exclusion in 2008 from financial products and common consumer goods – the odds of people who were excluded from social relationships in 2002 being excluded from financial products and common consumer goods in 2008 were 2.5 and 2.7 times higher respectively compared to people who were not excluded from social relationships in 2002.

11. Changes in health between 2002 and 2008 were associated with negative movement in terms of social exclusion. Deteriorating self-rated health was associated with becoming excluded from local amenities; taking less exercise was associated with becoming excluded from social relationships; and becoming depressed was associated with becoming more excluded overall and becoming excluded from cultural activities. Differences by changing health status were of a substantial magnitude – for example, people whose self-rated health changed from very good to bad/poor were over five times more likely to become excluded from local amenities compared to people whose health remained very good.

12. Examining changes in care giving status using fixed effects models revealed that those who assumed care giving duties between 2002 and 2008 were more likely to become excluded from civic activities and access to information, excluded from decent housing and public transport, and excluded from common consumer

goods. Becoming a care giver between 2002 and 2008 was associated with a two fold increase in the odds of experiencing greater levels of overall social exclusion between 2002 and 2008.

13. Older people who live in rented accommodation and/or who live alone are more likely to be socially excluded. Those who transition to live alone are at particularly elevated risk of becoming socially excluded – for example those who moved from living alone to living as part of a couple (with no children) exhibited a 68 per cent reduction in the odds of becoming multiply excluded (excluded on two or more dimensions) between 2002 and 2008 compared to those who stayed living alone; conversely, those who moved from being resident in a couple household to living alone were over three times more likely to become multiply excluded over this period.

6.2 Describing and understanding a rise in the number of socially excluded older people

Across just over half a decade between 2002 and 2008, our cross-sectional results demonstrated that the number of older people aged 50 and above who were socially excluded in any form rose by two per cent. Most of the two per cent rise in the numbers excluded in some form between 2002 and 2008 was solely attributable to a rise in the numbers excluded on one domain alone – the numbers excluded on two domains (multiply excluded) or three domains (severely excluded) were unchanged or slightly lower among the population aged 50 and over as a whole.

As is the case in some of the literature (Burchardt et al 1999), few people were simultaneously disadvantaged on all domains of exclusion (none in 2008), and furthermore, exclusion was a relatively fluid concept, with people moving in and out of exclusion between sweeps. It should also be noted that this is dependent on where the threshold of exclusion is set – while in these analyses we adopt thresholds set in the literature that classify around ten per cent of people as being excluded on any given domain, further research may find that this threshold should be set at a different point.

This rise in the numbers excluded on one domain was mainly attributable to the substantial rises in the number of people aged 50-54 years and 55-59 years who were socially excluded, as well as rises in those excluded from basic services and excluded from decent housing and public transport. Conversely, we observed substantial declines in the number of older people excluded from common consumer goods, with the proportion excluded declining by over half during a relatively short period. In terms of exclusion from decent housing and public transport, older people were most likely to report difficulties in accessing public transport that was convenient and affordable. The rise in exclusion from basic services was mainly attributable to older people reporting greater difficulties in accessing local shopping services and local hospitals. Accessible public transport and the availability of local services are key tenets of lifetime neighbourhoods –

neighbourhoods that support people of all ages (Harding 2007). This could indicate that instead of seeing neighbourhoods becoming more accessible to older people, that the reverse was true in terms of these basic services and public transport.

However, it should also be noted that for other domains of social exclusion, the picture changed very little, and that levels of exclusion remained around the ten per cent mark. This was true for exclusion from civic activities and access to information, where there was a half per cent decrease in the proportion aged 50 and above excluded. When we investigated this further, we found that rates of civic participation had changed little, although there had been more substantial changes for patterns of accessing information. For the majority of the sample, newspaper readership had declined, although there had been a compensatory rise in internet usage, pointing at changes in the way the older people access information. The exception to this rule was found among the oldest age groups, where newspaper readership had declined with no compensatory rise in internet usage – for example there was just a 0.2 per cent rise in the proportion of people aged 85 and above using the internet in 2008 compared to the same age group in 2002. Likewise, levels of exclusion from cultural activities had changed very little, and there were only comparatively modest declines in the proportion aged 50 and over who were excluded from social relationships and financial products. Furthermore, as we discuss below, longitudinal evidence highlighted that as people age, they are more likely to become excluded than to transition from being excluded.

In summary:

- Levels of exclusion rose slightly, mainly due to:
  - Rises in older people excluded on one domain,
  - Rises in older people excluded from basic services
  - Rises in older people excluded from decent housing and public transport
  - Rises in exclusion among older people aged 50-54 and some aged 55-59 who were new to the study

6.3 Ageing and Social Exclusion – Why we are still not getting it right and identifying future causes for concern

The state of social exclusion exhibited a remarkable degree of fluidity, and relatively high numbers of people transitioned in and out of being classified as socially excluded. For the majority, however, this fluidity was associated with an increase in the likelihood of becoming socially excluded. Over the half decade between 2008 and 2002 among individuals, around 24 per cent of those aged 50 and above became more socially excluded in some form, and 19 per cent became less excluded in some form. However, this varied substantially by age group. Those aged 50-59 in 2002, approximately equal numbers became more excluded (22%) as became less excluded (21%); for those aged 80+, over twice as many became more excluded (35%) as became less excluded (19%). There was also considerable variation by domain of exclusion. In terms of exclusion from decent housing and public transport, there were indications that those in the oldest age groups became less excluded from this domain over time. This was the exception to the rule, and for the majority of the individual domains of social exclusion, the evidence suggested that for all people aged 50 and above, that the risk of becoming excluded was either approximately equal

or higher than the chance of becoming not excluded - for those in the oldest age groups the risk of becoming more excluded over time in most cases far outweighed the chance of becoming less excluded. Generally, with the exception of exclusion from decent housing and public transport, those in the oldest age groups were already more excluded than younger age groups in 2002, and with the passage of time to 2008, became excluded further.

We were also interested in the way in which people who were socially excluded in 2002 remained excluded in 2008. We found that those who were excluded from social relationships, local amenities, and civic activities and access to information were most likely to remain excluded – around half of those excluded in 2002. In addition, some groups were particularly likely to remain excluded; for example, almost two-thirds of people who were excluded from social relationships and lived alone in 2002 were still excluded in 2008. For these domains in particular, social exclusion is a persistent state (or 'sticky' state) for a substantial portion of older people with earlier exposures – here the analyses demonstrate that approximately half of people excluded on these domains are still excluded in the same way six years later. Six years of experiencing exclusion on any one of these domains is likely to have a substantial negative impact on older people's outcomes, not least their quality of life. Furthermore, almost two-thirds of people who were excluded on at least one domain in 2002 (64.3%) were also excluded on at least one domain of social exclusion in 2008. This evidence builds on the earlier theme that one of the best predictors of social exclusion at any given point is previous experience of social exclusion. These results highlight the specific domains of exclusion that are most persistent among individuals across time. Should policy-makers regard persistent exclusion as a priority, these results suggest that interventions should focus on these domains; however, as was outlined in the earlier chapters, levels of persistent exclusion not only differ between domains, they also differ according to older people's characteristics.

It is clear that the risk of social exclusion and the ageing process are intimately twined with one another. Transitions that characteristically mark the ageing process for many – for example retirement, widowhood, or loss of health – can culminate in a loss of independence and autonomy that is suggestive of synonymy with social exclusion. From the perspective of policy-makers, the trend towards greater levels of social exclusion with time and age suggests that society is still unable to prevent older people from becoming socially excluded. In terms of the domain that bucks this trend, exclusion from decent housing and public transport, where the oldest age groups actually become less excluded over time, we can consider several explanations as to why those in post-retirement years enjoy lower levels of exclusion. Firstly, in terms of public transport, those in post-retirement years are eligible for bus passes, which offer free bus travel. They are also eligible for railcards which offer a third off the cost of standard fares. Given that cost and convenience were some of the main barriers to using public transport (Chapter 3), the combination of discounted or free travel, as well as the convenience of not being restricted to rush hour travel for work, could be one set of explanatory factors for the distinction between the exclusion rates between the pre and post-retirement age groups. Similarly, while many older people do continue to live in substandard housing, many agencies exist to help older homeowners and private sector tenants to carry out essential repairs to their homes. These services are often provided at a discounted rate, although people below pensionable age are generally not eligible. Perhaps it could be argued that results reflect the fact that not one of the other domains of social exclusion

have such transparent policies, discounts, and incentives that help people, especially those in the oldest age groups, from becoming excluded with age.

Nevertheless, it is important not to pitch the results for exclusion from decent housing and public transport as necessarily being exemplary of the success of older people's policies – they could simply highlight that those approaching retirement may have been overlooked in policy terms and the failure of policy to consider ageing as a process. Among those in the younger age groups of this study (50-54 and 55-59 years), successive cohorts appear to be faring less well, with those in 2008 more excluded than those in 2002 in terms of exclusion from cultural activities, basic services, financial products, and decent housing and public transport. Rising levels of exclusion for this group does not bode well for plans for keeping older people active for longer in the workforce, particularly given the negative impacts of social exclusion on health and wellbeing. Some of the underlying mechanisms in explaining this trend may derive from changes in lifecourse transitions exhibited between these age cohorts that may impact on family caring patterns and patterns of financial support. For example, among those aged 50-54 years in 2002, between 76-81 per cent would have had at least one child by the age of 30; for those of the same age in 2008, 69-73 per cent would have had a child by the age of 30 (Office for National Statistics 2009). The higher rates of postponement of fertility among the more recent cohort could suggest that they are more likely to be supporting financially dependent children. The more recent cohort may also be more likely to be supporting dependent parents through changes in longevity – life expectancy rose from 80.5 years to 82.3 for women and 77.6 from 75.8 years for men even over the short six year period between interviews (Office for National Statistics 2010). Equally, period effects manifested as changes in the labour markets and housing markets may act independently, or may amplify the cohort differences described above. When we control for financial status and care giving in our models, the effect of age attenuates somewhat for some individual domains. However, we continue to observe an effect where those aged 50-54 years were at high risk of multiple and severe exclusion in 2008.

The longitudinal results suggest that the risk of exclusion increases with age, although it is important to note that social exclusion is not inevitable with advanced age, and substantial numbers of people in the oldest groups actually became less excluded over time. Further research will shed light on the characteristics and life course events that predict such transitions – our results help to shed light on the predictors of exclusion, but not so much the characteristics or events that help people stay resilient and out of social exclusion, or actually develop resilience and move from being excluded. Although the population aged 80+, for example, were less excluded in 2002 than the population of the same age in 2008, the longitudinal evidence could suggest that this group is still the most vulnerable to becoming excluded over time, and overall as a society, we are still unable to prevent increasing age being synonymous with increasing levels of social exclusion. If the cost of an ageing society is to be met, at least in part, through keeping older people independent and autonomous for longer, then these results are of concern.

In summary:

- The new 50-54 years cohort appeared particularly vulnerable to being socially excluded
- The 80+ age group was the most vulnerable to becoming more socially excluded over the study period, with high numbers becoming more socially excluded

- Successive cohorts of the youngest age group in the study (50-54 years) appeared to become more socially excluded over the study period

6.4 Who is at greatest risk of social exclusion among those aged 50 and above?

In this study we included many factors in our models and described the results for many of these. Unsurprisingly, we found that those with a social profile that is usually associated with material disadvantage or poverty were statistically significantly more likely to experience social exclusion. For example, we found that non-white older people were over three times as likely to be excluded from financial products as white older people in 2008. This led us to speculate on issues of access to financial products through information, affordability, and physical accessibility, as well as issues related to discriminatory practices. Similarly, those in rented accommodation were four times more likely to be excluded from financial products in 2008. This suggests that those with characteristics known to be disadvantageous across other stages of the lifecourse were also disadvantaged in older age – exclusion from financial products serves not only as a marker of poorer financial circumstances, but also as a marker that older people will be less able to alter their financial circumstances and to weather financial shocks. When we analyse movement in terms of exclusion status longitudinally, we find that those who were in social housing in 2002 were 87 per cent more likely to become excluded from decent housing and public transport, and three times as likely to become excluded from financial products, than those in outright owner occupied housing by 2008. These results suggest that housing tenure is a good predictor of older people who will experience difficulties in either accessing information about financial products or difficulties in being granted access to financial products, as well as those who are likely to experience difficulties in accessing good housing or public transport.

Older people who were depressed in 2002 were twice as likely to be excluded from social relationships in 2008, compared to older people who were not depressed in 2002. We also find strong relationships over time between poorer self-rated health and a number of individual domains of exclusion. Our analyses indicated that for older people, the effect of poor self-rated health is to raise the risk of exclusion from services and amenities in particular, while the effect of poorer mental health raises the risk of exclusion from social relationships. These longitudinal models offered compelling evidence given that they included previous exclusion status. Early models did not find caring duties to be especially strongly associated with social exclusion; however, when we explored fixed effects models, we found that becoming a care giver between 2002 and 2008 was statistically significantly associated with becoming excluded from civic activities and access to information, exclusion from decent housing and public transport, and exclusion from common consumer goods. The fixed effects models controlled for unobserved variables that may have led to the spurious non-significant results in earlier logistic regression models.

Not all of our findings were expected. Longitudinally, we find men and women are not significantly different in their risk of becoming multiply or severely excluded, but women are around 33 per cent less likely to be excluded from social relationships and 30 per cent more likely to be excluded from cultural activities in 2008, regardless of their observed characteristics in 2002. However, it should be noted that women are more likely to possess other disadvantageous characteristics such as

low education, low income, high levels of living alone, and are more likely to live in rented accommodation. Our null effect in terms of gender and overall exclusion occurs despite that many older women will have spent the majority of their lives in a societally marginalised position, certainly in terms of labour market opportunities. Men's higher likelihood of being excluded from social relationships is being addressed through initiatives such as 'men in sheds', based on a successful Australian model of community activity, informal learning, and social participation (Golding 2011). Our findings appear to suggest that such initiatives should expand in terms of geographic scope. Similarly, exclusion from cultural activities suggests that there is greater scope for offering incentives and discounts to encourage female participation in cultural activities, as well as a need for further research to better understand the mechanisms of gender differences in exclusion from cultural activities.

These analyses highlight which factors are important in predicting future patterns of social exclusion among older people; however, it is beyond the scope of this report to discuss all the factors individually that were included in our models. Nevertheless, we can conclude that levels of social exclusion overall appear to be rising, in ways discussed earlier, and that for most domains, as people age they are more likely to become excluded, with physical and mental health status, gender, housing tenure, highest qualification, and living arrangements, among others, significantly moderating the risk of becoming excluded with age.

Many other factors that are likely to be significant explanatory components are absent from our models, for example widowhood status, sexual orientation, a number of neighbourhood level variables, and many others. Our fixed effects models assume that these unobserved variables were fixed between 2002 and 2008; these models find that changes in health between 2002 and 2008 were associated with negative movement in terms of social exclusion, as were transitions to living alone. Deteriorating self-rated health was associated with becoming excluded from local amenities; taking less exercise was associated with becoming excluded from social relationships; and becoming depressed was associated with becoming more excluded overall and becoming excluded from cultural activities. In addition, becoming a carer (described earlier) and moving to live alone was associated with increased odds of becoming excluded from social relationships and becoming excluded from financial products.

In summary, what our analyses do demonstrate successfully is the complexity of both measuring and analysing social exclusion, a challenge which we have attempted to address in this report, although we acknowledge there is ample room for improvement.

6.5 Why does social exclusion still matter?

One of the strongest predictors of exclusion in 2008 was previous exclusion status from the same domain; this was particularly true for exclusion from common consumer goods, civic activities and access to information, and social relationships. However, we also found a number of instances where non-material domains of social exclusion were significantly associated with material domains of social exclusion (and vice versa). This lends weight to an argument for the consideration of non-material domains of exclusion in assessing disadvantage, perhaps

particularly in the case of older people where non-material domains are enablers to maintaining independence.

However, we presented further evidence of the importance of assessing disadvantage in a multifaceted way, as is the case for social exclusion, through examining the impact of earlier exposure to different domains of social exclusion on outcomes measured in 2008. Our final set of results in Chapter 5 demonstrated that the experience of social exclusion is associated with a lower quality of life. Essentially, when these aspects of older people's lives deteriorate, they directly lead to a decrease in quality of life. While composing an economic argument for the benefits of maintaining quality of life among older people is challenging, there is a transparent moral argument for doing so. In addition, through impacting on health outcomes (for example Bilotta et al 2011), but also in other ways through keeping older people actively contributing through volunteering or providing care, policy-makers should be prepared to accept that maintaining and raising quality of life is a necessity not a luxury for older people, and the wider community and society. In addition, we also demonstrated that people with earlier experiences of social exclusion (in 2002) are more likely in 2008 to report poorer wellbeing, lower self-perceived social status, greater financial uncertainty, feeling lonely, cutting meals, and receiving no assistance with the activities of daily living (among those who were most likely to be in need of assistance). These results suggest that the impact of being socially excluded pervades outcomes reflecting both material and non-material circumstances. We also present evidence from fixed effects models that examine changes in these outcomes, finding that overall exclusion was a significant predictor of wellbeing and loneliness. Between 2002 and 2008, becoming excluded from social relationships, civic activities and access to information, cultural activities, and local amenities was associated with a lower wellbeing score; becoming excluded from social relationships and decent housing and public transport was associated with becoming lonelier between sweeps.

In this research, we only examined a limited set of outcomes on older people of being socially excluded– there are many more. However, our evidence gives a persuasive argument of the need to consider both material and non-material domains of older people's lives to understand the outcomes of older people. We also noted the close relationships between material and non-material domains over time, and how earlier exposure to exclusion on non-material domains was associated with a higher likelihood of exclusion from a material domain at a later point, and vice versa. These findings highlight the importance of acknowledging the multifaceted nature of disadvantage, as was the case with the notion of social exclusion. Social exclusion, as a term, has virtually disappeared from current national policy, being associated with the previous Labour government, although we would emphasise that the notion of a relationship between material and non-material domains is non-partisan. It would not be an accurate representation to suggest that a recognition of the importance of non-material factors has disappeared from public policy altogether - indeed the present government is set to measure the nation's happiness and wellbeing, as well as planning to ensure 'social justice' for all. However, the advantage of social exclusion as a policy focus was the full recognition to the multifaceted nature of disadvantage, as well as the equal weight placed on material and non-material domains. These advantages may explain why the concept and terminology remain in use in European and UN policy. Given that our results emphasise the usefulness of social exclusion in understanding patterns of disadvantage, and for

older people can represent a shorthand way of expressing the domains of social participation necessary to maintain independence and autonomy, the current UK policy void in this respect and the abandonment of the notion of social exclusion, is likely to be at the detriment of older people.

6.6 What are the limitations to the research?

In this research we make the following broad points: that social exclusion increased slightly between survey points and that social exclusion remains a valid concept because of both the irrefutable link between material and non-material domains of poverty and because of the association between social exclusion and a number of outcomes including wellbeing. However, there are some limitations to the research that serve to caveat our results. One of the main limitations of the research is that attrition, which as discussed in Chapter 2 is likely related to social exclusion, serves to both limit our sample size and potentially make the sample unrepresentative. Attrition weights will partially correct for this; however, in this report, our longitudinal analyses in particular are likely to have led to an underestimate in the level social exclusion as well as the numbers who became socially excluded. The limited sample size also means that the effect of social exclusion among small groups of older people, such as non-white older people or those in privately rented accommodation, was likely to have been overlooked or underestimated because of a lack of statistical power. We have also noted throughout that our models are likely to have omitted a number of variables that may help to further understand patterns of social exclusion, but whose omission could bias our estimates, although our fixed effects models help to alleviate potential bias that this may cause.

Three further limitations are worthy of mention. Firstly, while we are careful to avoid the language of causality when discussing our results, it is inevitable that some intonation of causality may be derived from our results. As was noted earlier in some of the chapters exploring the results however, we are not able to fully ascertain whether social exclusion causes deleterious outcomes or whether deleterious factors cause social exclusion. We referred to this as something of a chicken and egg parable and it is likely that there is something of a symbiotic relationship between social exclusion and negative outcomes – in this sense social exclusion is both a marker and influencer of negative outcomes. Secondly, our conception of social exclusion, while based on an existing framework in the literature (see Barnes et al 2006), is still arbitrary to some extent. The original framework defined those with the ten per cent lowest scores on any given domain as being socially excluded, and while the use of thresholds is common in social exclusion research, older people themselves may perceive that the location of these threshold points should be located at very different points. This may be particularly relevant given that we use the same thresholds for the whole of the over 50 population, despite the fact that this population is very heterogeneous. In addition, our use of thresholds, particularly in our longitudinal analyses, may overlook movement within these – for example and older person may have experienced an improvement in terms of their social exclusion score, although may still be classified as excluded at both interview points because of the cut-off point used for defining those as socially excluded. Thirdly, our domains of exclusion, are in part driven by theory, but also partially reflect the availability of the data available in ELSA. As such, some indicators which would have been useful in constructing our domains of

social exclusion, such as an indicator of going to a pub or social club in constructing our measure of exclusion from cultural activities, were absent.

While these potential limitations do represent possible caveats to the results, they do not detract from the recommendations below. In addition, it is intended that these results will serve as a springboard for further investigation – for example there is further scope for understanding change within individuals through including data from 2004 and 2006 in our fixed effects models. As was stated earlier, we suspect that most of these limitations lead to an underestimate of the level and consequences of social exclusion for older people.

6.7 How should policy-makers respond to these results?

6.7.1 Shift policy directions away from 'older people's policies' to 'ageing policies' in order to tackle increasing exclusion among middle aged people

Older people approaching retirement (50-54) appear to be worse off in 2008 compared to 2002. This is a group that is facing the brunt of increases in state pension age. This is also a group that is likely to be facing the brunt of some demographic changes including caring for parents or older relatives who are living longer but not necessarily healthier, while simultaneously providing resources for longer periods to their adult children. Policy-makers have recently identified the squeezed middle classes as an at risk group (Independent 2011) – this analysis suggests that the squeezed middle age group may also be another at risk group. Although our models accounted for care giving and number of children, our analyses did not account for the potentially increasingly dependent nature of these relationships, which may be instrumental in explaining the elevated levels of exclusion among this age group. Alternatively, changes in working patterns may be another explanatory factor in accounting for the rise in exclusion. However, there is little in the way of clear policies aimed at steering this pre-retirement group towards a better future in older age. Without further research and action, it is questionable whether the previous gains we have witnessed in terms of lower levels of exclusion among those of pensionable age will be replicated. As such we would call for:

- older persons' policies to start earlier, and take on the mantle of 'ageing' as opposed to 'older people'.

Such a shift could also have benefits in terms acknowledging the diversity of older people and in recognising that ageing is a dynamic process that occurs among both those who have already reached what would be conventionally recognised as old age and those who have not.

6.7.2 Allocate the task of measuring and developing strategies to overcome material and non-material disadvantage simultaneously to a specific unit or team within government

The link between material and non-material domains needs to be maintained and reflected in all policy, for older people and more widely among people of all ages. Our analysis in this report highlights the way in which non-material domains of social exclusion can act as risk factors for later experiences of material domains of social exclusion, and vice versa. However, non-material domains and services are often viewed as non-essential by policy-makers, both in central and

local government. For example, it is resources that can potentially help to lower levels of exclusion from civic activities and access to information and that can help preserve levels of social relationships, local amenities, and cultural activities, which are the first to face cuts in funding in times of austerity. The analysis in this report presents evidence which suggests that such an approach may hold long-term negative consequences in terms of the levels of material exclusion – becoming excluded from non-material domains of social exclusion is a risk factor for becoming excluded from material domains. Therefore, here we view social exclusion as an apolitical/academic construct that is useful for policy-makers as a short-hand way of describing people who face a combination of material and non-material deprivation.

However, at the beginning of this report we outlined that despite 'social exclusion' as a term and construct predating the previous Labour government, the current government has disbanded the Social Exclusion Unit, has dropped the terminology of 'social exclusion', and has left a void in its place. Therefore, what appears to be lacking in current government policy is a specific structural framework that allocates responsibility for the measurement and reduction of non-material and material disadvantage in a simultaneous, systematic and cohesive way. Whether the government sticks with the (arguably apolitical) term of social exclusion, or develops new terminology is irrelevant to our call for:

- the allocation of the task of measuring and developing strategies to overcome material and non-material disadvantage simultaneously and cohesively to a specific unit or team within government

Levels of social exclusion among those aged 65+ in 2002 compared with the same age group in 2008 declined – these were age groups that were the focus of policies aimed at tackling social exclusion among older people. However, policies were not aimed as younger older people (50-64), who exhibited an increase in exclusion over the same period, reinforcing our recommendation above.

6.7.3 Improve planning of neighbourhoods for people of all ages to reduce levels of exclusion from local amenities and decent housing and public transport

Creating neighbourhoods for people for all ages gathered some policy momentum under the final years of the previous government, but made relatively little impact on the ground, particularly once the full effects of the financial crisis and recession became apparent (Kneale 2011c). The new coalition government has transformed the way that communities will be developed in future. However, much of the focus has been on housing, and there has been little mention of how neighbourhoods per se should be developed to support people of all ages. For example, the National Planning Policy Framework, which sets out principles for developing neighbourhood development plans, addresses the needs of different age groups, and the challenge of demographic change, only through the guise of housing. There is no mention of the need to plan neighbourhoods to better facilitate people of all ages to traverse the local neighbourhood and to be able to access the full range of amenities needed to prevent deprivation. Building houses to support people of all ages but not neighbourhoods is a false errand. Our results here showed increasing levels of exclusion from decent housing and public transport, with most of the increase

attributable to increases in difficulties in accessing public transport. Similarly, we also presented evidence of increasing difficulties in accessing local amenities, particularly in accessing local shopping facilities and hospitals. We would therefore call for the next National Planning Policy Framework (post-2012) to explicitly address the issue of neighbourhood design, including public transport and community facilities and amenities to ensure:

- **better planning of neighbourhoods for people of all ages to reduce levels of exclusion from local amenities and decent housing and public transport**

Given that accessing local hospitals was one of the amenities that respondents reported increasing difficulties in accessing, better neighbourhood planning may necessitate the involvement of a greater range of stakeholders than is usually the case, including the health sector. The forthcoming changes in health service delivery may provide opportunities for greater collaboration and integration of health services in neighbourhood design.

6.7.4 Instigate further research into the trigger factors and roles of public policy and services in helping older people move from being socially excluded

This report identified that social exclusion was not inevitable or irreversible with age. We identified several instances where older individuals became less excluded between 2002 and 2008. However, while we identify many of the characteristics associated with becoming more (or less) excluded over time, there is considerable further work to identify other trigger factors associated with positive movement in terms of social exclusion. This work could better link policy developments and initiatives to examine evidence for improvements in levels of exclusion. We view this report as uncovering many trends worthy of further investigation and requiring:

- **further research into the trigger factors and roles of public policy and services in helping older people move from being socially excluded**

6.7.5 Encourage greater development of outreach provision to reach the hardest to reach before crises occur

Our analyses highlight that those who were socially excluded in 2002 were associated with higher levels of loneliness, higher levels of cutting meals, and were more likely to receive no assistance with the activities of daily living, despite ostensibly requiring this assistance. Overall, our analyses highlight the precarious position of those who are socially excluded occupy in accessing the necessary services and support that they need. Our concern here is, given that socially excluded people, in theoretical and pragmatic terms, are those who are likely to be less engaged with civic structures and have access to information; are those who have difficulties in physically and economically accessing social, financial, cultural and civic structures and institutions; and are also likely to have lower levels of negotiation skills and fewer avenues of social support to help in accessing services and support; that socially excluded people will remain at higher risk of failing to receive the services and support that they need without a programme of engagement and outreach. Loneliness, cutting meals, and not receiving care to help with the activities of daily living

are negative outcomes in themselves, but can also be viewed as precursors of much more serious, and costly, events.

Providing services is only part of the solution; for socially excluded people, who are detached from many of the institutions and structures that are considered 'standard' among socially included people, these services are redundant without supplementary outreach programmes. Outreach programmes could also be aligned with other government policies, such as the move towards the Big Society, and could encourage more targeted volunteering and advocacy to ensure and encourage those with fewer resources receive the services and support that they may need. We would therefore welcome the development of:

- greater development of outreach provision to reach the hardest to reach before crises occur

6.7.6 Support programmes to encourage the development/uptake of financial products among disadvantaged older people

Disadvantaged groups are at particular risk of exclusion from financial products – two groups identified in this research included those resident in social housing and those from black and minority ethnic groups. In terms of the latter result, further research is needed to investigate which particular ethnic groups were at elevated risk of exclusion from financial products. However, our findings are particularly concerning as they signal that those with the lowest levels of financial resources are also less likely to be able to manage their resources in a way that could enable them to weather financial shocks. This level of financial exclusion highlights the need for the financial sector to engage with older people on low incomes to overcome problems in accessibility. It is unclear from these results whether problems in accessibility include direct criteria on income/wealth eligibility or whether the issues lie with other factors such as the physical accessibility of financial institutions for those from more disadvantaged groups. Further research is needed to tease out these unresolved issues, and specifically to ascertain whether new sets of financial products need to be developed, or whether criteria on existing products need to be modified, or if financial institutions need to provide better information and services around existing products. Nevertheless, we would encourage policy-makers to work with the financial services sector to:

- **support programmes to encourage the development/uptake of financial products among disadvantaged older people**

6.7.7 Development of a widowhood strategy

Our results suggest that transitioning to living alone from being part of a couple has devastating effects in terms of increasing the likelihood of overall exclusion. We found that moving from living in a couple household (no children) to living alone between 2002 and 2008 raised the odds of becoming multiply excluded three-fold. For many respondents, this change would signal occurrences of widowhood, and less so divorce or separation (although divorce rates are thought to be increasing among older people). Therefore, we would recommend the development of a

specific set of strategies and policies to help older people adjust to the loss of a partner, who in some cases will have been a life-long partner. This may help reduce the consequential loss social status that can follow widowhood, which in these analyses is found to substantially raise the risk of social exclusion.

- development of a widowhood strategy

6.7.8 Provision of additional support for carers

Unpaid care is the bedrock of the health and social care system. Analyses by Carers UK suggest that the economic contribution of carers is as high as £119 billion annually (Buckner and Yeandle 2011). Despite the invaluable work of carers, we find that those who became carers between 2002 and 2008 were at a substantially higher risk of becoming socially excluded compared to those who did not become carers. These results suggest that without the:

- provision of additional support for carers

that carers will continue to be socially excluded. This not only has implications for the quality of life of the carer, but also will likely impact on the standard of care delivered to the recipient and the sustainability of individual's long-term informal care arrangements.

6.7.9 Greater investment in physical exercise services for older people with specific focus on how to retain older people in programmes of physical exercise

We find that older people who decreased the level of physical exercise that they took are not only more likely to develop health problems, but are likely to become more socially excluded. Greater investment in resources promoting physical exercise for older people not only represents a relatively cost effective way of improving health; it could also have wider benefits in helping to reduce levels of social exclusion. In particular, many of the arguments for promoting physical exercise and a healthy lifestyle made to older people in public health campaigns are made around the health implications; an alternative message from these analyses is to highlight the way in which decreasing physical exercise can also negatively impact on people's social relationships and the way in which they access local amenities. We would therefore highlight the positive impact on people's health and levels of social exclusion that the following, relatively cheap, measure could have:

- **greater investment in physical exercise services for older people with specific focus on how to retain older people in programmes of physical exercise**

6.7.10 Reduction of gender inequalities in social exclusion through expansion of existing intervention programmes

These analyses have highlighted gender differentials in exclusion from social relationships and cultural activities. Men are much more likely than women to be excluded from social relationships while women are much more likely to be excluded from cultural activities. In the case of exclusion from social relationships, greater geographic expansion of programmes that aim to foster social

relationships for men such as the ‘men-in-sheds’ initiative could have measureable benefits in reducing men’s elevated risk of becoming excluded from social relationships. Similarly for older women, further research to understand the underlying mechanisms may be needed before trialling interventions aimed at reducing women’s elevated levels of exclusion from cultural activities. Such interventions could build on the existing offers and incentives available to older people, such as discounted or free admission. The results here suggest that changes in the activities on offer, the way that these are run, or the way in which they are marketed to attract greater numbers of older women, may have an impact in reducing gender differentials in exclusion.

- reduction of gender inequalities in social exclusion through expansion of existing intervention programmes

Appendix 1 - Glossary

Domains of exclusion: (also referred to as components at times) refer to individual elements of social exclusion such as exclusion from financial products or social relationships

Multiple exclusion: Defined here as when an older person is excluded on two domains

Severe exclusion: Defined here as when an older person is excluded on three or more domains

Overall exclusion: A shorthand term used to denote any form of social exclusion and not referring to a specific domain.

Cross-sectional: Refers to analysis that only explores data from 2002 or 2008, and does not consider change within individuals

Longitudinal: Refers to analysis that explores change within individuals between 2008 and 2008.

Binary Logistic Regression: A model that aims to understand the relative effect of different factors simultaneously on the probability of experiencing a certain condition versus not.

Multinomial Logistic Regression: A model that aims to understand the relative effect of different factors simultaneously on the probability of experiencing a certain circumstance versus not, where the circumstance is one of a number of possible outcomes.

Ordinal Logistic Regression: Where the dependent variable is measured on a scale this model aims to understand the relative effect of different factors simultaneously on the probability of experiencing a higher or lower value on the scale.

Odds Ratio (OR): Deriving from a binary or ordinal logistic regression model, a way of expressing the relative probability that a group will experience a certain condition versus not – values over one suggest that the group is more likely to experience an event; values below one suggest the group is less likely.

Relative Risk Ratio (RRR): Deriving from a multinomial logistic regression model and similar in interpretation to an odds ratio, a way of expressing the relative probability that a group will experience a certain condition versus not – values over one suggest that the group is more likely to experience an event; values below one suggest the group is less likely.

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