

**Shopping and Successful Ageing: A New Approach to Promoting
Health and Wellbeing in Later Life**

**Thesis submitted in accordance with the requirements of the University of
Liverpool for the degree of Doctor in Philosophy by**

Elizabeth Anne Evans

September 2015

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List of Abbreviations

ADL	Activity of daily living
CAPI	Computer assisted personal interviewing
CASP	Control, Autonomy, Self-Realisation and Pleasure scale
CFAS	Cognitive Function and Ageing Study
DWP	Department for Work and Pensions
ELSA	English Longitudinal Study of Ageing
EPC	Economic Policy Committee
HSE	Health Survey for England
IADL	Instrumental activity of daily living
MMSE	Mini-Mental State Examination
NIH	National Institutes of Health
Ofcom	Office of Communications
Oftel	Office of Telecommunications
ONS	Office of National Statistics
PAF	Postcode Address File
PSU	Primary Sampling Unit
SFQ	Shopping Frequency Questionnaire
TUS	United Kingdom Time Use Survey
UKHLS	United Kingdom Household Longitudinal Study
VLA	Value and Lands Agency
WHO	World Health Organization

Chapter 1

Overview

This PhD was funded through the Cognitive Function and Ageing Study (CFAS) Wales and included a sub-sample of its participants. This thesis aims to fill the lacuna in our understanding of the role shopping plays in healthy ageing as there is scant existing knowledge from which to draw. The term shopping is used to refer to activity that takes place around shopping venues and, therefore, is not limited to the purchasing of products. Population ageing means that we need to be more creative about how we promote healthy ageing and shopping might be one such site for intervention. The relationship between shopping and healthy ageing is complex and circular but findings show that shopping activity is a viable area of research that has implications for health and wellbeing.

The structure of the thesis is led by the data so that each empirical chapter focuses on a key concept. Analyses will build on each other through the structure so that variables that are introduced in one chapter will be explored in more detail in other relevant chapters. This means that some of the themes (e.g. gender, marital status) have been artificially separated across chapters but they will be reconfigured in the discussion chapter. To aid navigation of the complex issues addressed in this thesis a proposed model of the mediating role shopping plays in healthy and successful ageing will be introduced in Chapter 2. This model will provide a framework for data presentation highlighting the specific areas of exploration in each chapter. Each of the empirical chapters will follow the same structure and begin with a discussion of the literature relevant to its key theme. Next, the results of analyses will be presented before providing a discussion (including limitations) and concluding with a chapter summary.

All interviewee names used in this thesis are pseudonyms in order to protect the anonymity of the participants. To provide context, participants are referenced in the following way: *name* (pseudonym), *age*, *marital status*, *location* (Wales or Wirral). Furthermore, place names have been anonymised. As many of the participants live in rural areas the names of specific shops have been anonymised as limited

shopping facilities could lead to place identification. The names of shops have been retained only when it is important for analysis and does not compromise anonymity. As shown in Table 1.1, several transcription symbols have been used in the quotations.

Table 1.1. Symbols used in transcription.

Symbol	Explanation
...	Dots indicate ellipses and elisions.
[]	Square brackets indicate the beginning and end of overlapping talk.
(.)	A dot enclosed in parentheses indicates a short silence.
(())	Double parentheses enclose comments such as background noise or the tone of the participant, e.g. ((laughing)).
<>	Angle brackets indicate replaced words to anonymise content, e.g. “Freya” might become <granddaughter1>; “Tesco” might be shown as <large supermarket>.

American Psychological Association (APA) style has been used throughout the thesis for figures, tables and headings (APA, 2001).

Chapter 2 will discuss and critically evaluate the existing research concerning later life, shopping and what it means to age successfully. However, first it is important to briefly mention two of the key concepts being explored in this thesis: later life and shopping. For the purpose of this thesis, ‘later life’ and ‘older age’ (unless otherwise specified) refer to ages 65 and older and the rationale for using this chronological age will be discussed further in subsequent chapters. But it is important to note that, according to the historian Thane (2005), for centuries it has been common practice to consider around age 65 as the onset of old age:

In ancient Greece and Rome, throughout medieval and early modern Europe, in 19th-century North America and Australasia, old age was believed to begin somewhere between ages 60 and 70, as it still is. (p.17)

Although it is acknowledged that those aged 65 and over are not a homogenous group, later life is used as a global reference to this age group and there will be

further demarcation based on demographic variables (e.g. gender, marital status) and/or individual circumstances (such as health status and physical limitations) as appropriate.

It is equally important to stress that 'shopping' is *not* synonymous with 'consumption'. For the purpose of this thesis 'shopping activity' will be considered as a broad term and will *not* be limited to purchasing goods. The term 'shopping' will encompass activities taking place in and around shops and shopping centres (as well as internet shopping when relevant), including browsing and window shopping. Thus, 'shopping activity' also includes activity in which no purchases are made and activity in which purchases are not intended to be made. Throughout the thesis, shopping activity is further divided into food and non-food shopping (i.e. shopping for anything other than food). However, this is not always relevant to analyses or even possible (e.g. when considering one-stop shopping venues) so where there is no demarcation 'shopping' refers to any type of shopping.

Chapter 3 begins by defining the concepts that are central to this current research: later life; healthy ageing and successful ageing; shopping. The methodological approach will be discussed, including the cross phase concurrent design and the methods of data integration. The primary data collection (including sampling) and analysis will be discussed. In addition, descriptions of each of the data sources will be provided.

Chapter 4 is the first of the empirical chapters and will establish the viability of shopping practices as a site for exploring physical health and wellbeing in later life. This chapter predominantly draws from analysis of secondary data sources and by including younger age groups it is possible to demonstrate some of the ways in which shopping activity is influenced by life stage. Findings demonstrate the heterogeneity of shopping practices in later life yet identify the common themes that inform further exploration in subsequent chapters.

Following on from the findings of the previous chapter, Chapter 5 explores the potential relationship between shopping activity, gender and marital status. Data from both primary and secondary sources will be analysed to investigate attitudes to different types of shopping activity. Food shopping often is subsumed under domestic tasks and will be considered in terms of traditional gendered

responsibilities. Of particular interest will be reasons for not enjoying shopping and how they impact on shopping behaviours.

Chapter 6 is concerned with whether shopping is experienced as a social activity in later life. Data will be presented to explore what types of social activity people engage in while shopping, who people shop with and the ways in which shopping is experienced as social. Further delineations will be made based on individual circumstances such as living arrangements, rurality and physical health.

Chapter 7 considers the physical health benefits associated with shopping activities as well as how shopping can be a physical activity. Findings from secondary data analysis will demonstrate the circular relationship between physical health and shopping. In addition, this chapter considers the impact of each of a number of health variables on the ability to go shopping. Physical health limitations as barriers to shopping will be explored as well as how these might be overcome.

Chapter 8 further explores the relationship between shopping and healthy ageing by focusing on cognitive and psychological health. Findings from secondary data analyses using measures of cognitive function will be presented. Qualitative data analysis provides evidence of cognitive activity while shopping. In addition, how shopping activity contributes to psychological health is demonstrated using both measures of wellbeing (life satisfaction; quality of life) and qualitative data.

Chapter 9 will draw together findings from earlier chapters across a number of variables and consider them in relation to previous literature. The limitations of the current research will be discussed. This will include the limitations of each of the data sources and the challenges of using a mixed methods approach. Suggestions for future research directions will be offered. A conclusion will be presented highlighting the multidimensionality of shopping activities in later life and the complexity of the relationship between shopping activity and healthy ageing.

Chapter 2

Later Life and Shopping: A Review of the Literature

2.1 Introduction

At the time of writing there were no existing studies that directly focus on shopping and healthy ageing; thus, in the absence of an existing body of literature the purpose of this review is to draw together research that is relevant and/or has looked at similar concepts. By considering allied concepts a case will be made for why shopping should be studied as well as identify potential indicators from previous studies that might be useful in subsequent analyses. This will entail pulling together studies from across a wide range of concepts (both in terms of independent and outcome variables) and disciplines. This eclectic approach is essential in order to piece together a comprehensive overview of the types of activities that might take place during shopping that could be important for successful and healthy ageing. However, whilst the existing studies are helpful in identifying possible shopping-related activities that might contribute to healthy ageing, each of the studies reviewed suffers from at least one of the following limitations:

- 1) They do not deal directly with shopping activity. This represents the most common criticism. However, these studies have been included because they offer potential insights from associated or similar activities.
- 2) The study does deal with shopping but it has been conducted outside of the UK. This is the second most common issue as the majority of studies in this area have taken place in North America. These studies are potentially indicative but, due to cultural and geographical differences, it cannot be assumed that the same mechanisms that operate in the US or Canada, for example, will operate in the same way in a UK population.
- 3) Finally, there is a small class of studies that do deal directly with shopping behaviours in later life yet they do not do so in relation to health and wellbeing.

To reiterate, this chapter critically reviews the relevant literature to provide context for the current study and to outline the limitations in previous research that are to be addressed in this thesis. Broadly, this will be in three sections. The first explores gerontological and psychological theories of ageing and how shopping fits in to these debates. The second considers research on shopping and what shopping activity may mean in later life. The third section will introduce health and wellbeing and lead to a discussion of the concept of healthy ageing. After which, several domains that have implications for healthy ageing will be explored along with how shopping activity might contribute to them. Exploring these relationships with healthy ageing, and how shopping behaviours can offer a framework within which to study healthy ageing, is the ultimate focus. Further relevant research will be discussed throughout the thesis.

2.2 Ageing Society

Population ageing is a global concern as policy makers around the world seek to meet the challenge and benefit from the opportunities of this demographic transformation (UN, 2011). As with other countries, the UK is an ageing society as the number of people aged 65 and over increased by 1.7 million between 1985 and 2010. This age group is expected to account for 23 per cent of the total population by 2035 (ONS, 2012). Thus, it is more important than ever to gain a greater understanding of health status and risk factors in the older population. Ill-health in later life places a significant burden on the health care system (Economic Policy Committee (EPC) of the European Commission, 2007); therefore, improvements in health behaviours have potential for substantial benefits both for the quality of life of individuals as well as to the health industries and the national economy. Consequently, there are both economic and personal benefits to identifying modifiable individual and environmental factors that are associated with successful ageing and can improve health in later life.

2.3 Gerontological and Psychological Theories of Ageing

Gerontology is a multi-disciplinary field (encompassing biology, psychology, sociology, economics, anthropology, etc.) but British gerontology largely has been drawn from sociological and social policy approaches (Phillipson & Baars, 2007). As the main gerontological approaches do not fall neatly into disciplinary distinctions,

schools of thought will be broadly separated into chronological phases. Thus, disengagement theory and activity theory, and later continuity theory, will be discussed before more current perspectives such as the cumulative advantage and disadvantage model. Furthermore, shopping activity will be considered in relation to these theories where possible.

2.3.1 Early psychological perspectives on ageing. Ageing does not feature extensively in many psychology textbooks beyond biological explanations (physiological or anatomical changes) of cognitive decline, strategies (organisation and elaboration) that may take place in later life to cope with functional declines, or on the stability of personality traits across the life course. Psychologists made attempts as early as the 1930s to incorporate old age into work on developmental psychology. By measuring abilities at different ages in cross-sectional studies, researchers concluded that individuals peaked in childhood and declined in old age (Lupien & Wan, 2005). By comparing the 'normal' abilities of older adults with those of children and young adults this early work added to the notion that later life meant an inevitable decline in functioning (Lupien & Wan, 2005). This approach to later life within psychological research aligned with biomedical models of ageing, which emphasised disease and disability as inevitable products of old age. As an extension of this, ageing research from a psychological perspective has tended to focus on the (usually negative) changes that may occur in sensory and perceptual processes, cognitive abilities and adaptive capacity (Hooyman & Kiyak, 2007).

2.3.2 Early gerontological theories. The altered demographic and economic landscape in the post-Second World War period led to the development of the welfare state and the notion of a socially manufactured 'structured dependency' in later life (Townsend, 1981). Old age represented a problem that would require new initiatives in employment as well as health and social care (Phillipson & Baars, 2007). In response to these concerns, theoretical approaches to ageing utilised a social problems perspective, which generated two main psychosocial models: disengagement theory and activity theory (Phillipson & Baars, 2007).

2.3.2.1 Disengagement theory. Disengagement theory (Cumming & Henry, 1961) suggests that contact with the social world lessens as people get older and, thus, considers old age as a time when the individual and society mutually

disengage. In this sense, retirement is a time of social estrangement and provides a function for the (usually male) person to move to a socially sanctioned, non-economically productive role. It has been suggested that people disengage from contact with others and shed their physical ties through household disbandment, thereby downsizing their homes and reducing possessions (Ekerdt, Sergeant, Dingel, & Bowen, 2004) in preparation for death. Seen from this perspective, shopping for anything other than day-to-day provisions (e.g. food) and other necessary items (e.g. disability aids) could be antithetical. Thus, as people disengage, shopping activity would provide no benefits in later life beyond such provisioning. Although, for example, frequency of social engagement and the size of social networks typically decline with age (Barnes, Mendes de Leon, Bienias, & Evans, 2004), it is not a universal pattern of behaviour to disengage or withdraw from society in later life (Moody, 2000). Thus, it may be that disengagement, when it takes place, reflects a continuation of behaviour that existed prior to later life.

2.3.2.2 Activity theory. In contrast to disengagement theory, activity theory suggests that the more active people are in later life the more likely they are to have high levels of life satisfaction. Thus, people should maintain the activities and attitudes of midlife for as long as possible in order to age successfully (Havighurst, 1961). In this way, shopping activities in later life would reflect those in earlier life. As people in later life would have the same needs and values as they had in midlife (Moody, 2000) their already established shopping activities would continue. However, it may become increasingly difficult or even impossible to maintain levels of activity with age-related functional limitations or health problems. Furthermore, it could be that an individual's perception of being active and socially integrated is more important for life satisfaction than actual activity or outward behaviour.

Clearly these two theories of ageing are at odds with each other. Rather than engagement levels being a universal product of ageing, individual differences such as personality, specific events (e.g. widowhood) or economic hardship impact on levels of engagement. Whereas disengagement may be the preferred pattern of behaviour for some, many others continue to engage and remain active in later life (Moody, 2000). It is possible to hypothesise how such preferred patterns of behaviour might be reflected in shopping practices (either as functional provisioning

or as a continuation of midlife activity) although shopping activity is not explicit in these theories.

2.3.3 Theoretical shifts. Earlier gerontological theories focused on ageing as an individual and social problem in which growing old represented a discontinuity from prior life events and experiences. Shopping is noticeably absent from these early theories. In the period from the 1970s to the 1990s, changes to the social and economic context, such as a growth in early retirement, led to an increasing theoretical focus on the impact of social structure. For example, from the perspective of modernisation theory, the status of older people declines as society becomes more modern (Cowgill & Holmes, 1972). Although, paradoxically, in terms of numbers and resources older people actually may become a more significant population, particularly in relation to consumption (e.g. Jones et al., 2008). Moreover, age stratification theory (Riley, 1971) stressed the influence of social structure on the individual's adjustment to ageing. Not only does age regulate behaviour through the life course, ageing individuals are influenced by historical, social, economic and environmental factors that occur earlier in life. Thus, socially constructed problems of ageing became the focus of research through the political economy perspective (Phillipson & Baars, 2007). Ageing was then seen as a threat to economies and a social policy concern. This led to research on social inequality and the role of the state in the production of dependency. In later life, poverty, exclusion, isolation and poor health were seen to be caused by social structures that prejudiced older people. The older person became a social policy category, which, through the medicalization of old age, was a mechanism that disenfranchised older people (Estes, 1980, 1986; Townsend, 1981). By focusing on the poorest sections of the older population, both in health and financial terms, many of the theories at that time reinforced the association between ageing and illness.

2.3.3.1 Breadline Britain. Although shopping as an activity does not figure in those gerontological theories, they were closely aligned with attempts to determine a minimum standard of living. One such example is the Breadline Britain survey (Mack & Lansley, 1985), which was conducted in 1983 as part of a television series. The survey used a quota sample of 1174 people (aged 16 and over) across Britain to find out which items respondents thought were necessary and that all people should be able to afford and should not have to do without. These included household goods,

food, clothing, personal possessions and leisure and social activities. The authors found that, although older people formed a smaller proportion of those in poverty, they had lower expectations and those on low incomes “chose” to do without necessities (Mack & Lansley, 1985). Although beyond the focus of the survey, making this ‘choice’ may reflect the adjustments some people make in later life to adapt to their change in (particularly financial) circumstances. What constitutes a necessity may be different nowadays, yet having to make adjustments because of financial limitations may be the reality for the 13 percent of pensioners (defined as adults who are above State Pension age) who currently live below the poverty line (DWP, 2014).

2.3.3.2 Continuity theory. Although seemingly incongruous when placed against the political landscape in the UK at the time, a theory emerged in the US that deserves some consideration. Continuity theory has been suggested as an alternative (and as an extension of activity theory) in which people make adaptive choices to attempt to maintain internal and external structures by applying familiar strategies (i.e. using continuity) (Atchley, 1989). Thus, past experience leads to using continuity as a strategy to deal with the changes that are part of ageing. The maintenance of internal continuity acts as a foundation for day-to-day decision making, ego integrity, self-esteem and as a means for meeting important needs (e.g. food) and is defined by the individual in relation to their past self. Whereas external continuity refers to a remembered structure of physical and social environments, role relationships and activities (Atchley, 1989). In this way, people can minimise the potential effects of deficits when ageing by maintaining a sense of routine and familiarity; doing familiar things with familiar people in familiar places (Atchley, 1989). Seen in this way, shopping activities in later life would be a familiar lifestyle pattern that people would continue to engage in much as they had in earlier life. Yet, continuation of shopping activities may become increasingly difficult when faced with physical health, cognitive health and/or financial limitations. From a continuity perspective, however, shopping activities would contribute to the maintenance of both internal structures (decision-making, meeting food needs) and external structures (activities, relationships) as a strategy to adapt to and cope with age-related changes.

2.3.4 Current gerontological theories. The later approaches to studying ageing have continued to consider ageing as a social construction but have increasingly included cultural forces. As an extension of political economy, the critical gerontology approach primarily is concerned with social inequalities, which are influenced by factors such as status, education and access to health care. Seen from this perspective, growing old may be a collective process of intra-cohort stratification in which social processes allow the accumulation of advantage (or disadvantage) over the life course (Phillipson & Baars, 2007). This model of cumulative advantage and disadvantage highlights the differentiation associated with ageing processes, which are based on individual variation and life course trajectories (Dannefer, 2003). Although critical gerontology has become more open to cultural factors, shopping remains overlooked as a potential stratifying factor that might contribute to inequalities. Thus, there still is a tendency to focus on material disadvantage rather than practice.

The critical gerontology approach has been criticised for continuing to regard ageing as a social problem and for focusing on inequalities within a social welfare and public policy framework that emphasises frailty and burden (Twigg & Martin, 2014). In contrast, cultural gerontology has emerged as a way to provide a fuller account of ageing in which older people and their subjectivity take centre stage in order to encompass unproblematic old age in theories of ageing (Twigg & Martin, 2014). With cultural gerontology there has been a shift to the more positive aspects of ageing and an emphasis on the inclusion of a whole range of ageing experiences (rather than focusing solely on those who are sick and disabled). Such views are steadily being replaced by more positive images of 'active', 'successful' or 'productive' ageing (Bass & Caro, 2001; Gilleard & Higgs, 2000, 2005; Katz & Marshall, 2003; Metz & Underwood, 2005; Pampel & Hardy, 1994; Uhlenberg, 1992; Weiss & Bass, 2002). As will be discussed below, these concepts focus on optimal functioning and modifiable factors such as lifestyle choices that can increase the possibility of ageing well. A similar shift has been seen within psychology with a move (by some researchers) from the intensive study of psychopathology to a concern with what constitutes mental health, which is the focus of positive psychology (Seligman & Csikszentmihalyi, 2000). Consequently, there has been a change in the study of ageing; old age is less likely to be portrayed solely in terms of

its losses and later life is no longer just a period of decline and dependency. Although within cultural gerontology there has been a shift to more positive notions of ageing and its associated practices such as consumption (which is broadly defined as the purchase and/or use of goods and services), shopping as an everyday activity is noticeably absent in gerontology.

2.4 Shopping

Although theories of shopping draw heavily on sociological and anthropological frameworks, shopping research more often is conducted from marketing or consumer psychology perspectives. Shopping and its related cultural practices have rarely been the focus of research on what has been subsumed into “consumption” activity (Miller, Jackson, Thrift, Holbrook, & Rowlands, 1998). The relative paucity of literature on shopping has been attributed to the tendency within social sciences not to take shopping seriously either as a historical phenomenon or as a cultural practice (Edwards, 2009). Yet, a central argument in cultural gerontology is that consumption has become a key site for the construction of identities in later life (Gilleard, 1996; Gilleard & Higgs, 2000, 2005; Gilleard, Higgs, Hyde, Wiggins, & Blane, 2005). However, consumer behaviour has been largely overlooked within gerontology as it is youth that often is associated with consumption, whereas older age is associated with “failing to participate” in consumer culture (Jones et al., 2008). Moreover, older consumers have been similarly neglected within marketing and consumer studies (Greco, 1993) until recently. Again, it is worth stressing that consumption is not synonymous with shopping, which is the focus of this thesis, yet consumption research can provide some insight into relevant cultural practices. Although the purpose of this PhD is to use shopping as a lens through which to study healthy ageing, first it is important to provide some historical and cultural context in order to explore the meaning and value of shopping activity in later life.

2.4.1 Shopping in historical context. There are a number of significant cultural and retailing developments that have led to changes in how people in the UK shop. The first of which was the formation of high streets that paved the way for the introduction and expansion of department stores in the late 19th century (Edwards, 2009). The department stores were “fantasy palaces” that, in addition to the visual pleasures of these purpose-built “seductive environments”, included facilities such as

restaurants and tearooms, banks, ice rinks and picture galleries (Nava, 1997). Shopping in fashionable city centres had been a pleasurable social activity for the upper classes prior to this period (Nava, 1997) and was central to Walter Benjamin's notions of the *flâneur* as both participant and observer in Parisian shopping arcades (Miller, 1997). However, department stores expanded the practice of shopping for pleasure to include the middle classes. Thus they were able to "democratize luxury" by enabling the spread of a recreational attitude to purchasing (Nava, 1997; Sassatelli, 2007). Notably, a department store was one of the public spaces (along with other sites such as galleries, libraries and restaurants) that it was considered respectable (or at least acceptable) for unaccompanied women to visit (Nava, 1997). This led to delineation of the public space and the private (the domestic sphere to which women traditionally were confined) and going shopping became a "new feminine form of sociability" (Sassatelli, 2007). The development of consumer society has been attributed to the social and political transformations of that time, which were consequences of economic expansion and the rise of industrial capitalism (Edwards, 2009). Whether shopping expansion in the UK was the cause or effect of mass production is contested (Sassatelli, 2007) but it certainly coincided with the rise of shopping as a popular leisure activity (Edwards, 2009).

The next significant period of development in shopping practices occurred in the 1950s and 1960s, after a period of post-war austerity and following the demise of rationing. During this period there was a rapid growth in personal consumption as well as a spread of self-service shops and supermarkets (Hamlett, Alexander, Bailey, & Shaw, 2008). This so-called period of "mass consumption" saw an increase in the number of people (especially teenagers) with discretionary spending power (Jones et al., 2008). The sociocultural changes of this period led to lifestyle youth movements that were distinct for their generational differentiation (Jones et al., 2008). In other words, the 'young' wanted to be different from the 'old' of their parents' generation in appearance, values and (consumer) attitudes. Indeed, it has been argued that many aspects of the third age (between the age of work and that of decline and dependency) have their origins in the mass consumption established within post-war youth culture, with its emphasis on choice, autonomy, self-expression and pleasure (Gilleard & Higgs, 2005). Consequently, it may be that those who grew up spending freely earlier in life are more likely to continue to spend freely in later life (Jones et

al., 2008) and to continually engage with a consumer lifestyle. This observation is particularly relevant when considering that this thesis includes people aged between 65 and 95 who will not necessarily be from the same cohort or generation and therefore would not have been brought up with the same consumer attitudes and values. For example, interviewees who grew up during the 1960s are likely to have different values and attitudes than those whose formative years were during the inter-war period. Furthermore, those third-agers of the baby boom generation (born 1945-1965) may be in a better financial position than earlier generations. It has been argued that they have had record rates of home ownership, will be able to draw out more from the welfare state than they contributed, and many have benefitted from generous occupational and private pension schemes (Sodha, 2015).

Nonetheless, whichever generation people belong to they would have been influenced by the spread of self-service shops and supermarkets in the 1950s and 1960s. Previously, household shopping involved visiting several high street stores (greengrocers, butchers, newsagents) and being served by a shopkeeper from the other side of a counter. Supermarkets changed the way in which people shopped both by providing the convenience of one-stop shopping as well as the practice of self-service (Edwards, 2009). Out-of-town shopping centres were introduced from the 1970s onwards and the subsequent decline of the high street has meant that the ability to go shopping became increasingly reliant on the ability to travel (Jones et al., 2008). Of course, the move to more out of town shopping sites and purpose-built malls took place earlier in other countries that rely more heavily on car ownership (particularly the US) and in which population density is lower than in the UK. Although these temporal differences have implications when considering research from other countries, it is worth noting that the location of shops, access to (and within) shops and how people shop will have changed considerably over the life courses of those now aged 65 and over.

Nowadays in the UK, the shopping landscape consists of blurred boundaries between what is a site for shopping and what is not. Examples of this are shops in hospitals and airports as well as the prevalence of cafés in shops, which can encourage the social aspect of shopping. Now is a period of disposable wares in which fast fashion and products with intentionally short lifespans encourage frequent upgrading, as explored in a recent BBC documentary (Peretti, 2014). It is possible to

shop at any time of the day or night either virtually via websites or physically at 24-hour supermarkets. Yet, only a generation ago it was common for shops to close half a day in the week and all day Sunday. It has been argued that when opening hours were shorter shopping gave a temporal pattern to everyday life but that now shopping is more likely to be fitted in around other activities (e.g. on the way home from work), which affects its meaning (Shaw, 2010). The possible devaluation (at a personal level) of shopping as an activity can be demonstrated by people's underestimation of the time they spend shopping. Using UK time use data, it has been found that although we typically spend about the same amount of time shopping, time is systematically underestimated by about half (Gershuny, 2000).

All this goes to show that shopping as an activity has changed and perhaps is underpinned by the changed relationship between supply and demand. Where and how people shop may be, in part, influenced by (past and present) identification with consumer culture, as well as by an individual's financial means and the shopping facilities available to them. Although it is not the aim of this thesis to empirically test changes in shopping habits over the life course, in order to consider the meaning and value of shopping in a health context it is important not to divorce shopping activity from its sociocultural framework.

2.4.2 Shopping behaviour. It is important to stress that the majority of marketing and consumer behaviour research focusing on older people has been concerned with people's attitudes to products and how these are manifest in purchasing behaviours (Pettigrew, 2011), which is not the focus of this thesis. Furthermore, much of this research has taken place in the US, which has a more advanced consumer culture and in many ways (geographically and culturally) may not reflect a UK population. Yet, the increase in marketing research in the US since the 1990s illustrates how the "mature market" has been seen as increasingly important and lucrative. As a pioneer in this area of research, Moschis (2003) argues that older people (aged 55 and over) are more heterogeneous than younger consumer age groups because people become increasingly different from others with age. Even with the acknowledgement of such heterogeneity, much of his research uses his method of market segmentation based on life events and circumstances (rather than age), which he calls 'gerontographics' (Moschis, 1993). The results of this research show that the specific ways in which older people shop

differently from younger people include shopping more during morning hours, being convenience-oriented and preferring one-stop shopping. His consumer research also suggests that older people are less price-conscious and deal prone, tending to choose products based on quality and brand name (Moschis, 2003). However, these results relate to older Americans and such differences may not reflect those of a UK population. Still, it is noteworthy that life circumstances (such as employment status and living arrangements rather than age alone) may significantly impact on shopping behaviour.

2.4.3 Attitudes to shopping. People tend to be divided in their attitudes to shopping. Previous research in the UK on general attitudes towards shopping found that people either loved it or hated it with only a minority expressing indifference (Campbell, 1997). The study also revealed some sociodemographic differences. Women were found to be more likely to express positive attitudes to shopping than men, and men were more likely to express negative attitudes than women (Campbell, 1997). However, that research was based on younger age groups (aged 25 to 45) and may not be generalizable to those in later life. Moreover, it is important to make the distinction between attitudes to food shopping and non-food shopping activity. Drawing from years of ethnographic research Miller (2005) concluded that when shopping is considered a necessity it is more likely to be viewed as work, while the freedom to browse and choose is experienced as a “free expression of agency”. Hence, shopping that involves wandering around in shops and malls may be seen as an enjoyable, playful activity (Lehtonen & Mäenpää, 1997) whereas supermarket shopping may be seen as mundane (Edwards, 2009). Nevertheless, the authors of an upcoming book about food and femininity argue that supermarkets can be a place of joy and leisure for women, particularly when providing escapism from the house (and children) (Johnston & Cairns, 2014). Although this may be the case for only a particular subset of women (i.e. middle-class Canadians), it is important to note that motivations to shop and attitudes towards shopping may differ according to a complex set of physical, cultural, environmental and personal circumstances.

2.4.4 Leisure shopping and enjoyment. In recent years there has been more focus on recreational shopping, or leisure-time enjoyment of shopping, with consumer studies exploring people’s reasons or motivations for spending leisure time in this way (Bäckström, 2011). There has been a particular focus on examining

the social benefits derived from shopping, primarily through research into the social interaction with friends or family members as motivation for shopping (Bäckström, 2011). Again, consumer research suggests that there may be benefits to shopping with a companion because of the shared experiences and help with decision making (Borges, Chebat, & Babin, 2010). But it may also be the case that shopping with companions encourages social exchange with others. Hence, there may be more positive affect when shopping with a friend compared to either being alone or with a family member (Borges et al., 2010). Furthermore, it has been suggested that stores and shopping malls provide people with an outlet for social participation or interpersonal activities, which may alleviate emotional or social isolation (Kim, Kang, & Kim, 2005). Although these studies are from consumer studies in the US, such findings are suggestive of the potential social benefits that shopping with others may provide.

The act of shopping also has been researched specifically for its pleasure inducement or hedonic value. Again, findings from consumer research in the US suggest that, for some people, there may be much pleasure derived from bargain hunting (Arnold & Reynolds, 2003). These results were from qualitative research conducted with 98 adults aged 18-55 and show that there are people who engage in 'gratification' shopping as stress relief, a way to alleviate negative mood, or as a treat to oneself (Arnold & Reynolds, 2003). The primary function of these data was to inform the design of a scale (to identify shopper types) based on hedonic motivations to shop and it is not known whether only those who enjoy shopping were selected to participate. However, it is interesting to note that these motivations ranged from the enjoyment of browsing and keeping abreast of trends to shopping as an excuse to spend time with friends or family members. Consequently, shopping motives are a function of many variables, some of which are unrelated to the buying of products (Tauber, 1972) and include, but are not limited to, social engagement either from shopping with others or from being around others and the hedonic value derived from the act of shopping.

2.4.5 Later life shopping activity and independence. As will be discussed later, the ability to maintain independence is an important aspect of healthy ageing. Being able to go food shopping, in particular, contributes to a sense of independence and can become increasingly difficult for older people as they experience declines in

health, mobility and the ability to drive a car (Thompson et al., 2011). For example, an Australian study found that whereas lack of economic resources often is considered the most common constraint to food access, having decreased mobility or disability also influences shopping habits and may lead to food insecurity (Burns, Bentley, Thornton, & Kavanagh, 2011). In a US study, functional impairments (as measured by activities of daily living and instrumental activities of daily living including shopping) were significantly related with food insecurity among older people even after controlling for low income, low education and social isolation (Lee & Frongillo, 2001). Although these studies suggest that independently accessing food may become especially difficult for those experiencing health declines in other (larger) countries, it is reasonable to assume that decreased mobility or disability also impacts on food shopping in the UK and may require a change of practice.

Indeed, a study addressing the potential association between physical health and ease of purchasing nutritious foods was conducted recently in Bristol with 240 adults aged 70 and over. This investigation of food shopping habits drew on data from both questionnaires and measures of physical health that were collected during home visits. The authors suggest that greater independence in food-related activities such as food shopping is significantly associated with fewer health problems, greater physical strength and better food intake in older adults (Thompson et al., 2011). Furthermore, they found that car use may indicate an ability to maintain independence to do one's own shopping, and helps older adults avoid the challenges of carrying heavy loads of groceries (Thompson et al., 2011). Yet respondents with a higher level of deprivation were less likely to drive or be driven to their main food shopping venue (Thompson et al., 2011). A reliance on car use to maintain food-related independence in later life may be problematic for those ageing in the UK where older people are less likely to live in a household with a car or van than the population as a whole (i.e. 56% versus 77%) (Evandrou, 2000). Recent Department for Transport (2010, 2014) figures show that this is increasing with 68% of those aged 70 and over in England having a household car (compared with 87% of 40-49year olds) and an increase in older people in the UK having driving licences, particularly women. Of course, this may be of less importance for those living in areas that are well-connected by public transport, so needing a car for shopping also depends on geography, local facilities and the ability to shop online.

Moreover, whether transport is used, and the type of transport used, may affect shopping frequency and have implications for social networks. For example, those without cars may shop more often or may have to rely on others to help with larger shopping trips, which again has implications for independence (Turrini et al., 2010). This recent cross-European study investigated the role of informal networks in food shopping for 640 adults aged 65 and over (which included 80 participants in the UK). The study used a mixed methods approach, which included data from a questionnaire (sociodemographic variables and food-related habits), a 7-day food procurement diary and an interview about food shopping routines. Although most of the findings were collated (so not UK-specific), they are suggestive of some differences according to living arrangements. For example, it was found that those living alone used informal networks of relatives and non-relatives as well as formal support for their food shopping. Those living with others had informal networks comprised mostly of spouses and children. In addition, those living alone reported being proud of their independence, whereas those living with others (especially non-drivers) sometimes felt dependent (Turrini et al., 2010).

Yet receiving instrumental support from others for shopping-related activity may become necessary as health declines. Shopping with others is seen by some as a way to maintain independence, whereas a reliance on others for help is seen as a loss of independence (Wilson et al., 2004). A consumer study of 791 older (60 and over) food shoppers in Northern Ireland showed that 35% had a heavy reliance on accompanied shopping or dependency on others to shop on their behalf (Meneely, Strugnell, & Burns, 2009). As consumer research, the focus of this study was to identify the positive and negative experiences that affect purchase decisions when food shopping. However, it was found that one of the positive experiences of food shopping is the opportunity to engage in social interaction and to socialise with others (Meneely et al., 2009). Similarly, it has been claimed that in the UK up to 80% of older adults receive informal help food shopping (Turrini et al., 2010). Furthermore, cross-European data suggest that people who receive informal support for food shopping often enjoy it as both practical help and as a social activity (Turrini et al., 2010).

2.4.6 Shopping, gender and marital status. It has been suggested that, as shopping is not done in isolation, other family members play a critical role in shaping

the shopping practices of individuals (Burningham, Venn, Christie, Jackson, & Gatersleben, 2014). Previous findings on gender differences in shopping activity are inconsistent; however, it has been suggested that there has been an increase in shopping as a leisure activity in later life for both sexes (Bennett, 1998). Thus, gender convergence in later life may lead to no pronounced gender difference in shopping activity (Bennett, 1998); however, this may depend on the type of shopping. In a recent UK study of the food shopping habits of 240 adults aged 70 and over, women were more likely than men to shop alone, with men more likely than women to shop with their spouse (Thompson et al., 2011). Furthermore, men were more likely to drive to food shopping and women were more likely to take the bus or be driven (Thompson et al., 2011). In a cross-European study, although women were more likely to be responsible for household food-related activities, men reported carrying shopping bags, driving for shopping trips and shopping when their spouse was ill (Turrini et al., 2010).

Consequently, there may be differences in shopping habits depending on marital status. A longitudinal study found that married men participated to a greater extent in shopping than widowed and single men; widowed men participated more in shopping activities than single men (Bennett & Morgan, 1993). In addition, there may be differences in motivation and shopping frequency for those who live alone versus those who live with others. For example, Turrini et al. (2010) found that women who live alone tend to enjoy the social interaction during their shopping trips and may shop more frequently than men. Moreover, amongst those living alone, men were more likely to drive to distant supermarkets once or twice a week, whereas women were more likely to walk or take a bus to nearby shops twice or more times per week (Turrini et al., 2010). While these studies are suggestive of differences in shopping activity depending on gender and marital status (or living arrangements), they have not looked at the health consequences of shopping activity.

2.4.7 Shopping and technology. Although use of the internet is increasing and there is some variability in the older population, those in later life have the lowest use rate (Ofcom, 2014). Recently in the UK, 69 percent of those aged 65-74 reported using the internet, however, only 36 percent of those aged 75 and over reported doing so (ONS, 2013a). The lower rates have been attributed to physical and mental impairments that can reduce older people's ability to use the internet as well as lower

income and educational levels reducing the accessibility of technology (Browne, 2000). However, reasons given (by all ages) for not having internet access also include having no need, lacking the skills required and the cost of equipment (ONS, 2013a). Due to these factors, low rates of online shopping would be expected amongst older cohorts but there is some evidence to suggest that this activity may be increasing. According to the ONS (2013a), there has been significant growth in the rate of online purchasing in the UK by those aged over 65 with more than a third (36%) buying online in 2013. Moreover, in a recent study of internet users (aged 55 and older) from across Australia, many participants (71%) reported using the internet for shopping, in part because they do not have to leave home, which is especially beneficial to those who have mobility problems or who live in rural areas (Sum, Mathews, & Hughes, 2009). Reasons given for not shopping online include not wanting to present credit card details online, lack of interest and lack of necessity to shop online (Gietzelt, 2001).

2.5 Health and Wellbeing

So far, a review of the literature has shown some of the ways in which shopping may be different for those in later life. In order to show how shopping activity might relate to healthy ageing, first a general introduction to health in later life will be presented.

2.5.1 Definitions of health. Health is a multi-dimensional concept, which captures how people function as well as how they feel (Kuh, Karunanathan, Bergman, & Cooper, 2014). As with theories of ageing, definitions of health have changed throughout history and, consequently, there have been several approaches. These include the pathogenic approach, which views health as the absence of disability, disease, and premature death. In addition, there is the salutogenic approach, which views health as the presence of positive states and functioning in cognition, affect, and behaviour (Keyes, 2014). Furthermore, there is the approach used in the World Health Organization's (WHO) definition of health as a complete state. According to the WHO, health is: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). Although these approaches do not use the same criteria, it is clear that health is considered to be a multidimensional concept and one that encompasses aspects of both physical functioning and psychological wellbeing.

2.5.2 Social model of health. Traditionally, health and health variations have been understood through the social model of health (Dahlgren & Whitehead, 1991), which stresses the influence of social and community networks (including family, friends and wider social circles) on the health of individuals. Thus, improved health and wellbeing can be achieved by focusing on social and environmental determinants of health along with biological and medical factors (Dahlgren & Whitehead, 1991). However, although the model accommodates variations in behaviours, shopping activities often are overlooked in terms of their potentially positive aspects and implications for health. As will be discussed, shopping as an everyday activity is included as a measure of functional ability but is not regarded as a factor that in itself contributes to health.

2.5.3 Measuring physical health in later life. There is a vast literature spanning health psychology, social epidemiology, medical sociology and gerontology that has looked at the factors that impact on the health of older people. For the most part these studies rely on a number of well-established measures of health, which typically are self-rated general health (usually measured by a single item), presence of chronic illness, or functional limitation (often measured by activities of daily living (ADL) and/or instrumental activities of daily living (IADL) batteries). Furthermore, as disability and physical functioning are closely related, they are often grouped into one dimension and discussed together (Depp & Jeste, 2006). Having difficulty shopping is one of the items included in IADL scales, which assess an individual's ability to live independently. Difficulty with tasks such as food preparation, finances and housekeeping are assessed and it has been argued that such tasks can be separated into cognitive and physical domains, though all may require some degree of both (Seidel et al., 2010). Having difficulty shopping may include difficulties relating to body posture (standing, reaching, bending), actions (lifting, holding) and hand function (gripping); however, shopping seems to be dependent on factors other than functional ability (Seidel et al., 2010).

2.5.4 Psychological health. Positive mental health, or wellbeing, describes a condition in which individuals are fulfilling their potential and enjoying their life. From the perspective of positive psychologists, there are three constituents of happiness or wellbeing, which are pleasure (a hedonic route to happiness in which positive emotion is increased), engagement (or gratification through being fully engaged) and

meaning (or purpose in life) (Seligman, Parks, & Steen, 2005). Positive views of mental health have further challenged traditional models in which ageing was marked as a period of decline. There is some evidence from psychosocial studies that with age individuals tend to become happier, have better mental health, are better at managing interpersonal relationships, and that they present fewer negative emotions (Helmuth, 2003).

2.5.4.1 Subjective wellbeing. Subjective wellbeing refers to the evaluations people make of their lives that are made up of both affective reactions and cognitive judgements (Diener, 2000). It is concerned with how and why people experience their lives in positive ways and thus, encompasses happiness, satisfaction, morale and positive affect (Diener, 1984). As a subjective measure it necessarily resides within the individual and does not include objective measures (such as health or wealth) that are potential influences on wellbeing (Diener, 1984). Subjective wellbeing consists of a number of components, which include quality of life, life satisfaction (global judgments of one's life), satisfaction with important domains (e.g., work satisfaction), positive affect (experiencing many pleasant emotions and moods), and low levels of negative affect (experiencing few unpleasant emotions and moods) (Diener, 2000). Diener et al.'s satisfaction with life scale (Diener, Emmons, Larsen & Griffin, 1985) is a commonly used measure of wellbeing at any age but there are other approaches to consider.

2.5.4.2 Six-factor model of wellbeing. A multidimensional model of wellbeing has been proposed in response to criticism that existing approaches were 'atheoretical' (Ryff & Keyes, 1995) and have ignored factors such as purpose in life. In this model, positive psychological functioning is determined by six components. These include: positive evaluations of oneself and one's past life (self-acceptance), a sense of continued growth and development as a person (personal growth), the belief that one's life is purposeful and meaningful (purpose in life), the possession of quality relations with others (positive relations with others), the capacity to manage effectively one's life and surrounding world (environmental mastery), and a sense of self-determination (autonomy) (Ryff & Keyes, 1995).

2.6 Successful and Healthy Ageing

The biological definition of healthy ageing is getting old with a minimum load of age-associated diseases. In order to age successfully from a biological standpoint then, requires longevity (to live beyond average life expectancy) and the compression of morbidity (so that people have a longer period living without chronic infirmity) (Lupien & Wan, 2005). Yet, definitions of healthy ageing and successful ageing differ somewhat and are often confused (or used interchangeably) with various terms such as 'positive ageing', 'ageing well' and 'active ageing'. The term 'active ageing' is used by the WHO, which provides the most comprehensive definition of the different aspects that active ageing might encompass:

Active ageing is the process of optimising opportunities for health, participation and security in order to enhance quality of life as people age. It applies to both individuals and population groups. Active ageing allows people to realize their potential for physical, social, and mental well-being throughout the life course and to participate in society, while providing them with adequate protection, security and care when they need. The word "active" refers to continuing participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labour force. Older people who retire from work, ill or live with disabilities can remain active contributors to their families, peers, communities and nations. Active ageing aims to extend healthy life expectancy and quality of life for all people as they age.

(www.who.int/ageing/active_ageing)

However, despite the advantage that such a broad definition has for attracting a wide range of possible supporters, active ageing has tended to be more narrowly defined in terms of labour market participation and has been criticised for being gender blind (Foster & Walker, 2014). As there is no standard operational definition and no consensus on how to measure its components, the two models of healthy and successful ageing, which are more commonly used in psychological research, will be outlined below.

Successful ageing and, more recently, healthy ageing have emerged as key concepts that try to encompass the multidimensionality of health, disease and

functioning in later life. These concepts focus on optimal functioning rather than on losses and declines as it is argued that many age-related declines are due to modifiable factors. Consequently, the lifestyle choices people make can help them to avoid health problems and to increase the possibility of ageing well. Thus, Rowe and Kahn (1997) define successful ageing as a “low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement with life”. Similarly, healthy ageing can be separated into healthy biological ageing (having optimal physical and cognitive functioning for as long as possible) and wellbeing, which usually covers positive emotional health, and participation in valued social roles, engaging with others, leading meaningful lives, maintaining autonomy and independence (Kuh et al., 2014).

In contrast to Rowe and Kahn’s outcome-oriented approach, a number of process-oriented models have been proposed including that of Baltes and Baltes (1990). Their focus was to explain what people do to age successfully while considering that the meaning of success is highly individual. Their model of selective optimisation and compensation emphasises the management of the dynamic interplay between declines and losses through a general process of adaptation. With age-related declines, individuals need to adapt to changes in order to age successfully. People do this through selection, which implies that people adjust their expectations to allow the subjective experience of satisfaction and personal control (Baltes & Baltes, 1990). In order to optimise performance, people engage in behaviours (such as practice or training) that will help them to reach higher levels of functioning. When people are restricted by their functioning or adaptive potential, they employ compensatory strategies (e.g. mnemonics).

Nevertheless, it has been argued that the move to more positive representations of ageing have masked inequalities in later life and produced practices of exclusion. Bowling (2006; 2005) has criticised the concepts of ‘healthy ageing’ and ‘successful ageing’ for re-medicalising later life. Furthermore, research often makes comparison with a norm, which can be difficult when these norms can be pushed downwards by those with age-related pathologies in the normative group tested. As mentioned earlier, there is increased variability in function amongst older populations. So it has been argued that comparison with the mean of an older population leads to an elitist definition of successful ageing (Minkler & Fadem, 2002).

With advances in medicine and assistive technologies, many chronic conditions may have little impact on daily functioning (Cheng, 2014). This may lead to a disconnect between what researchers posit as ageing well and lay views of successful ageing. Thus, as not all diseases or health conditions impair functioning, many people with chronic illnesses may consider themselves to be ageing successfully (Strawbridge, Wallhagen, & Cohen, 2002). It has been argued that successfully ageing, as well as being viewed multi-dimensionally, should be considered an ideal state to aim for and should be on a continuum of achievement rather than as an assessment of success or failure (Bowling & Dieppe, 2005).

2.7 Domains of Ageing and Shopping Activity

This section will discuss some of the key areas in which deficits have been shown to occur with ageing and which have implications for shopping activity. While these domains will be considered individually where possible, it is important to note that the picture is more complex in reality as ageing-related decline in these areas often is interconnected. In the U.S., the National Institutes of Health (NIH) experts (from the Ageing, Mental Health, and Neurological Disorders and Stroke Institutes) have identified a need for research on healthy brain ageing to include demographic, social, and biological determinants of cognitive and emotional health in older adults (Hendrie et al., 2006). They called for further research in the key areas that have promise for improving cognitive ageing, which are cognitive activity, physical activity and social engagement (Hendrie et al., 2006). As all of these areas have implications for health in general and can be studied through shopping activities, these will be the focus of the following section.

2.7.1 Ageing and cognition. In an ageing population, risks for cognitive decline affect the independence and quality of life of older adults and present challenges to the health care system (Hooyman & Kiyak, 2007). Normal cognitive ageing includes established declines in cognitive processes affecting functional abilities related to everyday tasks such as shopping, which involves cognitive activity through decision making, memory use and money handling. Intelligence, learning and memory are key cognitive domains that normally change during ageing and have implications for maintaining independence and quality of life (Hooyman & Kiyak, 2007). The changes observed with cognitive ageing are usually explained by

changes in psychological or behavioural processes. These include sensory declines, decreased inhibition, working memory limitations and declines in executive functioning (Spiro & Brady, 2011).

Theoretically, age-related cognitive changes normally occur as outcomes of distal or proximal life events. Distal events are early life experiences (e.g. social, cultural) that influence cognitive development and functioning. For example, vocabulary increases with age yet older adults may experience problems with technologies that they did not experience when they were younger. Proximal factors may affect processing speed, working memory capacity and sensory losses. Thus, cognitive capacity remains intact with ageing but encoding, storage and retrieval become less efficient (Fillit et al., 2002). Furthermore, there are several modifiable psychosocial and behavioural factors such as control beliefs and quality of social support as well as physical exercise that consistently show positive associations with cognitive functioning (Agrigoroaei & Lachman, 2011). Engaging in a greater number of these protective lifestyle factors is associated with better cognition (both cross-sectionally and longitudinally) and can attenuate the cognitive risks associated with low education (Agrigoroaei & Lachman, 2011). Findings from both human and animal studies have suggested that lifelong learning, mental and physical exercise, continuing social engagement and stress reduction all may be important factors in promoting cognitive vitality in ageing (Fillit et al., 2002).

As the current study will look at how shopping might impact on cognitive health, it is important to note that some decline in cognitive function is a normal part of the ageing process, although the rate and extent of this decline varies widely between individuals (McNeill et al., 2011). Serious cognitive decline (such as dementia) is costly to the national economy as well as for individuals and families as it leads to increased service use, needs for community and residential care and impacts on family care-givers. Some studies have shown that cognitive activity is a protective factor against onset of dementia. For example, in a longitudinal study of Catholic clergy members, Wilson and colleagues (2002) used a composite measure of participation in a range of cognitive activities such as reading newspapers, doing puzzles or visiting museums. The risk of developing Alzheimer disease (after controlling for age, gender and education) was reduced by a third for each point increase in cognitive activity score at baseline. So, engaging in frequent cognitive

activities was associated with better cognitive performance and cognitive health. Yet, the number of hours of physical activity per week was not related to the risk of developing Alzheimer disease suggesting that the association of cognitive activity with dementia risk reflects mental stimulation rather than a result of being physically active (Wilson et al., 2002).

Shopping requires making decisions regarding where to go, how often, what to purchase and how much to spend. These decisions, as well as the handling of money, may contribute to the possible protective factor of cognitive activity as mentally stimulating activities have been associated with significantly reduced risk of incident dementia (Karp et al., 2006). A study assessed 29 leisure activities (which included meeting friends, walking, housekeeping and cooking food) for community dwelling people aged 75 or older, with follow-ups at 3 and 6 years. They found that engaging in activities that cover more than one of the mental, physical and social components had a cumulative positive effect on health and seems to be more beneficial than to be engaged in one type of activity (Karp et al., 2006). Although the authors took a novel approach by considering the multiple components that activities can encompass, notably they did not include shopping in their analysis. However, it could be argued that shopping activity encompasses mental, physical and social components and, thus, could contribute to the reduced dementia risk suggested by this cumulative effect.

2.7.2 Ageing and physical activity. Regular physical activity may be among the most important lifestyle factors for maintenance of good health in later life. Active lifestyles have been linked to a reduction in the morbidity associated with diabetes, musculoskeletal disorders, cardiovascular diseases, cancer and frailty (Almeida et al., 2014). Indeed, recent research suggests that sustained physical activity is associated with improved healthy ageing (Hamer, Lavoie, & Bacon, 2014). Using the English Longitudinal Study of Ageing (ELSA), community dwelling adults aged 55 and older were assessed for physical activity (level and frequency) and health (disease status, cognitive function, depressive symptoms and gait speed) at baseline and 8 years of follow up. The authors found that sustained physical activity was associated with improved overall health, with health benefits also seen among those who became physically active later in life. Thus, becoming active or remaining active was associated with healthy ageing (defined as absence of disease, freedom from

disability, high cognitive and physical functioning as well as good mental health) in comparison with those who remained inactive (Hamer et al., 2014). Similar results have been found in a recent longitudinal study of older Australian men. At the 11-year follow-up, those who had maintained physically active lifestyles were 1.6 times as likely to have aged successfully (surviving free of cognitive and functional impairment as well as depression). Moreover, those who became inactive lost some of the health benefits and those who became more active gained health benefits (Almeida et al., 2014).

There is a limited amount of literature that has considered shopping as physical activity in later life. Findings are suggestive that shopping activity can contribute to physical fitness, with a cross-sectional study of older adults (aged 65 and older) in the UK finding that 40% of their reported time walking was for shopping (Dallosso et al., 1988). Furthermore, longitudinal research in the UK found that walking activity amongst those aged 65 and over did not decline after a 4 year follow up. Even though this activity did decline after an 8 year follow up, activity levels remained high for all groups except older (75+) women (Bennett, 1998). However, it is not known how much time was spent walking specifically for shopping as that activity was combined with any other walking activity.

2.7.3 Physical activity and cognitive health. Walking also is protective of cognitive health (Prohaska et al., 2009) and the physiological effects of increasingly sedentary lifestyles may eventually degrade cognitive function (Mirowsky, 2011). Physical function and cognitive status are known to be linked in cross-sectional studies of those with Alzheimer disease (Auyeung et al., 2008) and of high-functioning community-dwelling older adults (Fitzpatrick et al., 2007). Lifestyle factors including physical exercise have been suggested to be protective against cognitive decline, particularly dementia, by increasing brain reserve (Stern et al., 2003). According to Payette et al. (2011), risk factors associated with impaired physical function and cognitive decline include older age, lower education, comorbidity, low initial cognitive status and depression.

Although there have been many studies investigating the physiological effects of exercise in later life, fewer have looked at potential cognitive benefits. However, studies with community-dwelling, frail and cognitively impaired older adults have

shown that improving physical function results in improved cognitive function (Payette et al., 2011). In a European study of older men, participants who maintained or increased their physical activity were nearly four times less likely to experience cognitive decline, as measured by the Mini-Mental State Examination (MMSE) and those in the lowest activity quartile had significantly greater risks for cognitive decline with age (van Gelder et al., 2004). In a study with physically and cognitively healthy women aged 65 or older, those who increased the distance they walked were significantly less likely to demonstrate cognitive declines six years later, as measured by the MMSE (Yaffe, Barnes, Nevitt, Lui, & Covinsky, 2001). Clearly, results such as these have implications for shopping-related physical activity such as walking, which may decline in later life in tandem with a decline in physical function. However, it is important to note that, although these studies are indicative, they have not directly looked at shopping activity and as a result further highlight a lacuna in our understanding.

2.7.4 Ageing and physical function. The ageing brain may contribute substantially to mobility limitations in later life; indeed, much recent evidence suggests that subclinical changes in the brain are associated (both cross-sectionally and longitudinally) with age-related gait slowing and variability (Rosano, Rosso, & Studenski, 2014). Gait speed may be a useful proxy for health and physical functioning in later life (Killane et al., 2014) as either slower usual walking speed or faster decline in motor capability are associated with increased mortality in older people (Gale, Allerhand, Sayer, Cooper, & Deary, 2014). Furthermore, there may be a bidirectional relationship between walking speed and fluid cognition. In a longitudinal study in the UK, after adjusting for age and sex, people with better baseline performance on cognitive tests (of executive function, memory and processing speed) experienced less yearly decline in walking speed over the six-year follow-up period (Gale et al., 2014).

Maintaining cognitive and motor capabilities with increasing age is crucial for quality of life, living independently and carrying out everyday activities (Gale et al., 2014) such as shopping. Gait speed is one of the measures used to determine physical frailty, which increases in prevalence in later life. In recent research it was found that 36 percent of frail older people had difficulty shopping for groceries and that 98 percent of frail individuals reported that they received help with shopping or

doing work round the house or garden (Gale, Cooper, & Aihie Sayer, 2014). Thus, although it would be expected that declines in physical capabilities would make shopping activities more difficult, physical function limitations may not prevent people from shopping. In a recent study in Singapore, both older (aged 60 or older) and younger (in their 20s) people simulated crossing roads unloaded, holding two shopping bags (weighing 2 kilograms each) or pulling wheeled shopping carts (weighing 15 kilograms). It was found that having a load reduced walking speed but that those who were younger reduced their walking speed more substantially while handling the shopping cart than did older participants (Kong & Chua, 2014). As a shopping cart is commonly used to transport shopping in later life (both in the UK and Singapore), these findings suggest that the older participants were not hindered as they were more experienced using carts than were the younger participants. Moreover, that using a shopping cart did not slow down these older participants, intriguingly, suggests that they may be used to overcoming potential barriers to shopping that are associated with physical limitations.

2.7.5 Social engagement and ageing. The health benefits of maintaining social engagement (social behaviour and social structure) in later life have been well documented. Social engagement has been linked to better physical (Mendes de Leon, Glass, & Berkman, 2003) and mental health outcomes (Kawachi & Berkman, 2001), cognitive functioning (Seeman & Crimmins, 2001) and lower mortality (Seeman, Lusignolo, Albert, & Berkman, 2001). Thus, meaningful participation and social integration have been shown to contribute to ageing well (Fast & de Jong Gierveld, 2008) and social involvement and productive activities may lower mortality outcomes as much as physical exercise. For example, community-dwelling (i.e. not in institutions) older people with higher levels of social activity had lower mortality at a 13-year follow-up compared with those with few social ties. Furthermore, those who had few social ties were at increased risk for cognitive decline (Bassuk, Glass, & Berkman, 1999). Thus, there may be a predictive association between social relationships and mortality, which has been consistently demonstrated even when controlling for biological and health variables (House, Landis, & Umberson, 1988).

Consistent evidence suggests that there are significant protective effects of social integration and social support on both physical and mental health (see Seeman, 1996). Social disengagement is an independent risk factor for cognitive

decline among cognitively intact older persons (Fillit et al., 2002). Conversely, being engaged in social recreational activities and having a rich social network have been found to have a protective effect against dementia (Karp et al., 2006), thus, social integration may be protective of cognitive abilities in older adults (Beland, Zunzunegui, Alvarado, Otero, & del Ser, 2005). Shopping might offer a site for such social participation and integration. It has been suggested that individuals who have rich and satisfying social engagement patterns and who engage in continuing complex non-occupational activities may be protected against dementia in late life (Fillit et al., 2002). It is possible that social engagement challenges people to communicate and to participate in exchanges that stimulate cognitive capacities. Consequently, the maintenance of social engagement and avoidance of social isolation may be important in maintaining cognitive vitality in old age (Fillit et al., 2002) and may exert a protective influence on health (Mendes de Leon et al., 2003).

Shopping activity encompasses many opportunities for social engagement and, for those in later life, shopping often is considered to be a social event (Moschis, 2003). Shopping is: "seeing and being seen, meeting and being met, a way of interacting with others" (Fiske, Hodge & Turner, 1987, p.96). Nevertheless, there has been little research to identify the role that shopping in later life may play in a social context. Generally research focuses on how to make shopping centres age-friendly, on food shopping behaviours amongst older adults and the instrumental support older people receive when shopping. Yet, shopping in later life can be a leisure activity in its own right (Myers & Lumbers, 2008) as shopping centres are used by older people as a place to meet up with others and for 'hanging out' (White, 2007). Those who feel lonely may be more motivated to visit shopping centres; therefore malls play a role in providing a potential avenue for alleviating loneliness (Kim et al., 2005), which has implications for psychological wellbeing. As suggested by recent research in Australia, having accessible local shops in which to engage socially may enable people to remain active and independent community members (Stewart, Browning, & Sims, 2014). Older people may not have as many public connections (e.g., through places of work or education) as younger people. So, socially inclusive public spaces such as shopping centres enable older people to remain connected with public life (Holland, Clark, Katz, & Peace, 2007). Small, single-purpose shops may be more accessible (both physically and socially) to older people and facilitate social interaction (Gardner, 2011).

2.8 Research Aims

Whilst there is evidence that younger cohorts of older people are increasingly engaged in consumption (Hyde et al., 2009), there is little research exploring either how older people view shopping or the range of activities shopping encompasses that may contribute to health in later life. Particularly in the UK, research often is limited to older disadvantaged people and food poverty (Myers & Lumbers, 2008) or to large-scale statistical data with measures of consumption (Banks & Leicester, 2006). Although previous research has shown that there is increasing engagement (through purchasing habits) with consumer society in older households (Higgs et al., 2009), such studies have not looked at shopping directly nor have they been concerned with the potential relationship between shopping and health. Thus, there is a lacuna in our understanding of the everyday shopping activities in later life as it has fallen between the research interests of gerontology (which typically has not engaged with shopping) and consumer research (which until recently has not been concerned with older people).

Although theories of ageing do not explicitly consider shopping activity, it is possible to determine how shopping could contribute to healthy ageing from these perspectives. Seen from the perspective of continuity theory (Atchley, 1989), when faced with physical health declines, people could minimize their effects by continuing to engage in shopping activities. Continuing to do so would be a strategy to adapt to and cope with age-related changes. When considered using the model of selective optimisation and compensation (Baltes & Baltes, 1990), people would adjust their expectations of shopping and adapt behaviours accordingly. This could mean receiving instrumental support from others (e.g. getting lifts to shopping venues) or shopping more frequently to carry fewer items at a time. Compensatory strategies could be employed, such as making shopping lists and following a familiar shopping routine. Such adaptations in shopping activities could enable people to maintain a level of functioning that corresponds to their (adjusted) expectations thereby allowing subjective satisfaction with how well they are ageing.

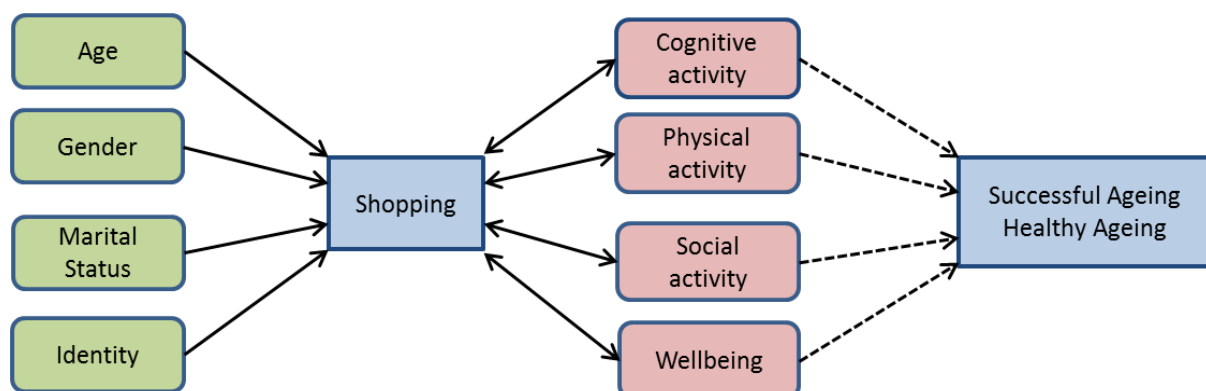
Population ageing has challenged traditional notions of ageing and what constitutes ageing well. Shopping is unique in being an instrumental activity that is both essential and potentially involves key areas associated with successful ageing

(i.e. cognitive activity, physical activity and social engagement). The thesis is organised around the exploration of shopping activity in later life and its relationship with healthy ageing. As is evident from the foregoing discussion, these are both complex and contested concepts; therefore, it is necessary to break this down into more defined research questions. These overarching questions provide the structure of this thesis:

- Is shopping a viable site in which to explore health in later life?
- Are attitudes to shopping influenced by gender, marital status and personality?
- Is shopping a social activity in later life?
- Does shopping activity impact on physical activity and physical health?
- Does shopping activity impact on cognitive health and wellbeing?

A graphic representation of the approach being taken to these research questions is presented in Figure 2.1. The model will be referred to continually to structure the thesis and to help navigate the complex issues being addressed.

Figure 2.1. Proposed model of the mediating role shopping plays in healthy and successful ageing



This model will be used throughout to illustrate the specific areas of exploration in each chapter. Thus, the model provides a framework for data presentation and

analysis; however, it is important to note that this framework was not established *a priori*. As a starting point, a theoretical model was derived initially from the factors that impacted on shopping and health that were identified from a review of the literature. These factors formed the basis of the initial data collection and analysis and the model then was refined through the results of the analyses (which resulted in the model shown in Figure 2.1). The iterative analytical process adopted in this research led to continual re-evaluation to ensure that the model is grounded in the data.

Chapter 3

Methods

3.1 Introduction

This chapter will discuss the methods used in this thesis. The chapter begins by discussing the challenges of defining later life and shopping as concepts to be explored. The study design and mixed methods approach will be reviewed before providing descriptions of the primary data collection and secondary datasets used. The analytical strategy employed for all data sources as well as the approach to data integration will be described.

3.2 Defining Concepts

3.2.1 Later life. The first challenge is to determine what is later life (or older age) and how it can be measured. From a review of the literature, it is possible to identify five characteristics that commonly are used to classify older people: chronological age, labour market position (retirement), benefit status (pensioner), cohort or generation; however, these characteristics are not synonymous. For example, in western societies often the onset of later life is indicated by retirement from full-time employment, usually between the ages of 60 and 65 (Stuart-Hamilton, 2006). Yet, the recent abolition of the default retirement age in the UK, as well as changes in the financial positions of older people and an increase in healthy life expectancy, have made these associations problematic. Although recent figures show the average age of retirement peaks around default retirement age, significant numbers (52% men; 26% women) had left the labour market prior to pensionable age (ONS, 2013). There are signs that this trend in early retirement is changing (ONS, 2013) and although some people retire early because of ill health or redundancy, many are healthy (and relatively wealthy), which could give an unduly positive impression of later life.

In addition, the use of either cohorts or generations is not without problems. Cohorts can be variously defined by a certain set interval, such as 10 year birth cohorts or by living through certain events such as World War Two. In addition, the concept of a generation is questionable. When used in a family sense later life would

mean grandparents, which does not take into account the changing nature of families; not all older people are grandparents and not all grandparents are advanced in age. Indeed, in the UK, on average people become grandparents for the first time at age 49 (DWP, 2010). Generation, when used in terms of consumerism, often refers to the 'welfare generation' that lived through post-war austerity (Moffatt & Higgs, 2007) in comparison with 'baby boomers' who were the first to grow up in a modern consumer society (Gilleard & Higgs, 2000, 2005).

A commonly used measure of later life is chronological age, which essentially is an arbitrary measure as there is no single point at which a person becomes 'old' (Stuart-Hamilton, 2006). Ageing is characterised by large inter-individual variability (heterogeneity) in level, rate and direction of change (Baltes & Baltes, 1990). This variability in later life can be due to genetic factors, lifestyle choices or because the course of normal ageing (without pathology) has been modulated by different patterns of pathologies (Baltes & Baltes, 1990). For example, in later life some cognitive skills tend to decline (e.g. fluid intelligence, reaction time) but others can remain stable or even improve (e.g. factual and procedural knowledge) (Baltes & Baltes, 1990). Thus, differences in ageing processes (including physiological, social and psychological processes) mean that functional ability is not age dependent and, therefore, what constitutes "later life" may be subjective and/or culturally-specific. Indeed, in recent research conducted for the DWP in the UK, on average people perceived later life to commence at the age of 58. However, this increased with respondent age as those aged 60 to 64 years perceived 'later adulthood or old age' to start at 63 on average (Humphrey, Lee, & Green, 2011).

What constitutes "old age" is a moving target with no standard definition. Consequently, for the purpose of this thesis, later life will be considered as aged 65 and over, which will enable comparisons with previous research. At the time of data collection, chronological age still was a useful indicator of life stage. Further, reaching the age of 65 is still culturally meaningful in the UK and is a useful proxy for retirement age, which is the most commonly used definition of old age (ONS, 2014). Furthermore, this age group will encompass both those with functional limitations and those with little or no decline in physical and psychological processes.

3.2.2 Health and wellbeing. Although psychological wellbeing may be defined in different ways (see Chapter 2), commonly used methods for assessing it are self-reported subjective wellbeing questionnaires. Subjective wellbeing consists of a number of components, which include quality of life, life satisfaction (global judgments of one's life), satisfaction with important domains (e.g., work satisfaction), positive affect (experiencing many pleasant emotions and moods), and low levels of negative affect (experiencing few unpleasant emotions and moods) (Diener, 2000). Thus, for the purpose of this thesis, psychological wellbeing will be considered and assessed in the same way.

3.2.3 Successful and healthy ageing. As discussed in Chapter 2, successful ageing and, more recently, healthy ageing have emerged as key concepts that try to encompass the multidimensionality of health, disease and functioning in later life. Rowe and Khan define successful ageing as a “low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement with life”, (Rowe & Kahn, 1997). Similarly, healthy ageing can be separated into healthy biological ageing (having optimal physical and cognitive functioning for as long as possible) and wellbeing, which usually covers positive emotional health, and participation in valued social roles, engaging with others, leading meaningful lives, maintaining autonomy and independence (Kuh et al., 2014). Yet, definitions of healthy ageing differ somewhat and are often confused (or used interchangeably) with various terms such as ‘active ageing’, ‘positive ageing’ and ‘ageing well’ (Strawbridge et al., 2002). As there are still no standard operational definitions of these terms, generally ‘healthy ageing’ will be favoured to denote ageing well in physical terms and ‘successful ageing’ will be used when including a social component.

3.2.4 Shopping. It is important to note that shopping activity will be considered as a broad term and will not be limited to purchasing goods. So, shopping is: “a network of activity of which the actual point of purchase of a commodity is but a small part”, (Miller et al., 1998, p. 14). The term ‘shopping’ will encompass activities taking place in and around shops and shopping centres, including browsing and window shopping. Thus, shopping activities in which no purchases are made and/or are not intended to be made will be included. In the qualitative data, usually

shopping activities take place in person; however, shopping activity that takes place online also will be included when it is relevant to analyses.

3.3 Methodological Approach

3.3.1 Mixed methods research. Mixed methods research can be defined as approaches that combine quantitative and qualitative components (Bergman, 2008). Mixed methods have grown in popularity in recent years, increasingly challenging the binary distinction between qualitative and quantitative research methods (Bergman, 2008). Such methods seek to integrate different types of data to arrive at a more complete understanding, yet there is no agreed consensus on how to do so (Bryman, 2006).

Typically, mixed methods approaches are either concurrent or sequential (Cresswell, Plano Clark, & Garrett, 2008). Concurrent designs include triangulation (one phase in which quantitative and qualitative data are collected and analysed in parallel) and embedded designs (enhancing a study based on one method with the use of a second dataset from the other method). Sequential designs (in which the qualitative and quantitative data collection are implemented in different phases) are explanatory, exploratory or embedded (Cresswell et al., 2008). Some of the advantages of using mixed methods include: obtaining multiple perspectives to enhance and enrich the meaning of a singular perspective; contextualising information to develop a more complete understanding; to develop a complementary picture; to compare, validate, or triangulate results; and to provide illustrations of context (Plano Clark, 2010).

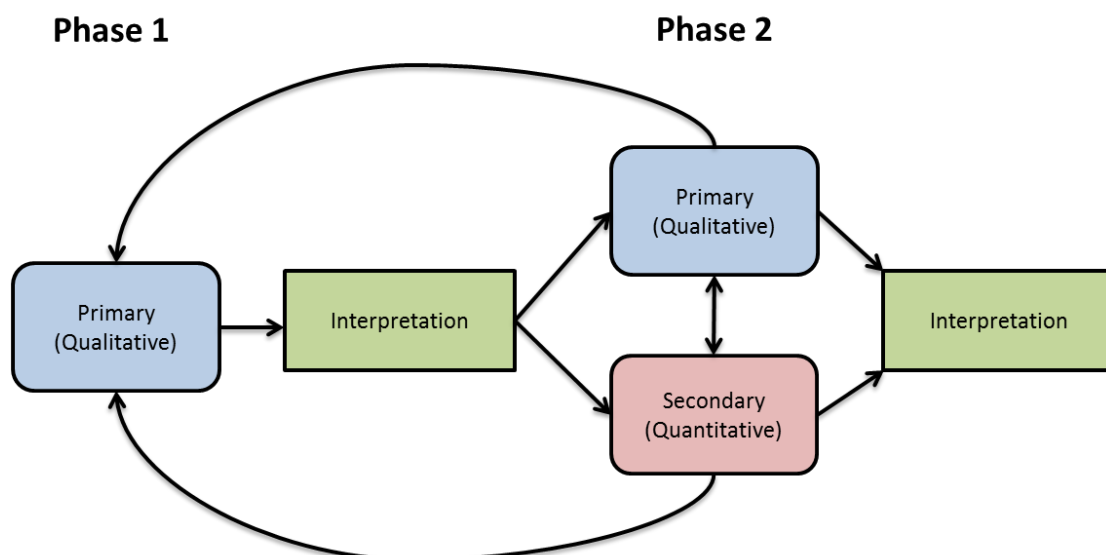
However, mixed methods approaches are not without challenges. These may be due to difficulties with the integration of findings from qualitative and quantitative components of a study (Bryman, 2007). Potentially, issues may arise during data analysis and interpretation, for example, findings may conflict or be contradictory when merging data during a concurrent design (Bryman, 2006). Thus, a strategy of resolving differences needs to be considered, such as gathering more data or revisiting the data (Cresswell et al., 2008).

The reasons for adopting a mixed methods approach in this thesis are the following: a) the relative lack of research in shopping and health requires, in part, an

exploratory approach; b) shopping activity is not covered well in survey data; c) shopping activity is a multidimensional concept, which requires multiple perspectives in order to get a comprehensive view.

3.3.2 Cross phase concurrent design. The approach used in this thesis is best described as a cross phase concurrent design, as illustrated in Figure 3.1. By using this approach the aim is to obtain different but complementary data in order to address the research questions. Hence, using different types of data will allow some cross-validation (within and between findings) as well as to enhance findings from one data source through further exploration with another data source. The strategies used for overcoming the potential methodological issues from a mixed methods approach include reanalysis of original data, using different participants and using preliminary results for further inquiry. It is hoped that by using different data sources and different types of data, a more complete picture of the role of shopping in later life will be attainable.

Figure 3.1. Cross phase concurrent design of data collection and interpretation.



3.3.3 Combining qualitative and quantitative data. The process of combining qualitative and quantitative data sources will be an iterative process. This means that both types of data will be used to contribute to the overall interpretation, as shown in

Figure 3.1. As the primary qualitative data were collected in two phases, the initial phase 1 interpretation informed the phase 2 data collection and analysis. In turn, the phase 2 analyses informed subsequent analysis as well as reinterpretation of the data from phase 1. Each of these data collection phases and data sources will be described below.

3.3.4 Original study design. This PhD was funded through CFAS-Wales. The original plan was to interrogate cross-sectional and longitudinal data from the main CFAS-Wales sample to explore information concerning shopping, nutrition and cognition. A sub-sample of CFAS participants was to be interviewed twice, 18 months apart, to determine their shopping activities and the changes over time. Qualitative and quantitative data were to be synthesized to identify associations and to relate these to health changes in the main CFAS sample.

The original study was designed to collect and analyse qualitative data from a sample in North Wales using the grounded theory approach of Charmaz (1995, 2009), which appealed as a systematic and rigorous method of qualitative data analysis. The classic grounded theory of Glaser and Strauss (1967) has its roots in both mid-century positivism and the pragmatist philosophy of Chicago School sociology. Glaser and Strauss combined dispassionate empiricism and its emphasis on emerging discoveries with interrogation into the social and subjective meanings within their data (Charmaz, 2009). They proposed a systematic approach to qualitative analysis in order to construct theoretical explanations of social processes; thus, theory is discovered as emerging from data separate from the researcher. Their rigorous and specific method for grounded theory proposes a process of coding that begins early in the research in order to think systematically about the data in accordance with basic analytic strategies (Glaser & Strauss, 1965). Through a process of constant comparison, analytic distinctions as well as comparisons are made both within and between interviews at each level of analysis. The researcher derives analytic categories directly from the data rather than from preconceived concepts or hypotheses (Charmaz, 1995). Continuous, inductive processes determine further data collection and analysis so that, ultimately, the analytic framework forms a systematic substantive theory (Glaser & Strauss, 1965).

Later, Glaser and Strauss went their separate ways and took somewhat different approaches to grounded theory. A significant difference in subsequent versions was that for Glaser the researcher was passive and for Strauss the researcher became more of an active participant (Howitt, 2010). Glaser remained consistent with the earlier version so that grounded theory was defined as a method of discovery that emerged from the data and relied on direct empiricism (Charmaz, 2009). Corbin and Strauss (2008), drawing from both Interactionism and Pragmatism, maintained that objectivity was not possible and that, as researchers bring their own perspectives and knowledge to research, they should have 'sensitivity' to the data. A further departure is that they use the term grounded theory in a 'generic sense' to denote theoretical constructs derived from qualitative analysis (Corbin & Strauss, 2008).

Charmaz (1995) has argued that grounded theory bridges traditional positivistic methods with interpretative methods and has offered a simplified, constructivist version. She maintains that her version is just one approach and emphasises flexible guidelines over methodological rules so that grounded theory methods are seen as a set of principles and practices (Charmaz, 2009). Furthermore, she suggests that basic grounded theory guidelines (such as coding and sampling) and comparative methods are neutral and can be adopted and adapted by researchers (Charmaz, 2009). It has been argued that this form of constructivist grounded theory furthers itself from the original ideas of Glaser and Strauss while continuing to adhere to the original core principles (Thomas & James, 2006). This includes the notion that 'theory' is 'grounded' and its implicit assumptions about social reality and how that knowledge can be arrived at, i.e. that the truth is there to be discovered, which is in contrast to Charmaz's approach that a truth is constructed through interaction (Thomas & James, 2006).

Grounded theory has made an important contribution to qualitative research but it is not without its criticisms and, as the above discussion suggests, each version of grounded theory is built on different epistemological and ontological assumptions. The realities of the current research necessitated a pragmatic approach to data collection and analysis for which a cross phase concurrent design was employed. This mixed methods design required a theoretically informed analytical approach for the quantitative data in order to feed back into further qualitative analysis. This is in

contrast to a more typical mixed methods design in which qualitative analysis informs quantitative analysis (Brannen, 2005). It is not that grounded theory is incompatible with mixed methods per se but that it becomes problematic when different approaches (methodological and theoretical) are needed, as with the current study's temporal structuring of the methodological phasing. Thus, it was decided that thematic analysis would be a better way to integrate the qualitative and quantitative data in the cross phase concurrent design. However, the qualitative analysis draws from some of the pragmatist underpinnings of grounded theory, specifically through building inductive analysis that is grounded in the data.

3.3.5 Rationale. The implementation of this research design was, in part, serendipitous. Delays in availability of the qualitative (phase 2) sample resulted in extended data collection with the phase 1 opportunity sample. However, the initial interpretation of these data shaped subsequent research questions, informed the interview schedule and allowed for purposive sampling at phase 2. The primary qualitative data collection is especially important as the secondary quantitative data sources were not specifically designed to answer the research questions. Furthermore, the rationale for the approach used in this study is threefold. First, the use of large-scale, nationally representative datasets with measures of physical and cognitive health can provide a more comprehensive account of health status in later life. Second, the findings from qualitative analysis can enhance the quantitative findings and vice versa. Third, the qualitative data both contextualise and illustrate the quantitative findings.

As argued by Brannen (2005), a research strategy should be devised as best suited to a particular purpose rather than being tied to a philosophical position. Hence, a pragmatic approach (and rationale for mixed methods research) is to be less purist in terms of methods and preconceptions. Consequently, the strategy adopted in this research is to use the most appropriate data available to address the research questions and to juxtapose the results of different data sources to generate complementary insights that create a bigger picture (Brannen, 2005).

3.4 Cognitive Function and Ageing Study (CFAS) Wales

This PhD was funded through CFAS-Wales and included a sub-sample of its participants. As at the time of writing CFAS-Wales has not been completed, the

information provided below is based on what was known at the time of writing based on the CFAS protocol.

3.4.1 CFAS objectives and design. CFAS-Wales is a longitudinal study looking at health and cognitive function in older people (aged 65 and over) living in Wales. The study addresses key questions from a biopsychosocial perspective regarding later life and ageing in the 21st century. It will follow longitudinally a new cohort of older people across diverse geographical areas in Wales. It is intended that, using established and standardised techniques, it will collect data that will enable the investigation of cognitive impairment, depression, physical disability and healthy active life expectancy for the whole group and within social groups. The study protocol is provided elsewhere (<http://cfaswales.bangor.ac.uk/documents/PROTOCOLv1.pdf>).

3.4.2 CFAS data collection. The participant interview is a combined screen and assessment developed for CFAS with selected additional questions. This provides the Automated Geriatric Examination for Computer Assisted Taxonomy (AGECAT) study diagnostic algorithm for dementia, depression and anxiety within a single interview, drawing on respondent and observer ratings. The interview will be administered using assisted computer direct data entry. Researcher-led focused in-depth interviews will be conducted, structured around a topic guide. Topics covered in the interview include demographic details, lifestyle variables, health, functional limitations, cognitive function and wellbeing. Further details of the questionnaires are provided elsewhere (<http://cfaswales.bangor.ac.uk/research-information.php.en?menu=1&catid=8832&subid=0>).

3.4.3 CFAS sample. The study will involve a representative sample of people aged 65 and over from two areas in Wales (Gwynedd and Swansea). A population based sample of 2,500 individuals from each site will be drawn from general practice records, with 50% of the individuals being from each of the age groups 65-74 and 75 years and over. It is expected that there will be an 80% response rate to the initial approach. Individuals ascertained from the general practitioners will, after approval from the GP, receive a letter from the GP followed by personal approach by interviewers.

3.4.4 CFAS sub-sample. To provide context for the individual participants with respect to demographic and health data, the sub-sample (shown in Table 3.1) contained only those from North Wales. Of this sample ($N = 1809$), 46% were male ($n = 831$) and 54% were female ($n = 978$). They were aged between 65 and 100 ($M = 75$).

Table 3.1. Sample description for CFAS North Wales.

	All	Female	Male
N	1809	978	831
Female (%)	54.1	-	-
Age groups (%)			
65-74	53.8	50.7	57.5
75-84	34.5	35.7	33.1
85+	11.7	13.6	9.4
Marital status (%)			
Single/sep/div	11.7	12.3	11.0
Married/cohab	62.9	50.3	77.9
Widowed	25.4	37.5	11.2
Retired	87.3	86.7	88.0
Health (%)			
Optimal health	71.5	72.1	70.7
Mobility problems	6.1	8.4	3.4
Memory problems	31.8	28.6	35.6
Good life satisfaction	80.3	78.5	82.5

3.5 Qualitative Data

3.5.1 Sample. The qualitative data were collected in two phases. As the phases were sampled and conducted differently, each sample will be described separately. A table of the interviewees is provided in Appendix A. The original study design was to collect and analyse qualitative data from a sample in North Wales using the grounded theory approach of Charmaz (1995, 2009). Delays in the main CFAS study meant delays in gaining access to the North Wales sample and so an opportunity sample from the Wirral (where the researcher resides) was obtained in order to begin data collection and analysis. Furthermore, the process of random sub-sample generation from the main CFAS sample meant that participants (i.e. based on gender and marital status) had to be requested before the study commenced. Therefore, it was not possible to request participants on an ongoing basis and to

conduct theoretical sampling based on previous analyses. This limitation in sample generation meant that grounded theory in a true sense could not be constructed.

3.5.1.1 Wirral interviews (Phase 1). The participants were recruited from the Wirral area of Merseyside through Age UK classes as well as using opportunity sampling. Contact was made with managers at Age UK and sheltered housing schemes who then facilitated informal meetings with potential participants. Further recruitment of participants was possible through referrals made by interviewees obtained through Age UK.

The Wirral interviews (N=20) consisted of 15 women and five men, who were aged between 65 and 87 ($M = 74$). Twelve of the participants were widowed, six were married and two were divorced. Twelve of the participants lived alone, six lived with their spouses and two participants lived with adult children. All respondents were retired, living in their own homes and not reliant on others for their shopping needs.

3.5.1.2 North Wales interviews (Phase 2). The participants (N=28) were recruited from the CFAS-Wales main sample. As mentioned above, preliminary analyses of phase 1 data provided a sampling frame for phase 2. As the phase 1 interviews were over-represented by people living alone, it was decided to include more married people in phase 2. Thus, the inclusion criteria at phase 2 were 10 people living alone and 18 not living alone (with a 50:50 gender split for each category), residing in North Wales. The exclusion criteria were that interviewees: wished to be interviewed in Welsh; had a MMSE score of less than 21; lived in residential care; had been selected for other qualitative interviews. A list of potential participants was randomly generated by the CFAS-Wales team. Contact with potential participants was made by post with a standard CFAS-Wales letter of invite (Appendix C) and participant information sheet (Appendix E). A follow-up telephone call was made to ask for participation and to make interview arrangements. Of those contacted, five declined participation.

The North Wales participants consisted of 14 women and 14 men, who were aged between 66 and 95 ($M = 77$). Eighteen of the participants were married, eight were widowed and two were divorced. All but two of the respondents were retired; all were living in their own homes and not reliant on others for their shopping needs.

3.5.2 Data collection. Qualitative data collection took place in two phases. The Wirral interviews were conducted between 2011 and 2013 and the North Wales interviews were conducted between 2013 and 2014. In depth semi-structured interviews, lasting up to two hours, were held with each participant in their own homes. Conversations were recorded at the time of the interview using an Olympus DM-450 digital recorder and each interview was subsequently transcribed into a Microsoft Word document.

The interview schedule was divided into several sections, as shown in Appendix B. In practice the interviews loosely followed the order of questions outlined in the interview schedule. Each interview began by asking respondents factual questions such as their age, marital status and living arrangements. The next section asked interviewees questions about their shopping habits. Examples of questions asked are: How often do you visit supermarkets? How often do you visit other shops? Have you changed your shopping habits over the last few years? Subsequent interview questions concerned whether they shop with others or use shopping as a social activity. For example, participants were asked: Who do you shop with? Do you use shopping as a social activity? Do you enjoy shopping? In addition, participants were asked about their motivations for shopping and whether they plan and make lists.

As the purpose was to gain a thorough understanding of the participants' experiences and what shopping activities mean to them, the interviewees were encouraged to freely describe their experiences. Thus, although interviews were semi-structured and organised around a number of broad themes, the interviews went with the flow of conversation rather than being prescriptive in terms of the interview schedule. This allowed the flexibility to cover the themes as they arose during the interview rather than following through in a sequential manner, which contributed to the naturalness of the interview situation. Nevertheless, whilst interviewees were encouraged to talk freely, where necessary, prompts were used to bring conversation back to the central focus. In conjunction with the interviews, notes were taken immediately after to serve as *aides memoire* and to provide context for later interpretation. The data analysis strategy will be discussed below (section 3.8).

3.6 Primary Survey Data: Shopping Frequency Questionnaire (SFQ)

3.6.1 SFQ design. The SFQ was designed in collaboration with the supervisory team as an online questionnaire in order to provide data regarding shopping practices and to explore emergent themes. Although the purpose of this research is to explore shopping in later life, at the outset it was unknown whether there would be differences in shopping habits during different periods of adulthood. As it was unclear whether there would be age differences, the decision was made to include adults of all ages (i.e. aged 18 and over) to determine whether later life was a distinct period in shopping practices. The questionnaire included basic demographic and socioeconomic questions (e.g. gender, age, marital status, working status, highest education level). Preliminary analyses of secondary data (i.e. Food and You, see below) as well as the first round of Phase 1 interviews informed the questions asked. To make comparisons with other survey data, shopping questions included level of food shopping responsibility, food shopping frequency and where people shop for food. To address gaps in survey data, shopping questions included who people shop with and how long people spend walking when shopping as well as asking about different types of shopping trips (top-up shopping; non-food shopping) and other activities people engage in while shopping. In addition, in line with CFAS-Wales, the questionnaire included measures of social engagement, wellbeing, general health and physical activity. The full questionnaire is included as Appendix H.

3.6.2 SFQ pilot. The questionnaire was piloted to a small group of people (10 responders of varying ages) using an opportunity sample. This was to determine whether there were ambiguous questions that did not garner the intended responses. Thus, the researcher was present during questionnaire completion to answer queries and to note which questions were unclear. This process resulted in a few minor language edits and the addition of a question asking who else in the household is responsible for food shopping.

3.6.3 SFQ data collection. Again, as it was unclear whether there would be age differences in shopping habits, it was decided to include adults of all ages (i.e. aged 18 and over). The questionnaire was advertised as a research announcement on the University of Liverpool staff and student online announcement system. Furthermore, links to SFQ were included in all researcher email correspondence. In

addition, interviewees from the second phase of qualitative data collection (Wales) were asked post-interviewee to return a paper copy of SFQ in a pre-paid envelope that was provided to them. (This resulted in a 79 percent response rate.)

The respondents consisted of 111 women and 21 men, who were aged between 20 and 92 ($M = 46$). Eight percent were divorced or separated, 25 percent were single, 62 percent were married, and five percent were widowed.

3.7 Ethical Considerations

3.7.1 Phase 1 qualitative. This study was approved by the University of Liverpool ethics committee. Each respondent was given an information sheet to read (see Appendix D) and asked to sign a consent form (Appendix F); confidentiality and anonymity were assured.

3.7.2 Phase 2 qualitative. The phase 2 qualitative data collection was approved as part of CFAS-Wales, whose ethics were obtained through NHS North Wales Research Ethics Committee. This required that participants were provided with an information sheet (Appendix E) and gave written consent (Appendix G). Confidentiality and anonymity were assured.

3.7.3 SFQ. The questionnaire was approved by the University of Liverpool ethics committee. Those who completed in person with a paper version were provided with a consent form. For those who completed online, the first website page required consent to be given before continuation to the main questionnaire. The study was open to anyone aged 18 or over. Responses were sent by email and subsequently the data were anonymised.

3.8 Secondary Data Sources

An exploration of datasets held by the UK Data Service was conducted to find studies that had included information about shopping. As shown in Table 3.2, several datasets (ELSA, Food and You, TUS, Understanding Society) contained shopping information and were chosen to provide sources for secondary analysis. Each of these secondary data sources will be outlined in turn. Again, to determine whether there were age differences, it was decided to retain all ages for the initial analyses.

Table 3.2. Sample descriptions of the studies used for secondary data analysis.

	ELSA (Wave 5)	F&Y	TUS	USoc (Wave 2)
Year	2011	2010	2001	2011
N	10274	3163	11664	54597
65 and over (N)	4308	836	1564	10552
Female (%)	55.5	58.9	54.6	54.1
Age groups (%)				
16-24	0.0	9.2	13.8	14.0
25-44	0.5	33.1	37.4	34.1
45-64	47.1	31.5	31.4	32.6
65-74	29.8	13.8	10.6	12.3
75+	22.5	12.1	5.9	7.9
Marital status (%)				
Single/sep/div	17.0	36.0	25.5	30.7
Married/cohab	67.4	51.5	63.8	63.3
Widowed	15.4	12.4	6.7	6.0
Work status (%)				
Working	31.7	48.4	57.8	53.8
Retired	55.2	28	18.8	21.8
Long term sick	5.0	4.0	4.1	3.9
Other	8.1	19.5	19.3	20.5
Education %				
DK/refused	1.6	0.9	4.0	2.4
Other/none	38.2	25.9	40.5	25.4
GCSE	22.4	21.6	22.7	20.8
A level/diploma	21.1	31.1	20.3	20
Degree or higher	16.6	20.6	12.5	31.2
General health (%)				
Optimal health	69.8	69.9	76.4	78.31
Disability/illness (%)				
Yes	54.7	31.8	30.7	34.3
Household size (%)				
1 person	23.4	29.6	25.6	25.0
2	58.5	37.5	34.1	34.1
3 or more	17.8	32.9	40.3	40.9
Car Ownership (%)				
	85.9	73.3	79.2	65.9
Urban (%)				
	-	-	75.8	70.6

Note. Numbers represent intention as figures unknown at the time of writing.

ELSA = English Longitudinal Study of Ageing; F&Y = Food and You survey; TUS = Time Use Survey; USoc = Understanding Society. For ELSA, Wave 5 has been used as an exemplar wave as it is the mid-point of many of the longitudinal analyses. Details of other waves can be found elsewhere and/or are reported in the relevant chapters.

3.8.1 English Longitudinal Study of Ageing (ELSA)

3.8.1.1 ELSA objectives and design. ELSA is a longitudinal survey of ageing and quality of life among older people (aged 50 and over) that explores the dynamic relationships between health and functioning, social networks and participation, and economic position as people plan for, move into and progress beyond retirement. Topics covered in the interview include demographic details, health, social participation, income and assets, cognitive function and psychosocial health. The self-completion questionnaire includes questions regarding quality of life, life satisfaction and social networks. Full details of the questionnaires are provided elsewhere (<http://www.ifs.org.uk/ELSA>).

3.8.1.2 ELSA data collection. Data collection varies per wave but includes a computer-assisted personal interview (CAPI) a self-completion questionnaire, clinical measurements and physical measurements. The main survey at Wave 5 (the most recent fully available) comprised a CAPI and a self-completion questionnaire. Questions concerning accessibility to shops are in the self-completion component and appear in all waves except for Wave 3. A summary of the data used for subsequent analyses (dependent on the availability in each wave), indicated by a '✓', is shown in Table 3.3. The variables used in analyses will be described in subsequent chapters and the specific questions asked in the original questionnaire are provided in Appendix J.

Table 3.3. Summary of ELSA data per wave.

	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
N	9432	9771	11050	10317	10601
Response rate %	82	73	74	80	79
Demographic data	✓	✓	✓	✓	✓
Socioeconomic data	✓	✓	✓	✓	✓
Physical health					
Self-rated health	✓	✓	✓	✓	✓
Mobility	✓	✓	✓	✓	✓
ADLs	✓	✓	✓	✓	✓
Gait speed	✓	✓	✓	✓	✓
Wellbeing					
Quality of life (CASP)	✓	✓	✓	✓	✓
Satisfaction with life scale	✓	✓	✓	✓	✓
Cognitive function					
Memory	✓	✓	✓	✓	✓
Executive function	✓	✓	✓	✓	-
Shopping					
Ease of access	✓	-	✓	✓	✓

3.8.1.3 ELSA sample. The ELSA sample was selected from the Health Survey for England (HSE) 1998, 1999 and 2001 respondents. Households were included in ELSA if they contained at least one adult of 50 years or older. To ensure that ELSA remained representative of the target population, refreshment samples from HSE participants were included at Waves 3, 4 and 6. The cross-sectional response rates per wave are shown in Table 3.2; however, sample attrition is more complicated given that part of the ELSA design is an attempt to bring back respondents who did not respond at an earlier wave. Thus, longitudinal response rates must take into consideration core members, refreshment sample members and returners at each wave. For Wave 5, the response rate for Cohort 1 (recruited at Wave 1) core members was 68.7%; for Cohort 3 (recruited at Wave 3) it was 75.3%; and for Cohort 4 (recruited at Wave 4) it was 85.1%. The demographic characteristics and the socioeconomic status of the sample at Wave 5 are shown in Table 3.1.

3.8.1.4 ELSA sub-sample. As different waves were used depending on the analyses and data availability at each wave, samples used will be described where relevant in the following chapters. However, figures for Wave 5 will be provided as

an exemplar wave. Of those aged 65 and older, only those who answered the shopping questions were retained ($N=5377$); of those 54% were female ($n = 2928$) and 46% were male ($n = 2449$). In ELSA age is collapsed over 90 ($n = 176$) and the remainder were aged between 65 and 89 ($M = 74$).

3.8.2 Food and You

3.8.2.1 Food and You objectives and design. The Food and You survey was commissioned in 2009 in order to inform policy making at the Food Standards Agency (FSA) and relevant government departments. Its aim was to collect quantitative data about the public's attitudes to, and behaviours towards, food issues such as safety and healthy eating. Along with demographic and socio-economic measures, further information was collected on lifestyle, such as shopping and eating habits, to determine how they influence food behaviours.

3.8.2.2 Food and You data collection. The survey comprised 3,163 CAPI interviews with people aged 16 and over across the UK. Interviews were conducted from March to August 2010. The response rate was 52% of addresses sampled. The survey included: information about household members; healthy eating attitudes and behaviours; knowledge of dietary recommendations; shopping habits; shopping expenditure; self-reported health, physical activity, height and weight; demographics. The questions about shopping behaviour were asked of a random third of respondents. Full details of the final questionnaire are presented elsewhere (Food Standards Agency & TNS-BMRB, 2010). The variables used in analyses will be described in subsequent chapters and the specific questions asked in the original questionnaire are provided in Appendix K.

3.8.2.3 Food and You sample. The sampling method used was a multi-stage random probability design in which samples were allocated to each Government Office Region (Scotland, Wales and Northern Ireland; England divided into nine strata) in proportion to their respective adult populations. In order to ensure socio-economic representation, these were further stratified using the percentage of heads of households in a non-manual occupation, households with no car and population density. The primary sampling units (PSU) were postcode sectors; 25 addresses were sampled randomly for each unit. Full details of the sampling methods used are

presented elsewhere (FSA & TNS-BMRB, 2010). The demographic characteristics and the socioeconomic status of the sample are shown in Table 3.1.

3.8.2.4 Food and You sub-sample. Of those aged 65 and older (N=836) only those who had been asked the shopping questions and had specified marital status were retained (N=289). Of the respondents who met inclusion criteria, 62% were female ($n = 178$) and 38% were male ($n = 111$). They were aged between 65 and 96 ($M = 75$) and, of those who specified ethnicity, 98% ($n = 282$) were white.

3.8.3 United Kingdom Time Use Survey (TUS)

3.8.3.1 TUS objectives and design. The key objective of the United Kingdom Time Use Survey (TUS) was to carry out a large-scale household survey featuring self-completion diaries to measure the amount of time spent by the UK population on various activities. Topics covered in the survey include employment, qualifications, care of dependants and children, leisure time activities and demographic details, such as age, gender, marital status, ethnicity and housing. Full details of the questionnaires are presented elsewhere (Ipsos-RSL & ONS, 2003).

3.8.3.2 TUS data collection. A total of 11,854 sampled households resulted in 6,414 household interviews with 14,423 eligible respondents of whom 11,667 answered the individual interview and/or filled in 20,991 diaries. Fieldwork was conducted from June 2000 to September 2001. The response rates were 61.1% for households; 80.9% for individuals; 72.7% for diaries. The 52 week year was divided into thirteen fieldwork months each of which covered a nationally representative sample. To ensure an equal distribution of week and weekend days for diary completion, the first diary day was randomly allocated to a day of the work week (Monday to Friday) and the second diary day was randomly allocated to either Saturday or Sunday.

Data collected included a CAPI household interview with the householder or their spouse/partner; a CAPI individual interview with all members of the household over 8 years of age; and a two-day diary (shown in Figure 3.2) completed by all members of the household over 8 years old.

Figure 3.2. TUS time use diary.

Late Morning Time, am	What were you doing? <i>Please record your main activity for each 10-minute period.</i>	What else were you doing? <i>Write in the most important activity you were doing at the same time</i>	Where were you? <i>e.g. At home, at friends, in car, on bus, train, cycling, walking</i>	Were you with anybody? <i>Please mark the boxes. See example on page 3.</i>				
	<i>Enter one main activity on each line.</i>	<i>e.g. Looking after children, listening to the radio or having a drink</i>		Alone or with people you don't know	Children up to 9 living in your household	Children aged 10 to 14 living in your household	Other household members	Other persons that you know
10:00 - 10:10				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:10 - 10:20				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:20 - 10:30				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:30 - 10:40				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:40 - 10:50				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:50 - 11:00				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11:00 - 11:10				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11:10 - 11:20				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11:20 - 11:30				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11:30 - 11:40				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11:40 - 11:50				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11:50 - 12:00				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:00 - 12:10				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:10 - 12:20				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:20 - 12:30				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:30 - 12:40				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:40 - 12:50				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:50 - 1:00				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The self-completion diary (for individuals aged 14 and over) was divided into 144 ten minute time slots starting at 4.00am. The diary collected information on both main and secondary activities. It asked about the location of the activities for each of the 144 ten minute time slots and respondents were asked to put crosses in pre-determined boxes indicating who they were with. The variables used in analyses will be described in subsequent chapters and the specific questions asked in the original questionnaire are provided in Appendix L.

3.8.3.3 TUS sample. A multi-stage stratified random sample design was used. The small users Postcode Address File (PAF) was employed as the sampling frame in England, Wales and Scotland and the Value and Lands Agency (VLA) list was used in Northern Ireland. The primary sampling units (PSUs) consisted of postcode sectors in Great Britain and Wards in Northern Ireland. Any postal sectors with less than 500 addresses were amalgamated with the adjacent sector. Each fieldwork month was designed to cover a nationally representative sample in its own right. To this end, the selected list of postcode sectors was combined with the list of selected wards. Wards were placed after postcode sectors to form the final PSU list. Full

details of the sampling methods used are presented elsewhere (Ipsos-RSL & ONS, 2003). The survey comprised only private households and the household members living in these private households. All individuals aged 8 years or more were asked to complete individual questionnaires. The demographic characteristics and the socioeconomic status of the sample are shown in Table 3.1.

3.8.3.4 TUS sub-sample. Only those aged 16 or older were retained (N=8999); 45% were male ($n = 4085$) and 55% were female ($n = 4914$). They were aged between 16 and 98 ($M = 45$). Of those aged 65 and older (N=1564), 44% were male ($n = 683$) and 56% were female ($n = 881$). They were aged between 65 and 98 ($M = 74$) and, of those who specified ethnicity, 99% ($n = 1547$) were white.

3.8.4 Understanding Society (USoc)

3.8.4.1 Understanding Society objectives and design. Understanding Society, or the United Kingdom Household Longitudinal Study (UKHLS), is a multi-topic household survey designed to understand social and economic change in Britain at the household and individual levels. The study has a strong emphasis on domains of family and social ties, work, financial resources, and health.

The study is an annual survey of each adult member of a nationally representative sample and the same individuals are re-interviewed in each wave. Each wave is collected over 24 months. One person completes the household questionnaire; each person aged 16 or older answers the individual adult interview and self-completion questionnaire. The individual interview includes questions about demographics, baseline information, family background; health, disability and caring; current employment and earnings; family networks; environmental behaviours. The questionnaires have rotating modules that are not used in every wave. The Domestic Labour module, which includes a question on grocery shopping, was asked only in Wave 2, therefore, that is the wave used for analytical purposes. Full details of the questionnaires are provided elsewhere (<https://www.understandingsociety.ac.uk/documentation>).

3.8.4.2 Understanding Society data collection. In Wave 2 there were a total of 30,508 households and 54,597 adults. Fieldwork was conducted from January 2010 to December 2011. The household response rates were 61.7% fully

responding, 14.5% partially responding (76.2% all responding). Cross-sectional individual adult response rates were 59.4% for the full interview.

Data collection takes place using a CAPI in the respondents' homes. One person completes the household questionnaire; each person aged 16 or older answers the individual adult interview and self-completion questionnaire. Young people aged 10 to 15 years are asked to respond to a paper self-completion questionnaire. The variables used in analyses will be described in subsequent chapters and the specific questions asked in the original questionnaire are provided in Appendix M.

3.8.4.3 Understanding Society sample. The study has four sample components: the General Population component, the Innovation Panel, a boost sample of ethnic minority group members, and participants in the former British Household Panel Survey (BHPS). Waves 1-2 include the General Population component and the ethnic minority boost sample. Former participants of the BHPS joined Understanding Society from Wave 2.

The General Population Sample is based upon two separate samples of residential addresses of England, Scotland and Wales and for Northern Ireland. The England, Scotland and Wales sample is a proportionately stratified (equal probability), clustered sample of addresses selected from the PAF. Northern Ireland has an unclustered systematic random sample of addresses selected from the Land and Property Services Agency list of domestic addresses. Full details of the sampling methods used are presented elsewhere (Lynn, 2009). The demographic characteristics and the socioeconomic status of the sample are shown in Table 3.1.

3.8.4.4 Understanding Society sub-sample. Only couples were included in the Domestic Labour module, which contained the grocery shopping question, thus only they were retained (N=31,723); 47% were male ($n = 14,826$) and 53% were female ($n = 16,897$). They were aged between 16 and 97 ($M = 49$). Of those aged 65 and older (N=6108), 55% were male ($n = 3369$) and 45% were female ($n = 2739$); they were aged between 65 and 97 ($M = 72$).

3.9 Analytical Strategy

3.9.1 Introduction. As mentioned above, the mixed methods approach used in this thesis is an iterative process and, therefore, each data source informs the others and guides further analysis. In effect, preliminary findings from qualitative data guided exploration of secondary (quantitative) data sources, which in turn led to subsequent qualitative data collection and analysis. So, at each point in the analytical process, both data types have been utilised to determine how findings fit together and what can be explored in more depth. Hence, both types of data contribute to the interpretation of findings. (See Figure 3.1.)

3.9.2 Quantitative data analysis. A range of descriptive analyses were carried out and appropriate bivariate and multivariate analyses were used. These included Chi-square tests, logistic regression and linear regression. The specific nature of the analyses will be provided in more detail where they appear in the relevant chapters. Analyses were carried out with SPSS (version 20) and Stata (Intercooled version 9).

3.9.3 Qualitative data analysis. There were 48 interviews, which were coded and analysed with a thematic analysis approach using the guidelines of Braun and Clarke (2006). Interviews were transcribed verbatim and transcriptions were entered into QSR NVivo (version 9) to organise data. Data collection, transcription and analysis were conducted simultaneously. Interviews were read line-by-line to give a holistic impression and then re-read and coded. This is a reflexive process, therefore, as new codes and themes emerged, the interviews were recoded. Brief memos were written for each interview. The next step was to group the codes into categories to identify emerging domains and themes. These were discussed and agreed upon with the supervisory team. As the interviews were conducted in two phases, the Wirral interviews tended to be more explorative and the Wales interviews were more focused as themes had already emerged. Furthermore, as some of these themes emerged spontaneously in earlier interviews, they were probed more in subsequent interviews. For example, as the social engagement theme frequently emerged unprompted, it was explored further in later interviews. This led to subsequent re-examination of earlier transcripts with particular focus given to social engagement while shopping. It is important to note that although social engagement emerged organically, the interview schedule used in phase 2 was

designed to pursue this and other areas of interest in more detail. The main themes that emerged and were interrogated were: shopping practices (how people shop), identity; social activity; physical activity; cognitive activity and wellbeing. Each of these themes will provide the focus of subsequent chapters.

3.9.4 Data integration. As already noted, secondary data sources were used as appropriate to explore emergent themes from qualitative data and to inform further exploration. None of the secondary data sources had an explicit focus on shopping and, therefore, the availability of items measuring shopping-related activities was limited in each. (See Appendices for questions used from each of the secondary data sources.) However, although individually each study can only give a partial view of shopping in later life, taken together they cover a wide range of shopping-related activities. The areas covered by each study are shown in Table 3.4.

Table 3.4. Summary of data available per quantitative data source.

	CFAS	ELSA	F&Y	TUS	USoc
Demographic data					
Age	X	X	X	X	X
Sex	X	X	X	X	X
Marital status	X	X	X	X	X
Socioeconomic data					
Education	X	X	X	X	X
Work status/ job classification	X	X	X	X	X
Health					
Self-reported	X	X	X	X	X
Disability/long- standing conditions	X	X	X	X	X
Wellbeing	X	X			X
Cognitive function	X	X			
Shopping					
Access to shops		X			
Time spent shopping				X	
Level of responsibility (food shopping)			X		X
Food shopping frequency			X		
Social activities while shopping				X	
Who people shop with				X	
Attitude to shopping				X	

Note. F&Y = Food and You survey; USoc = Understanding Society.

Thus, where possible, items from multiple studies were used to explore research questions. Again, this is an iterative process in which findings are enhanced by combining complementary qualitative and quantitative data sources. As a result of using different data sources and different types of data, a more complete picture of the role of shopping in later life will be attainable.

Chapter 4

Shopping Practices

4.1 Introduction

The purpose of this chapter is to establish shopping practices as a site for the subsequent exploration of physical health and wellbeing in later life. Chapter 3 positions this study within a mixed methods approach, specifically a cross phase concurrent design, in which research questions will be addressed using different but complementary data. While the quantitative studies used have collected some limited data on shopping, previously they have not been analysed for a correlation with health. As discussed in Chapter 2, these data refer to shopping practices and, although they may include purchasing behaviour, such practices are not limited to consumption. As a result of using different data sources and different types of data, a more complete picture of the role of shopping in later life will be attainable.

4.1.1 Consumption in later life. Whilst there is evidence that younger cohorts (born post-WW2) of older people are increasingly engaged in consumption (Hyde et al., 2009), there is little research exploring either how older people view shopping or the range of activities shopping encompasses that may contribute to health in later life. Particularly in the UK, research often is limited to older disadvantaged people and food poverty (Myers & Lumbers, 2008) or to large-scale statistical data with measures of consumption (Banks & Leicester, 2006). Although previous research has shown that there is increasing engagement with consumer society in older households (Higgs et al., 2009), such studies have not looked at shopping directly nor have they been concerned with the potential relationship between shopping and health.

4.1.2 Gender and age differences in time spent shopping. There is some evidence from time use studies to suggest that there are gender and age differences in shopping practices. For example, on an average day in the US grocery shopping was found to be a fairly infrequent activity with only 29 percent of women and 24 percent of men (over age 25) reporting spending any time grocery shopping in 2006. However, an

upward trend from the late 90s reflected a significant increase in the likelihood of grocery shopping for both sexes and an increase in the amount of time spent shopping, particularly for men (Zick & Stevens, 2009). The focus of that study was on food shopping activity only (which may be different in a UK population) but it does suggest that gender differences in food shopping may be becoming less prevalent. A time use study in Canada found that shopping participation rates amongst older people were similar to those of the rest of the population, however, older people and teens had longer trip durations for shopping activities (Farber, Paez, Mercado, Roorda, & Morency, 2011). Although that study was limited to three metropolitan areas (therefore does not include rural dwellers) it is interesting to note that shopping participation rates of those aged 65 and older were similar to those of other age groups. In the UK, time spent shopping was included in the Office for National Statistics (ONS) Omnibus Survey of 2005, which found that about a third of people shopped (or used services) on an average day, and women and older people did so more often than men and younger people (Lader, Short, & Gershuny, 2006). Moreover, shopping practices may differ depending on the day of the week. Overall people spent more time at the weekend than during the week on domestic tasks (which included shopping) and part of that difference was due to more time being spent on shopping at the weekend (Lader et al., 2006). Although for that study shopping activity was grouped with use of other services (such as banking, going to the post office and doctor appointments), it suggests that there may be different patterns of shopping activity depending on the day of the week. Importantly, the conclusions made by the above studies have been limited by either failing to include the whole population, by focusing on food shopping only or by grouping shopping with other activities.

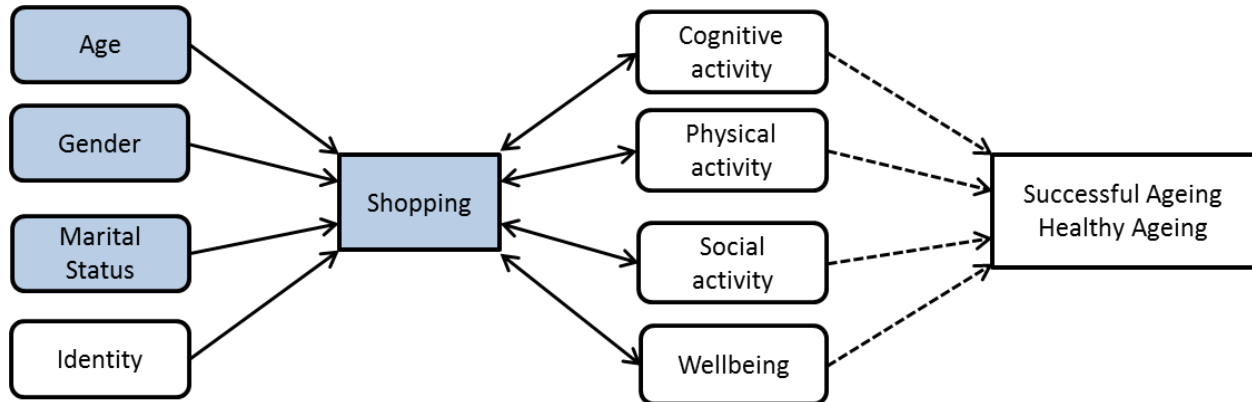
4.1.3 Consumer heterogeneity in later life. The majority of marketing and consumer behaviour research focusing on older people has been concerned with people's attitudes to products and how these manifest in purchasing behaviours (Pettigrew, 2011). Typically such marketing research focuses on market segmentation, yet, it has been argued that older people are more heterogeneous than younger consumer age groups because people become increasingly different from others with age due to differences in ageing processes and life circumstances (Moschis, 2003).

Research in the US shows that specific ways in which older shoppers differ from younger people include shopping more during morning hours, being convenience-oriented and preferring one-stop shopping (Moschis, 2003). Again, caution must be taken against comparing those ageing in the UK to those ageing in the traditionally consumerist society of the US and consumer research typically has a focus on tapping into the 'mature market' rather than shopping activity that does not involve purchasing. However, it is interesting to note that the leading researcher in this field argues that people's consumer behaviour does not correlate well with age (Moschis, 2003). Thus, research such as this does acknowledge that consumer behaviour in later life is influenced by life-changing events and circumstances such as health declines.

4.1.4 Shopping motives. However, shopping is more than just the acquisition of food or other goods. There may be pleasure derived from bargain hunting and people engage in 'gratification' shopping as stress relief, a way to alleviate negative mood, or as a treat to oneself (Arnold & Reynolds, 2003). Consequently, shopping motives are a function of many variables, some of which are unrelated to the buying of products (Tauber, 1972) and recently there has been more focus on recreational or leisure shopping, which will be discussed further in subsequent chapters. Such studies exploring the reasons or motivations for spending time in shops suggest that people also derive pleasure from the social interaction or escapism of leisure shopping (Bäckström, 2011).

4.1.5 Aims and research questions. Again, much of the prior research into shopping behaviour has been from a marketing or consumer psychology perspective and for the most part has not been concerned with motivations to shop beyond those related to purchasing products. When shopping activity has been included in results from time use studies, it has been limited to food shopping or combined with other activities (e.g., domestic tasks, other services), thus providing an incomplete picture. In order to establish shopping practices as a site for exploring physical health and wellbeing in later life, first it is necessary to consider the role of shopping in later life. As shown in Figure 4.1, age, gender and marital status are all thought to influence shopping activity in later life and will be explored in this chapter.

Figure 4.1. Proposed model of the mediating role shopping plays in healthy and successful ageing.



To this end, the aim of this chapter is to explore three research questions:

- Do older people engage in shopping practices differently from younger people?
- Are there differences in shopping practices amongst people in later life?
- What factors may explain differences in shopping practices amongst people in later life?

In order to address these questions, data from large-scale studies conducted in the UK that have asked about shopping practices (i.e., UK Time Use Survey; Food and You; Understanding Society) provide a useful starting point. Findings from both secondary data and primary qualitative data will be integrated where possible.

4.2 Age Differences in Shopping Practices

This section will investigate age differences in shopping practices by exploring whether people shop in a typical week, how they shop and how much time they spend on shopping activity. For the initial set of analyses, the sample is split into four age groups and those in later life (aged 65 and over) will be analysed separately below (section 4.3).

4.2.1 Whether people shop or not by age. In order to explore the role shopping plays in later life it is necessary first to establish whether older people are shopping and whether their shopping practices are different from other age groups. To do this, data from the UK Time Use Survey (TUS) were used to explore differences in the proportions of people in each age group who shopped or not on a typical day in the study period. To ensure an equal distribution of days, the 52 week year was divided into 13 fieldwork months each of which covered a nationally representative sample. The self-completion time use diary covered two 24 hour periods (one weekday and one weekend day) each of which was divided into 144 ten minute time slots. Shopping activity included all shopping codes (i.e. any instance of shopping for consumer goods, capital goods or window shopping; see Appendix L for all shopping codes), which covered all shopping activities in person. Note that as internet usage was much lower in 2000, with internet access in just 28 percent of homes in the UK at that time (OfTel, 2000), there were no instances of internet shopping. The sample was split into four age groups: 16-24, 25-44, 45-64, 65 and over. The results for age group, shown in Table 4.1, show that there are statistically significant differences ($\chi^2 = 73.793$; $df = 3$; $p < .001$). Just over half of those aged 16-24 mentioned that they did at least some shopping during the study period. This compares to around two thirds in each of the other age groups, therefore showing that the rates of shopping in later life were no different from those in midlife. There were gender differences ($\chi^2 = 168.047$; $df = 1$; $p < .001$) as women were more likely than men to have reported shopping, with around 70 percent of women shopping compared with 55 percent of men.

Table 4.1. TUS: percentage who reported doing any shopping by gender and age group.

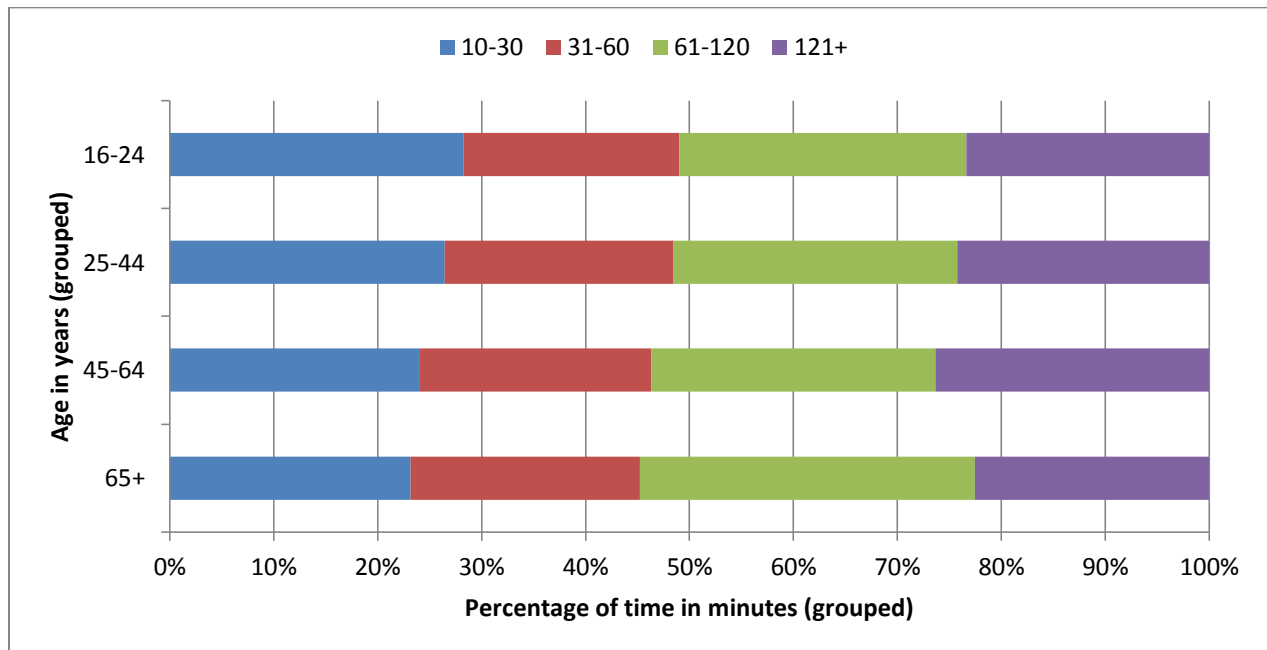
Age group	All [95% CI]	<i>N</i>	Males [95% CI]	<i>n</i>	Females [95% CI]	<i>n</i>
16 -24	51.40 [48.62, 54.18]	1241	41.17 [37.05, 45.29]	549	59.54 [55.88, 63.20]	692
25 -44	64.60 [62.99, 66.21]	3368	55.22 [52.72, 57.72]	1514	72.33 [70.29, 74.37]	1854
45 -64	63.70 [61.93, 65.47]	2826	55.79 [53.13, 58.45]	1339	70.81 [68.50, 73.12]	1487
65 or more	63.50 [61.11, 65.89]	1564	64.42 [60.83, 68.01]	683	62.77 [59.58, 65.96]	881
	$\chi^2 = 73.793$ $p < .001$			$\chi^2 = 168.047$	$p < .001$	

Note. CI = confidence interval.

The results also show there are statistically significant age group differences amongst both men ($\chi^2 = 67.324$; $df = 3$; $p < .001$) and women ($\chi^2 = 55.278$; $df = 3$; $p < .001$). Men aged 65 or over were more likely to have shopped than those in any other age group and the youngest men were the least likely to have shopped. On the other hand, women in the middle two age groups were the most likely to have shopped. Women aged 65 and over were as likely to have shopped as those aged 16-24.

4.2.2 Age differences in time spent shopping. Analyses were performed to explore whether there were age differences in the amount of time spent shopping amongst those who reported any shopping activity. Time spent shopping included all instances of shopping recorded in two 24 hour self-completion diaries, each of which was divided into 144 ten minute time slots. Thus, each recorded instance of shopping corresponds to a 10 minute slot or any part thereof. For each respondent all instances of 10 minutes shopping were summed to create a total time spent shopping. Thus, time spent shopping corresponds to total time per person over the two days and not individual shopping trips. Using cumulative frequencies the sample was divided into quartiles to produce four groups: 10-30 minutes, 31-60 minutes, 61-120 minutes, 121 minutes and over. These categories corresponded to 24.7%, 21.5%, 27.6% and 26.3% of the sample respectively. The results for time spent shopping by age group, shown in Figure 4.2, are statistically significant ($\chi^2 = 18.034$; $df = 9$; $p = .035$).

Figure 4.2. TUS: time spent shopping (grouped) by age group for all shoppers.



Note. $N = 5555$; 630 aged 16-24; 2153 aged 25-44; 1788 aged 45-64; 984 aged 65+.

It can be seen that the pattern is similar across all age groups as just over a fifth in each group spent 31-60 minutes shopping. However, those aged 65 and over were most likely to have spent 61-120 minutes shopping, whilst those in the youngest age group were marginally more likely to have done shorter bursts of 10-30 minutes.

4.2.3 Age differences in time spent shopping on weekday and weekend. Next, to explore patterns of shopping, analyses were performed to see whether there were age differences in the amount of time spent shopping on a weekday and on a weekend. For these analyses, time spent shopping was split into five groups: no time, 10-30 minutes, 31-60 minutes, 61-120 minutes, 121 minutes and over. This is because the categories were derived from all those who recorded any instance of shopping, hence, the 'no time' category needed to be added in order to capture those who shopped only on either a weekday or weekend day during the study period. Importantly, this allows exploration of different patterns of shopping activity on weekdays and weekends.

As shown in Tables 4.2 and 4.3, there are statistically significant differences between age groups in time spent shopping on weekdays ($\chi^2 = 182.29$; $df = 12$; $p <$

.001) and on weekends ($\chi^2 = 97.42$; $df = 12$; $p < .001$). Similar proportions, about a quarter, in all age groups reported shorter spells of shopping (10-30 minutes). However, at the other end of the scale, older people were much more likely to have shopped for longer. Twenty-three percent of those aged 65 and over reported shopping for between 61 and 120 minutes compared with 11 percent of 16-24 year olds. However, those aged 65 and over were less likely to shop on the weekend than those in the other age groups. Again similar proportions, about a fifth, in all age groups reported short spells of shopping (10-30 minutes); however, older people were a little less likely to shop for as long on weekend days.

Table 4.2. TUS: total minutes (grouped) weekday shopping by age group.

Age group	No time [95%CI]	10-30 mins [95%CI]	31-60 mins [95%CI]	61-120 mins [95%CI]	121+ mins [95%CI]	<i>N</i>	χ^2
16-24	47.62 [43.72, 51.52]	26.35 [22.91, 29.79]	11.43 [8.95, 13.91]	10.79 [8.37, 13.21]	3.81 [2.32, 5.30]	630	
25-44	41.29 [39.21, 43.37]	25.27 [23.43, 27.11]	14.68 [13.19, 16.17]	12.73 [11.32, 14.14]	6.04 [5.03, 7.05]	2153	182.29
45-64	37.64 [35.39, 39.89]	25.00 [22.99, 27.01]	16.50 [14.78, 18.22]	14.26 [12.64, 15.88]	6.60 [5.45, 7.75]	1788	$p < .001$
65+	22.76 [20.14, 25.38]	24.80 [22.10, 27.50]	20.12 [17.62, 22.62]	23.17 [20.53, 25.81]	9.15 [7.35, 10.95]	984	

Note. CI = confidence interval. Time spent shopping calculated only for those who reported shopping for any length of time during the study period.

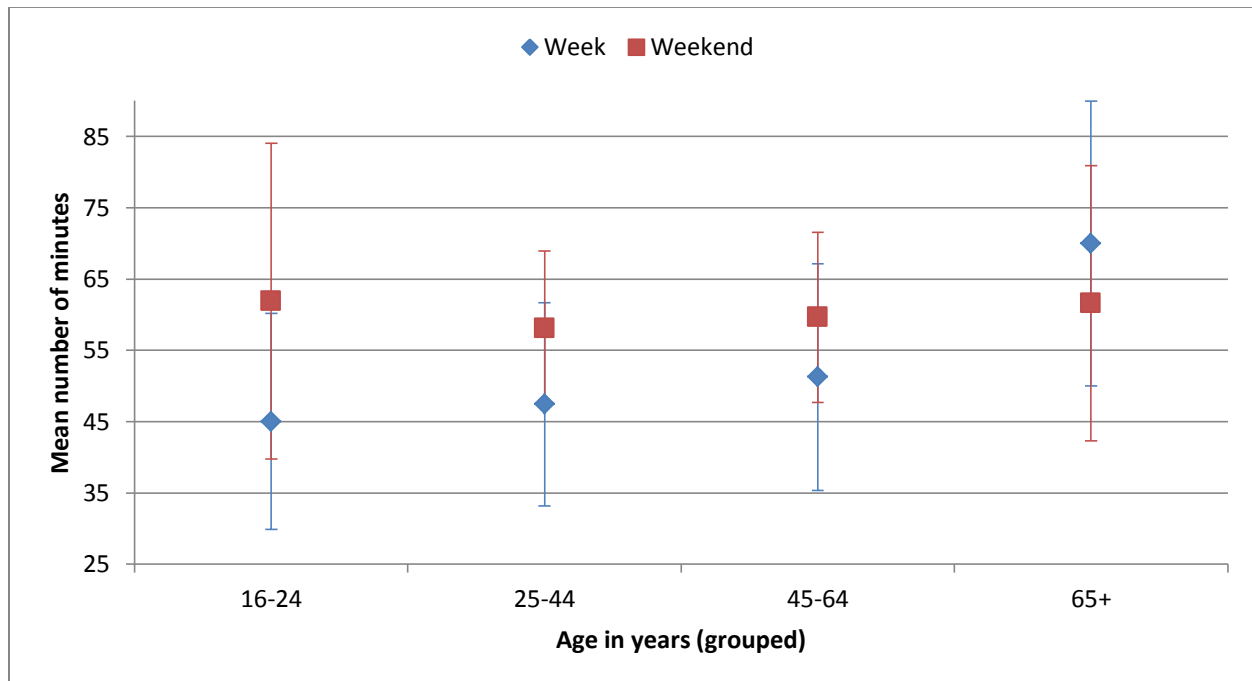
Table 4.3. TUS: total minutes (grouped) weekend day shopping by age group.

Age group	No time [95%CI]	10-30 mins [95%CI]	31-60 mins [95%CI]	61-120 mins [95%CI]	121+ mins [95%CI]	<i>N</i>	χ^2
16-24	27.78 [24.28, 31.28]	22.54 [19.28, 25.80]	14.76 [11.99, 17.53]	18.25 [15.23, 21.27]	16.67 [13.76, 19.58]	630	
25-44	29.91 [27.98, 31.84]	21.46 [19.73, 23.19]	16.81 [15.23, 18.39]	17.84 [16.22, 19.46]	13.98 [12.52, 15.44]	2153	97.42
45-64	31.10 [28.95, 33.25]	19.80 [17.95, 21.65]	16.16 [14.45, 17.87]	19.13 [17.31, 20.95]	13.81 [12.21, 15.41]	1788	$p < .001$
65+	44.11 [41.01, 47.21]	19.51 [17.68, 21.34]	14.02 [11.85, 16.19]	15.14 [12.9, 17.38]	7.22 [5.60, 8.84]	984	

Note. CI = confidence interval. Time spent shopping calculated only for those who reported shopping for any length of time during the study period.

4.2.4 Window shopping and food shopping patterns. Thus far aggregate data on shopping has been used; however, a major advantage of the TUS data is that they allow examination of specific types of shopping. For the purpose of these analyses window shopping and food shopping were explored as they capture leisure shopping and shopping out of necessity, respectively. Due to small numbers of people reporting specific types of shopping, the confidence intervals overlap and, thus, no statistical inferences can be made. However, as shown in Figure 4.3, the results suggest an interesting pattern for those who reported window shopping. Again, it seems plausible that older people may be more likely to shop during the week than at the weekend.

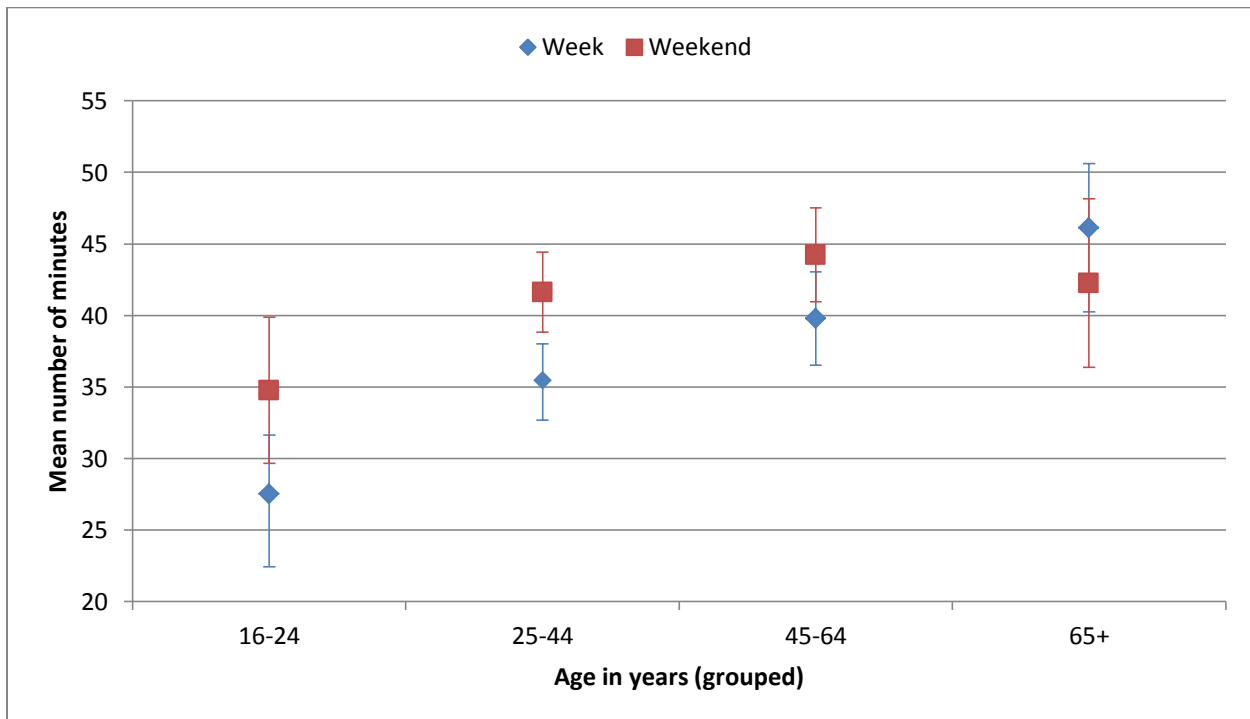
Figure 4.3. TUS: mean number of minutes spent window shopping on a week day and weekend day by age group.



Note. Error bars represent 95% confidence intervals. $N = 270$.

For those who reported shopping for food, the pattern is similar to that of window shopping. As shown in Figure 4.4, those aged 65 and over were more likely to have shopped during the week and to have spent longer than those in the youngest two age groups.

Figure 4.4. TUS: mean number of minutes spent food shopping on the week and weekend by age group.



Note. Error bars represent 95% confidence intervals. $N = 2108$.

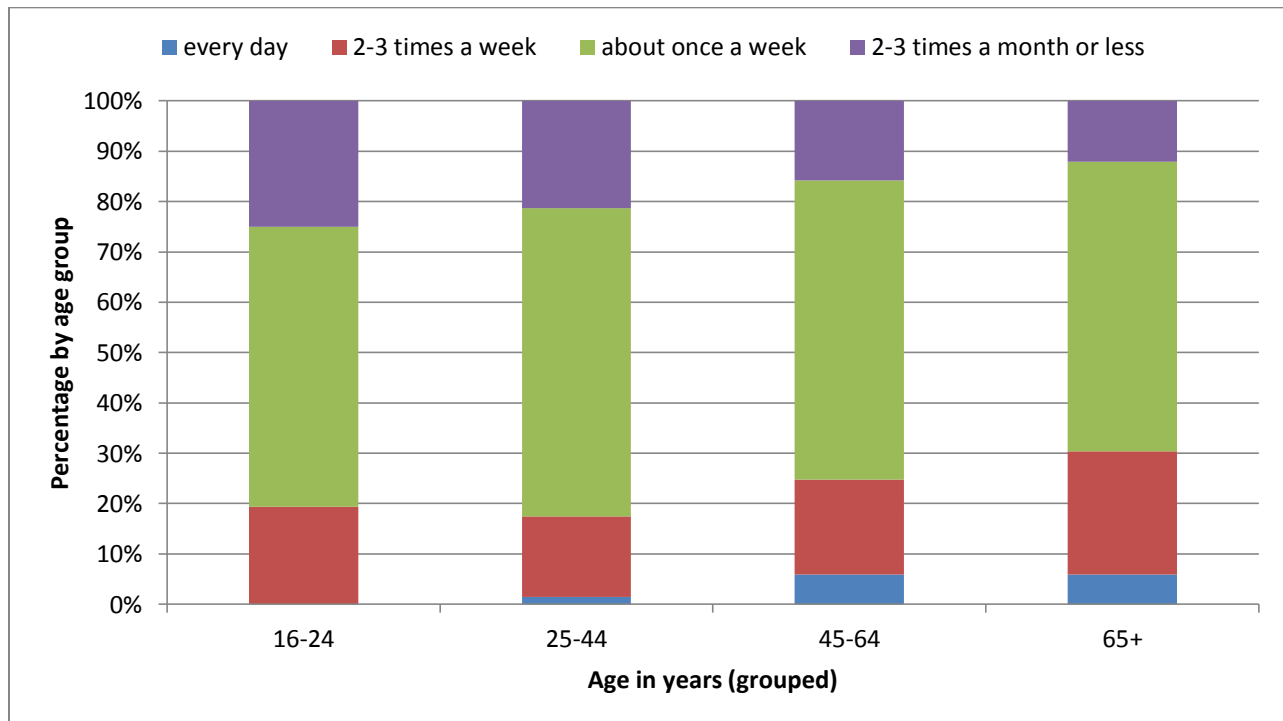
Again, these results must be treated with caution and are more suggestive than conclusive. However, they do illustrate an interesting pattern in which for both food (essential) and window shopping (leisure) people aged 65 and over may be more likely to shop on weekdays than weekends.

Overall the TUS data show that there are age and gender differences in whether or not people shopped. Consistent with ONS (Lader et al., 2006) findings, females were more likely to have shopped than males and people in older age groups were more likely to have reported shopping than the youngest age group (16-24). Furthermore, men aged 65 and older were more likely to have shopped than men in other age groups. Among those who shopped, similar proportions reported shopping for 31-60 minutes; 16-24 year olds were more likely to have shopped for shorter periods and those 65 and over were more likely to have shopped for up to two hours. On weekdays older people were more likely to have shopped and for longer than those in other age groups. At the weekend, fewer (although still more than half) in the older age group shopped than in the other age groups and they spent less time than the other age

groups. Of those who reported shopping for food, the older age group spent a little longer than the other age groups, especially during the week. However, the TUS data is limited to shopping activity on one weekday and one weekend day and, therefore, cannot account for subtleties in food shopping practices (such as frequency of main food shopping), which may differ between age and marital status groups.

4.2.5 Age differences in food shopping frequency. Shopping frequency usually has been researched in terms of food shopping as a domestic task and necessary activity. In Food and You, a national survey exploring attitudes to food issues, food shopping activity was addressed in a random third of the sample (N=1034). Using this sample, analyses were performed to explore whether there were differences in the frequency of the main food shop by age group. Respondents were asked: How often do you (or someone else) do a main shop for your household food shopping? Possible responses were: every day; 2-3 times per week; about once a week; 2-3 times a month; once a month; less often; never. As only 6 percent of the sample reported shopping monthly or less frequently, the top four categories were collapsed into 2-3 times a month or less. Although percentages are low in the “every day” category, older people who live alone may shop more frequently (e.g., Turrini et al., 2010) thus the category was retained. The results for frequency of main food shop by age group ($\chi^2 = 31.839$; $df = 9$; $p < .001$) are shown in Figure 4.5.

Figure 4.5. Food and You: frequency of main food shop by age group.



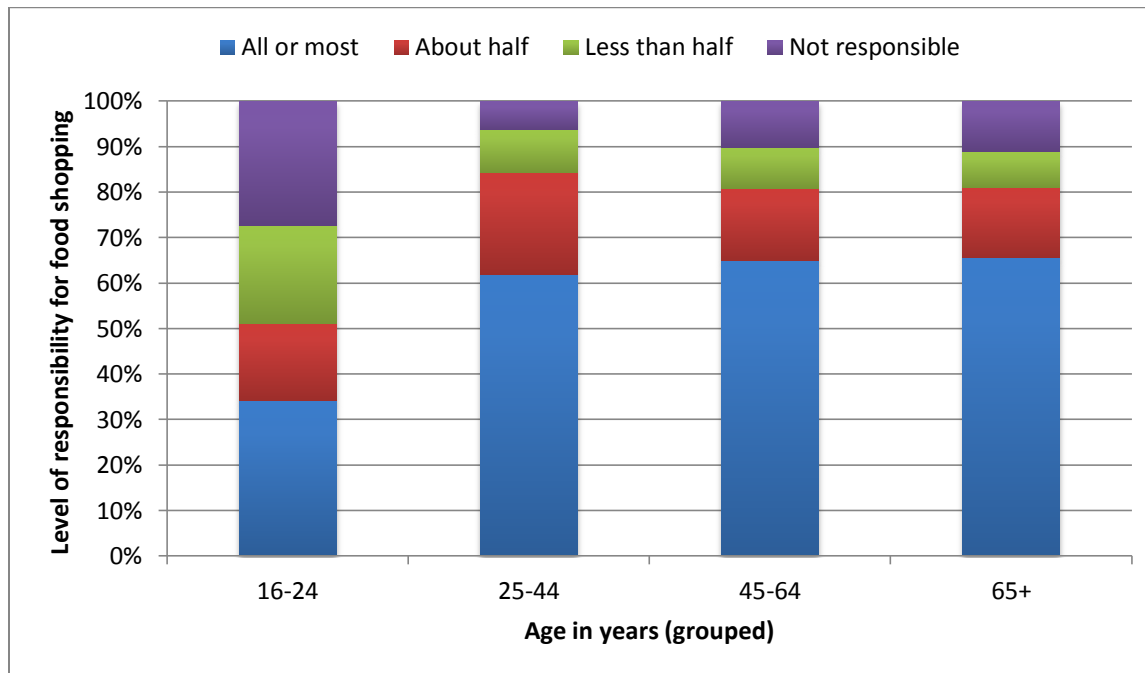
Note. $N = 1034$; 88 aged 16-24; 333 aged 25-44; 323 aged 45-64; 290 aged 65+.

Although more than half of the respondents in each age group report that the main food shop is done once a week, those in the oldest age group were more likely than other age groups to report that it is done 2-3 times a week with 24 percent of those aged 65 and older doing so. Those in the youngest age group were the most likely to report that the food shopping is done infrequently with 25 percent saying it is done 2-3 times a month or less often. This shows that those in the oldest age group are as likely as those in other age groups to do a main food shop weekly but that they are more likely to shop more often than weekly.

4.2.6 Food shopping responsibility. As food shopping frequency may be influenced by respondents' responsibility, analyses were performed to explore whether there were differences in the level of responsibility for food shopping by age group. Respondents were asked: Thinking about food/grocery shopping, which of these best describes the level of responsibility you have for the shopping in your household? Responsibility for food shopping was in four levels: all or most; about half; less than half;

not responsible. The results for level of responsibility by age group ($\chi^2 = 60.454$; $df = 9$; $p < .001$) are shown in Figure 4.6.

Figure 4.6. Food and You: level of responsibility for food shopping by age group.



Note. $N = 1034$; 88 aged 16-24; 333 aged 25-44; 323 aged 45-64; 290 aged 65+.

Around a third of those aged 16-24 were responsible for all or most of their food shopping compared with around two thirds in the other age groups. Thus, the results show that those aged 16-24 had the least responsibility, which most likely reflects a life stage effect such as habitation status (e.g. living with parents or others). In addition, the results show that older people were as likely to be responsible for all or most of their food shopping as the other two age groups.

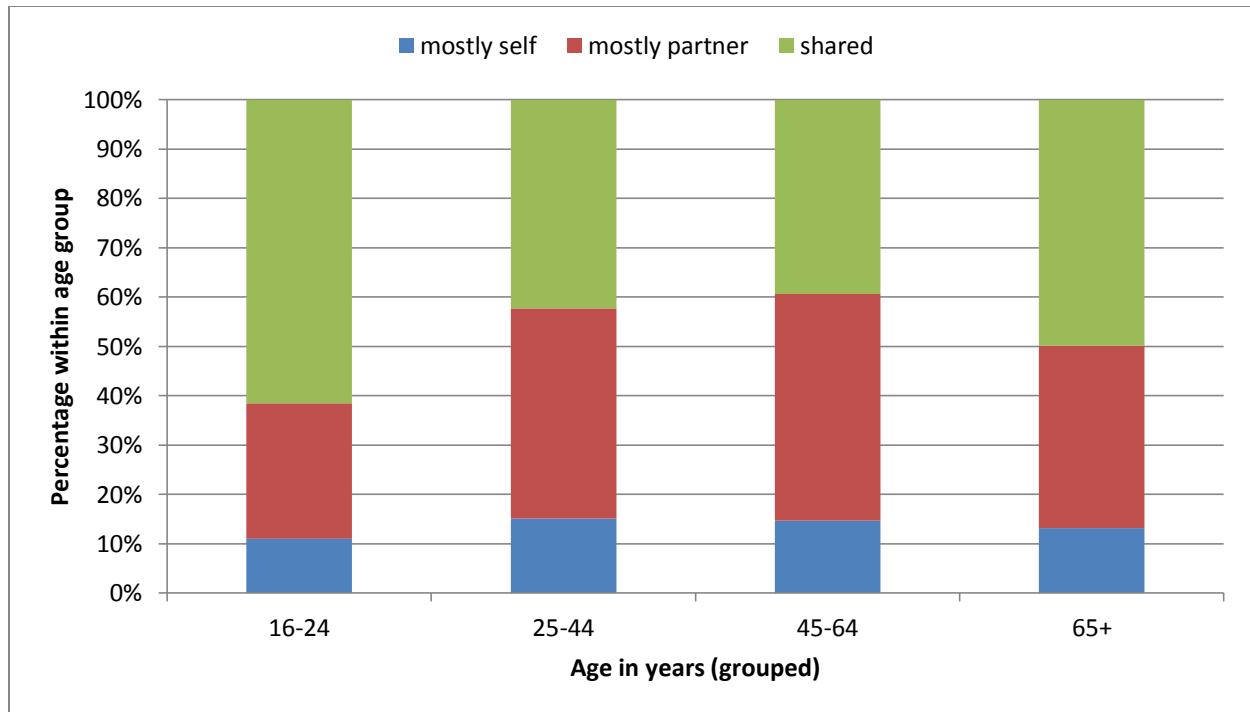
Overall findings from Food and You establish that there may be some age differences in food shopping practices. Analyses show that more than half of respondents reported doing their main food shop weekly; however, those aged 65 and over were more likely than other age groups to report food shopping more frequently, which is consistent with other research (Turrini et al., 2010). Although around two thirds

of those aged 65 and over were responsible for all or most of their food shopping, it is unknown with whom responsibility is shared.

4.2.7 Grocery shopping within couples. It is possible to explore further whether there are age and gender differences in food shopping within couples using data from Understanding Society. First, analyses were performed to explore whether there were age differences in who does the grocery shopping in couples (married or living as married). The sample was split into four age groups: 16-24, 25-44, 45-64, 65 and over. Respondents (couples only) were asked who does the grocery shopping: “Could you please say who mostly does this work here? Is it mostly yourself, or mostly your spouse/partner, or is the work shared equally?” Who does the grocery shopping had five levels: mostly self; mostly partner; shared; paid help; other. For the purpose of these analyses those who specified paid help or other (i.e. those who do not shop for groceries) were not retained. In order to determine whether there were gender differences, males and females had to be explored separately.

The results by age group for males only ($\chi^2 = 144.112$; $df = 6$; $p < .001$) are statistically significant and are shown in Figure 4.7. In the overall sample, around 15 percent of men reported doing most of the grocery shopping.

Figure 4.7. Understanding Society: who does the grocery shopping in couples by age group: male responses.

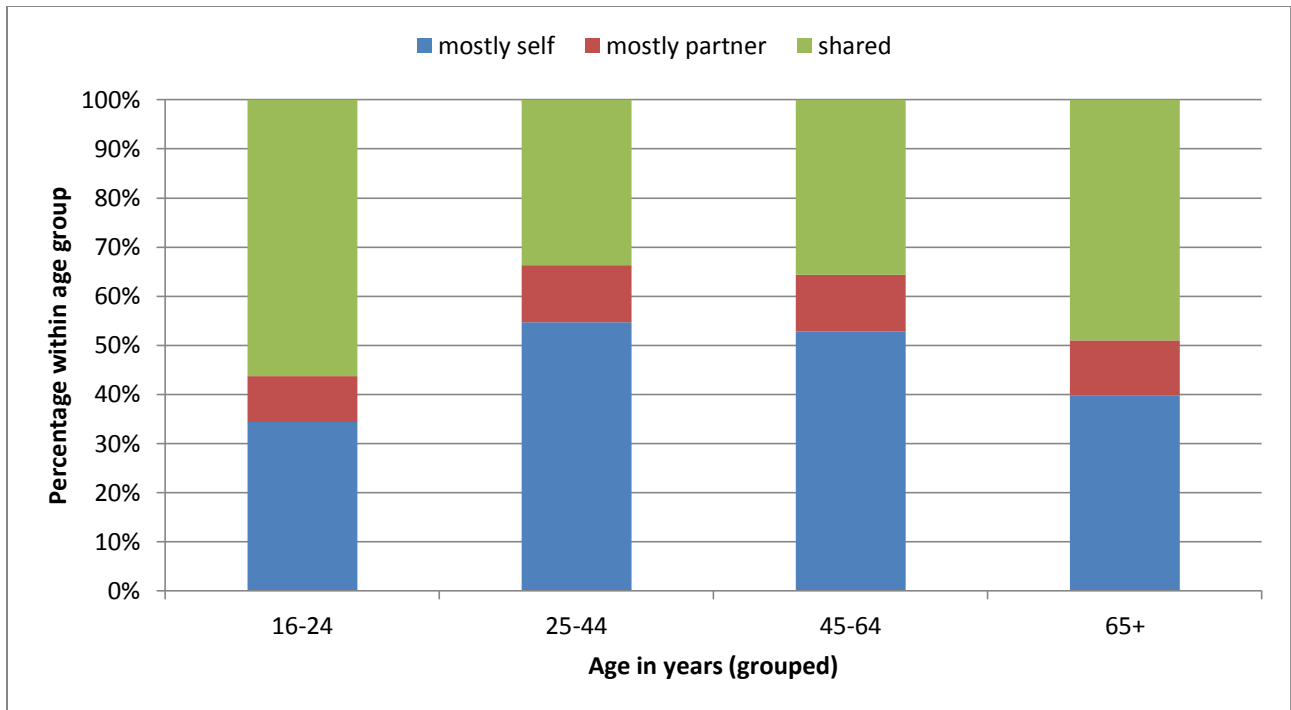


Note. $N = 14689$; 309 aged 16-24; 5341 aged 25-44; 5726 aged 45-64; 3313 aged 65+.

The results show that 50 percent of the men in the oldest age group and 61 percent of those in the youngest age group reported sharing grocery shopping with their partners, compared with around 40 percent in the middle two age groups. This shows that older and younger men were more likely to share food shopping with their partners.

The results by age group for females only ($\chi^2 = 304.279$; $df = 6$; $p < .001$) are statistically significant and are shown in Figure 4.8. More than half of the women in the middle two age groups reported doing most of the grocery shopping compared with 34 percent of those aged 16-24 and 40 percent of those aged 65 and older.

Figure 4.8. Understanding Society: who does the grocery shopping in couples by age group: female responses.



Note. $N = 16740$; 570 aged 16-24; 6956 aged 25-44; 6527 aged 45-64; 2687 aged 65+.

Furthermore, 49 percent of the women in the oldest age group and 56 percent of those in the youngest age group reported sharing grocery shopping with their partners compared with 35 percent in the middle age groups. Consistent with results for the men, this shows that older and younger women were more likely to share food shopping with their partners.

Analyses from Understanding Society show that although both men and women reported that women were more likely than men to do the grocery shopping, there are discrepancies. Around 45 percent of women said that they do most of the grocery shopping compared with 38 percent of men who said that their (female) partners do so. Around 14 percent of men reported that they do most of the shopping compared with around 11 percent of women who said that their (male) partners do so. Around 48 percent of men and 44 percent of women said that the grocery shopping is shared. Thus, there may be a slight tendency to overstate one's own responsibility and to understate one's partner's.

4.2.8 Age differences in shopping practices summary. In order to establish the viability of shopping practices as a site for exploring physical health and wellbeing in later life, first it is necessary to consider shopping activity in later life and whether it is different from activity at other life stages. To do so, it is important to ascertain whether there are groups that are less likely to go shopping based on, for example, age, gender or marital status. Taken together, results from secondary data analyses suggest that there are some differences in shopping practices between older and younger age groups. To summarise some of the main findings, women were more likely than men to report shopping; however, men aged 65 and over were more likely to have shopped than men in any other age group. Women were more likely than men (in all age groups) to do all of the grocery shopping but it was more likely to be a shared activity in the youngest and oldest age groups.

4.3 Shopping Practices amongst Older People (65+)

4.3.1 Introduction. Even though an increase in shopping as a leisure activity for both sexes may lead to gender convergence in later life (Bennett, 1998), previous research suggests that there may be gender and marital status differences in shopping practices. While it may be that responsibility for grocery shopping is limited amongst married males, with around 15 per cent claiming primary responsibility (Dholakia & Pedersen, 1995), a longitudinal study in the UK found that married men participated to a greater extent in shopping (i.e. spent more time) than widowed and single men (Bennett & Morgan, 1993). Amongst those who live alone, widowed men may participate more in shopping activities than single men (Bennett & Morgan, 1993) and women may shop more frequently than men for the social interaction gained while shopping (Turrini et al., 2010). Furthermore, in a recent UK study of food shopping habits of those aged 70 and over, women were more likely than men to shop alone and men were more likely to shop with their spouse (Thompson et al., 2011).

Food shopping, in particular, contributes to a sense of independence and can become increasingly difficult for older people as they experience declines in health, mobility and the ability to drive a car (Thompson et al., 2011). Such declines in turn may affect shopping habits, access to shopping facilities and use of transportation. For

example, a study of the food shopping habits of older people in 8 European countries (including the UK) found that men were more likely to drive to distant supermarkets once or twice a week, whereas women were more likely to walk or take a bus to nearby shops twice or more times per week (Turrini et al., 2010). Moreover, there may be implications for time spent shopping as a Canadian study found that older people have significantly shortened shopping durations yet lengthened trip durations; those in the oldest cohort (aged 75 and over) have the longest shopping durations (Farber et al., 2011).

4.3.2 Internet shopping. Although use of the internet is increasing and there is some variability in the older population, those in later life have the lowest use rate (Ofcom, 2014). Recently in the UK, 69 percent of those aged 65-74 reported using the internet, however, only 36 percent of those aged 75 and over reported doing so (ONS, 2013a). The lower rates have been attributed to physical and mental impairments that can reduce older people's ability to use the internet as well as lower income and educational levels reducing the accessibility of technology (Browne, 2000). However, reasons given (by all ages) for not having internet access also include having no need, lacking the skills required and the cost of equipment (ONS, 2013a). Due to these factors, low rates of online shopping would be expected amongst older cohorts but there is some evidence to suggest that this activity may be increasing. According to the ONS (2013a), there has been significant growth in the rate of online purchasing in the UK by those aged over 65 with more than a third (36%) buying online in 2013. Moreover, in a recent study of internet users (aged 55 and older) from across Australia, many participants (71%) reported using the internet for shopping, in part because they do not have to leave home, which is especially beneficial to those who have mobility problems or who live in rural areas (Sum et al., 2009). Reasons given for not shopping online include not wanting to present credit card details online, lack of interest and lack of necessity to shop online (Gietzelt, 2001).

4.3.3 Shopping by gender and marital status. The second research question is concerned with exploring whether there are differences in shopping practices among older people. In order to do so, this section again will present analyses from secondary

sources but will explore additional factors, such as marital status, that previous research has shown may influence shopping practices in later life. First, TUS analyses were performed to explore whether there were differences in the proportions of people aged 65 and older who did and did not shop by gender and marital status. Marital status groups were married or cohabiting; single, separated or divorced; widowed. The results (Table 4.4) show that there were no marital status or gender differences ($\chi^2 = 0.453$; $df = 1$; $p = .501$) as almost two thirds of both males (64%) and females (63%) shopped during the study period.

Table 4.4. TUS: percentage who reported doing any shopping by gender and marital status (aged 65 and over).

	Married/cohabiting		Single/separated/ divorced		Widowed		χ^2	<i>P</i> value
	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>		
All	62.88 [59.69, 66.07]	554	68.53 [60.92, 76.14]	98	63.32 [59.04, 67.60]	309	1.712	0.425
Males	63.78 [59.55, 68.01]	317	61.11 [48.11, 74.11]	33	68.18 [59.48, 76.88]	75	1.019	0.601
Females	61.72 [56.86, 66.58]	237	73.03 [63.81, 82.25]	65	61.90 [57.00, 66.80]	234	4.308	0.116

Note. CI = confidence interval. *N* = 1564.

4.3.4 Time spent shopping. Next, analyses were performed to explore whether there were differences in the time spent shopping for people aged 65 and older (amongst those who reported any shopping). For the sample of shoppers as a whole there were gender differences for time spent shopping ($\chi^2 = 8.961$; $df = 3$; $p = .030$) with men more likely than women to shop for shorter bursts. However, there were no statistically significant differences by marital status ($\chi^2 = 9.428$; $df = 6$; $p = .151$) with similar proportions of people in each time category. The time spent shopping separated by gender and marital status is shown in Table 4.5. Differences by marital status were tested separately for men and women due to the higher proportion of widowed women in late life. There were no statistically significant differences by marital status for men ($\chi^2 = 9.674$; $df = 6$; $p = .139$) or for women ($\chi^2 = 10.264$; $df = 6$; $p = .114$).

Table 4.5. TUS: time spent shopping (grouped) by gender and marital status (aged 65 and over).

	10-30 mins [95%CI]	31-60 mins [95%CI]	61-120 mins [95%CI]	121+ mins [95%CI]	<i>n</i>	χ^2
Males					432	
Married/Cohab	25.23 [20.48, 29.98]	18.07 [13.86, 22.28]	32.09 [26.98, 37.20]	24.61 [19.90, 29.32]	321	9.674
Single/Sep/Div	30.30 [14.62, 45.98]	12.12 [0.98, 23.26]	33.33 [17.25, 49.41]	24.24 [9.62, 38.86]	33	$p = .139$
Widowed	33.33 [22.87, 43.79]	26.92 [17.08, 36.76]	26.92 [17.08, 36.76]	12.82 [5.40, 20.24]	78	
Females					540	
Married/Cohab	15.97 [11.32, 20.62]	20.59 [15.45, 25.73]	37.82 [31.66, 43.98]	25.63 [20.08, 31.18]	238	10.264
Single/Sep/Div	26.15 [15.47, 36.83]	24.62 [14.15, 35.09]	32.31 [20.94, 43.68]	16.92 [7.81, 26.03]	65	$p = .114$
Widowed	20.68 [15.52, 25.84]	24.89 [19.39, 30.39]	27.43 [21.75, 33.11]	27.00 [21.35, 32.65]	237	

Note. CI = confidence interval. Time spent shopping calculated only for those who reported shopping for any length of time during the study period.

Time spent shopping also can be explored using data collected through interviews with participants in North Wales and Wirral. The qualitative data offer insights that are not available through prescriptive survey data based upon limited response options yet findings from survey data analyses often are echoed by interviewees. However, when discussing how long people typically spend on shopping activities, several respond that the time they spend is not an important factor in their shopping behaviours. For example:

Er I've never really considered the time because I've got all the ((laughing)) time in the world. I've no need to rush for anything really. (Philip; 78, widowed, Wales)

We only need a couple of things and an hour later we're still inside <supermarket> talking so erm that's the way it works I think, you know, and again because we can, we've got the time. Not rushing around anymore, you know. (Rhona; 69, married, Wales)

Indeed, not rushing while shopping and the concept of having the time to shop frequently emerged with those who are retired. Furthermore, how shopping practices have changed over time has been attributed to retirement:

When I was working you would do one big shop a week, wouldn't you, you know, but when you're retired you just te- I tend to get what I need for the day or for two days so I can't say I do a major shop... most of the time I, I tend to shop just for a couple of days because I am retired and I can. (Sheila; 65, married, Wirral)

I think this is when you're retired, you know, you can go down anytime and I must admit, when I was working and if it was something I needed and needed to go into the shops at 5 o'clock, I'd think what are all these retired people doing in the shops when they've got all day! But time doesn't matter does it and it depends on the weather... you're much more relaxed. (Ruth; 66, married, Wales)

Thus, interviewees acknowledge that since retiring their shopping habits have changed regarding the frequency in which they shop (which will be discussed further below) as well as allowing the flexibility to spend as much time as they would like to.

4.3.5 Gender, marital status and food shopping frequency. Thus, in order to identify whether gender and marital status influence shopping habits, food shopping frequency data were examined using data from Food and You. Initially, frequency of the main food shop was explored to see if there were differences by gender and marital status. Frequency of main food shop was in four levels: every day; 2-3 times per week; about once a week; 2-3 times a month or less. The results are shown in Table 4.6 but, because of the relatively small numbers in some of the groups, the minimum requirements were not met in order to test for statistically significant differences.

Table 4.6. Food and You: frequency of main food shop by gender and marital status (aged 65 and over).

	Every day	<i>n</i>	2-3 times a week	<i>n</i>	About once a week	<i>n</i>	2-3 times a month or less	<i>n</i>
Females								
Married/cohabiting	4.35	3	13.04	9	66.67	46	15.94	11
Single/Separated/Divorced	0.00	0	27.78	5	61.11	11	11.11	2
Widowed	4.40	4	29.67	27	47.25	43	18.68	6
Males								
Married/cohabiting	6.56	4	18.03	11	70.79	43	4.92	3
Single/Separated/Divorced	8.70	2	56.52	13	34.78	8	0.00	0
Widowed	14.81	4	22.22	6	55.56	15	7.41	2

Note. Confidence intervals not shown due to small numbers.

However, single/separated/divorced (i.e. living alone) men were more likely than any other group to do a main food shop 2-3 times a week, with more than half reporting that they do so. Widowed men were the most likely to shop every day with 15 percent of that group reporting that they do. Thus, these findings support research showing that those who live alone may shop more frequently (e.g., Turrini et al., 2010). Fifty-six percent of the overall sample and 69 percent of married households do a main food shop about once a week.

Consistent with findings from Food and You, around half of the interviewees do their main food shopping weekly. Of the married participants who shop weekly, some have a set day out of habit:

Creatures of habit, usually on a Wednesday but we have been known to change our day and then we're put out the rest of the week because we don't know what day it is! (Jill; 79, married, Wales)

Routine, I'm very much a routine person. On the Thursday I do my main one when I get my housekeeping and it's usually two big bag fulls. (Betty; 70, married, Wales)

However, having a set day and having routine is attributable to personality and individual preference rather than marital status or household size and is just as likely with those who live alone:

I go every Thursday. I'm ((laughs)) all my friends laugh at this, I'm a creature of habit, I have a routine and every Thursday I go to <supermarket> and I do my week's shop that I want. (Fred; 82, widowed, Wirral)

Usually a Tuesday. Don't ask me why Tuesday, that was just- I think it was <friend> that said Tuesday, when I used to take her and I think that's just- Tuesday's as good as any. When you're on your own it doesn't matter what day you go. But you do get in a rut. (Pat; 75, widowed, Wirral)

In these comments Pat is being reflexive about her own shopping practices; even though she has flexibility and it does not matter which day she shops, she has become

routinized in her behaviour. Although Pat has flexibility in principle, other participants who shop weekly are more flexible in practice and choose a food shopping day to fit around other activities:

It will be once a week... it so happens it's gonna be Thursday this week but that, that's done to suit me. (George; 66, married, Wirral)

It depends, we might go Tuesday, there's no set pattern to when we go. We tend to keep away at weekends erm but other than that, apart from Monday and weekends we could go any other, four days of the week, it depends, it's not set in stone. (Joseph; 75, married, Wales)

As suggested by previous research (e.g. Moschis, 2003) some participants choose to shop early in the day. Indeed, a recurring theme when choosing a time or day to shop is avoiding busy times at supermarkets because of crowds. However, perceptions of when the shops are crowded vary amongst the participants:

We go early, we always leave here by half past 7, quarter to 8, get there early so that we can get round without crowds cos I don't like crowds. Usually on a Saturday erm because that's the quietest. Never ever go on a Thursday cos it would be chock-a-block. (Lyn; 70, married, Wales)

I definitely avoid Friday afternoons, they're a nightmare in there, and I avoid Sundays, because that's a nightmare in there as well. So they're the times I avoid but any other time I just go when I'm ready. (Sheila; 65, married, Wirral)

Quite often on a Thursday, the food's usually better and the supermarket's less crowded, yeah. In the morning, yeah. We've mostly got other things to do during the day so you get the shopping sorted as early as you can during the morning. (Gloria; 76, married, Wales)

Gloria mentions wanting to get the shopping over with in order to "get on with other things," implying that it is seen as a chore. That, for some people, food shopping in particular can be regarded as a chore to get out of the way is a sentiment echoed by Joseph:

We probably go early, early Friday and then, you know, it's done and dusted and you can get on with whatever you're doing with the rest of the day. (Joseph; 75, married, Wales)

Nevertheless, considering food shopping to be a chore does not impact on the frequency of his food shopping trips as Joseph and his wife regularly top-up shop when they are out for other reasons:

We don't stock up the freezer... we find it more convenient, I mean we trot about at least twice a week going somewhere so it's, it's no hassle to, to go and shop then, you know. (Joseph; 75, married, Wales)

So, although Joseph considers the (larger and more time-consuming) main food shopping trip to be a chore to get out of the way, his regular (smaller and quicker) top-up shopping trips are "no hassle" as an add-on to other activities. This suggests that there can be divergent attitudes to different types of shopping trips (in Joseph's case different in volume and duration rather than in regards to the specific nature of purchases or the location), which will be discussed further in subsequent chapters.

Furthermore, some of the married participants and many of the non-married participants shop for food more frequently than weekly. For two of the divorced interviewees who live alone there is a social aspect to their trips as they shop for food regularly with friends. For example: "I think probably er at least twice a week... my mate, he always wants to shop er he likes, he likes shopping," (Ken; 74, divorced, Wales). Even though Ken says that he shops with his friend more for the friend's benefit than for his own, he clearly enjoys the social aspect of their trips. Similarly, Gaynor does her food shopping frequently with a friend:

We go every day. Every day, yeah, except a Sunday.... [Mondays] I'll just do not a big shop but just a medium shop cos I know I'm coming to town every day so I can get bits and pieces to do me till the weekend then. (Gaynor; 69, divorced, Wales)

Gaynor is open about the social aspect of her shopping trips, however, shopping as a social activity is the focus of Chapter 6 and, therefore, will not be elaborated on here.

Shopping frequently for food is not limited to those who live alone as, for two of the married participants, living very close to supermarkets is a factor that influences their shopping habits. For both, the convenience of having a supermarket around the corner means that they shop often:

<The local supermarket is> where we get most of the shopping... a few odds and ends and other things I suppose. If we're short of something I'll just walk down to the <supermarket> here. (Huw; 80, married, Wales)

Probably about five times a week ((laughs)). That's because <supermarket> is too close for comfort, it's like the corner shop. (Sheila; 65, married, Wirral)

Proximity to shops is a factor for other participants who shop frequently, as with Edith (66, widowed, Wirral) who lives close to a shopping centre: "Erm about three times a week... just randomly really... but ((laughing)) I go in nearly every shop then." Later when asked if she goes to the shopping centre for leisure, Edith replies: "It's erm... to kill time. Yeah." Again, shopping frequently to get out of the house is mentioned by several widowed participants but also by some of those who are married: "We go shopping, you know, more, we probably go shopping about three times a week, more for just getting out the house basically," (Ernie; 80, married, Wales);

I did used to do one big shop a week ... but now I think we go more regularly but there again it's something to do ((laughing)) to walk to the shops. (Ruth; 66, married, Wales)

It is worth noting that all of the interviewees do their main food shopping at supermarkets. This is consistent with findings from Food and You in which, of the sample aged 65 and over ($N = 282$), 96 percent shop at medium or large supermarkets for their main household food shopping. Of the 4 percent who do not, it is possible that small supermarkets are being used.

4.3.6 Gender, marital status and food shopping responsibility. For food shopping in particular, gender and marital status may be factors influencing who is responsible within a household. Using Food and You, analyses were performed to

explore whether there were differences in the level of responsibility for food shopping by gender and marital status for those aged 65 and over. The results in Table 4.7 show that there were statistically significant differences for gender ($\chi^2 = 44.338$; $df = 3$; $p < .001$).

Table 4.7. Food and You: level of responsibility for food shopping by gender and marital status (aged 65 and over).

	All or most [95% CI]	About half [95% CI]	Less than half [95% CI]	Not responsible [95% CI]	<i>N</i>	χ^2
						44.338
Males						
All	44.14 [34.90, 53.38]	18.92 [11.63, 26.21]	16.22 [9.36, 23.08]	20.72 [13.18, 28.26]	111	
Married/Cohab	13.11 [4.64, 21.58]	27.87 [16.62, 39.12]	29.51 [18.06, 40.96]	29.51 [18.06, 40.96]	61	
Single/Sep/Div	78.26 [61.40, 95.12]	17.39 [1.90, 32.88]	-	4.35 [-3.99, 12.69]	23	
Widowed	85.19 [71.79, 98.59]	-	-	14.81 [1.41, 28.21]	27	
Females						
All	78.77 [72.75, 84.79]	13.41 [8.39, 18.43]	2.79 [0.36, 5.22]	5.03 [1.81, 8.25]	178	
Married/Cohab	65.22 [53.98, 76.46]	27.54 [17.00, 38.08]	4.35 [-0.46, 9.16]	2.90 [-1.06, 6.86]	69	
Single/Sep/Div	77.78 [58.57, 96.99]	11.11 [-3.41, 25.63]	5.56 [-5.03, 16.15]	5.56 [-5.03, 16.15]	18	
Widowed	89.01 [82.58, 95.44]	3.30 [-0.37, 6.97]	1.10 [-1.04, 3.24]	6.59 [1.49, 11.69]	91	

Note. CI = confidence intervals.

Taking the Food and You sample as a whole, almost 80 percent of women were responsible for all or most of the food shopping compared with 44 percent of men. Amongst women, those who are married have less responsibility than those who are widowed, suggesting that there is a level of shared responsibility for food shopping when living with others. Married men are the least likely to have full responsibility when compared with non-married men or women of any marital status group.

Analyses from Food and You show that women are more likely than men to be responsible for food shopping and that married men have the least responsibility, which is consistent with previous research (Dholakia et al., 1995). Again, data from Food and You do not allow exploration of shared responsibility for food shopping; however, who does the food shopping within couples can be addressed with data from Understanding Society. Thus, analyses were performed to explore whether there were gender differences in who does the grocery shopping in couples (married or living as married) aged 65 and over. Who does the grocery shopping had four levels: mostly self; mostly partner; shared; other. The results in Table 4.8 show that there were statistically significant differences for gender ($\chi^2 = 807.316$; $df = 4$; $p < .001$).

Table 4.8. Understanding Society: who does the grocery shopping (in couples) by gender (aged 65 and over).

	All		Males		Females	
	[95% CI]	<i>N</i>	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>
Mostly self	24.64 [23.56, 25.72]	1505	12.94 [11.81, 14.07]	436	39.03 [37.20, 40.86]	1069
Mostly partner	24.98 [23.89, 26.07]	1526	36.36 [34.74, 37.98]	1225	10.99 [9.82, 12.16]	301
Shared	48.61 [47.36, 49.86]	2969	49.04 [47.35, 50.73]	1652	48.08 [46.21, 49.95]	1317
Other	1.59 [1.28, 1.90]	97	1.48 [1.07, 1.89]	50	1.72 [1.23, 2.21]	47
			$\chi^2 = 807.316$		$p < .001$	

Note. CI = confidence interval.

Thirteen percent of males reported doing most of the grocery shopping compared with 39 percent of females. Similarly, 36 percent of males and 11 percent of females reported that their partner does most of the grocery shopping. Thus, even though the framing of the question could be problematic, it seems to have been answered in the same way. Indeed, there is gender agreement as 49 percent of the respondents report that grocery shopping is a shared activity. This shows that although females are more likely than males to do most of the grocery shopping, it is often a shared activity in couples aged 65 and over. Although these results are not consistent with the findings from Food and You (in which fewer than a third of married respondents said food shopping was a shared activity), different questions had been asked and in different contexts. Moreover, this is a complex issue in which responsibility for food shopping may be shared and yet the actual shopping for food might be a more gendered activity. Thus, responsibility may not reflect practice.

All 26 married participants in the qualitative data have a main food shop, which is defined as the largest food shopping trip for the household. Of the married participants, 11 accompany their spouses on a regular basis to do the main food shopping, in 11 of the households the woman does the main food shopping and in 4 households the man does the main food shopping, which is fairly consistent with findings from Understanding Society. In the households in which the man has taken full responsibility, the decision has been related to work status. This is the case with both Albert (68, married, Wirral) who does the weekly food shopping as he is retired yet his wife is still in full-time employment and with George (66, married, Wirral) who retired before his wife and has continued to do the food shopping since her retirement. Indeed, two of the married women explain that their husbands took over the food shopping because of work-related reasons:

This is gonna sound ridiculous. Once a fortnight <husband> does all the shopping at the supermarket... Because when I was at work he was made redundant and he started to cook the tea and he would decide what we were having for tea so he started shopping for it. And that's, that's how it's gone on, he, decides what we're having. (Dorothy; 71, married, Wirral)

How it started was I was a <job> so I didn't have time to do the shopping so he used to do the shopping then and we, we've just carried on really, so erm it's

one of the things he does.... he quite likes shopping. (Rhona; 69, married, Wales)

For three of the households in which the man is the primary food shopper, he does the majority of the cooking also, thus, shopping for food is linked to meal planning and preparation. Of the married respondents who talk about why they do not do the main food shopping together with their spouse, the main reason seems to be differences in shopping styles:

I prefer to go on my own. I find it quicker, yes. If he's there he'll be looking at all the other things ((laughs)), he likes to browse. (Helen; 72, married, Wales)

I just go do what I want to do and come out and that's it. So if I go- and that's why we don't shop together cos I rush around the shop and get what I want and come out. So over the years she's decided that she'd do her own. (Robert; 67, married, Wales)

The findings presented so far have shown some of the differences in shopping practices amongst older people and that there are several factors that can affect how and why people shop the way they do. These include individual preferences and habits as well as motivations to go shopping (such as social interaction and physical activity) that extend beyond the need to purchase items.

4.4 Additional Factors Explaining Differences in Shopping Practices in Later Life

In order to address the third research question, qualitative data will be used to explore what other factors explain differences in shopping practices amongst older people. The survey data from secondary sources cannot account for factors that influence shopping practices, changes over time and motivations to go shopping; however, these can be addressed through interview data.

Several factors that influence shopping practices and motivations to shop became apparent through interrogation of the qualitative data, including the benefits of physical and social activity. Similarly, passing time by shopping and having the time to engage in shopping activity is a recurrent theme throughout the interviews. Indeed, not rushing while shopping and the concept of having the time to shop was

mentioned frequently by those who are retired. Furthermore, as acknowledged earlier, how shopping practices have changed over time has been attributed to retirement. Yet, retirement is not the only factor affecting changes in shopping habits. For Harold, an illness and subsequent operation led to his wife shopping with a neighbour: “We used to do it on a Saturday...but because I couldn’t drive that got abolished and er this lady said I’ll take you shopping,” (Harold; 67, married, Wales). For three other participants, disabilities have resulted in no longer being able to drive and, consequently, changes in their shopping habits. As suggested in previous research, declines in health and the ability to drive a car have implications for independence (Thompson, et al., 2011) and this is especially pertinent for two of the widows. For Doris not being able to drive is “the worst thing... losing my independence,” which she repeatedly mentions. Similarly:

I remember seeing my little car go away in a- and I thought if you run out of tea or something, you know, I could just pop down to the <supermarket> and buy it, that’s why now I, I don’t forget anything. (Alice; 95, widowed, Wales)

Hence, in order to maintain some independence by remaining in control of their food shopping, both women choose to pay someone to take them shopping on a weekly basis:

There’s a Helping Hands girl called <name> and er she takes me to erm <supermarket> on Fridays, then she rather leaves me to it erm which in one way I’d rather but, love, I’m so slow because I cannot see. (Doris; 92, widowed, Wales)

I’ve got a girl, she takes me out shopping er every Saturday... Every Saturday morning I, she comes at half past 9 and we go off and erm she leaves me in the <supermarket> with a, with a sort of trolley thing like that so I, I can hang onto it, you know, and then she comes back in about 20 minutes and, and er so that’s the only shopping I do. (Alice; 95, widowed, Wales)

For those in rural areas in which public transport services may be infrequent, no longer being able to drive means making necessary changes to shopping habits and limits their abilities to shop:

We’d go and do our erm our big shop once a week, you know, but it was erm

very nice to be able to potter around the shops a bit... but if you can't do that it's a bit limiting. (Ethel; 87, married, Wales)

Consequently, in order to maintain their independence Ethel and her husband opt to do the majority of their food shopping online: "We go for odds and ends erm at the village er most of our major requirements we get courtesy of <supermarket> online." Although many of the interviewees shop online for non-food items, few shop online for food on a regular basis. Joseph and his wife shop frequently in person but like the convenience of having heavy and bulky items delivered:

We have some large amounts of shopping delivered, probably once a month because as you know if you go to the supermarket you take it off the shelf, you put it in the trolley, you take it out of the trolley at the checkout, you put it back in, you put it in the car, bring it home and then you've got to put it away so for the 3 or 4 pounds that they charge to have it delivered, the heavy er and the bulky stuff erm we only have to put it in the, on the shelves. (Joseph; 75, married, Wales)

For the other two participants who regularly shop online for food, although retired, both are heavily involved with voluntary work and cite being busy as the main motivation to do so.

4.5 Discussion

4.5.1 Introduction. The aim of this chapter was to establish shopping practices as a site for subsequent exploration of physical health and wellbeing in later life. To do this, findings from both secondary data and primary qualitative data were presented to explore three research questions. Findings for each of these questions will be summarised, then the methodological challenges and limitations of the datasets will be presented and, finally, the ways in which the findings support and inform the subsequent chapters will be outlined.

4.5.2 Shopping and age. The first research question, regarding whether there are age differences in shopping practices, was addressed with secondary data analyses from TUS, Food and You and Understanding Society. Similar to recent findings in Canada (Farber et al., 2011), shopping participation rates amongst older people were similar to the rest of the population as older people were at least as

likely as those in other age groups to have reported shopping; however, men aged 65 and over were more likely to have reported shopping than men in younger age groups, which is suggestive of a life stage effect. Furthermore, those in the oldest age group were more likely to shop for food more frequently than weekly, which is consistent with other research (Turrini et al., 2010).

Previous time use findings from the UK suggest that people spend more time shopping at the weekend than during the week (Lader et al., 2006). Although not definitive because of the small sample size, results presented above suggest that this pattern may be reversed for the oldest age group. People aged 65 and older were as likely to be responsible for all or most of their food shopping as others aged 25 and older; however, grocery shopping was more likely to be a shared activity amongst older couples. Taken together these results show that there are some differences in shopping practices between age groups, specifically in the time spent shopping, patterns of shopping activity and food shopping responsibility. Again, it should be noted that having responsibility may not reflect actual shopping practice. But, more importantly, these preliminary findings establish that shopping practices in later life may be different from those of other age groups in two key ways: older men were more likely (than younger men) to have shopped; and food shopping was more likely to be a shared activity for older couples. Confirming that men (as well as women) are shopping in later life (and are engaging possibly even more so than at other ages or life stages) is an important finding when proposing shopping activity as an area in which to explore healthy ageing.

4.5.3 Shopping in later life. The second research question was to determine whether there were differences in shopping practices amongst people in later life and focused only on those aged 65 and over. While it is acknowledged that it is somewhat simplistic to consider this group as homogenous, the purpose of this chapter is to present initial findings that establish shopping as an area worthy of further exploration. First, analyses from TUS showed that similar proportions (around two thirds) of both men and women reported shopping during the study period, which suggests gender convergence in later life as has been suggested elsewhere (Bennett, 1998). Although there were no marital status or gender differences between those who shopped and those who did not shop, women were more likely to have spent longer shopping than men. However, qualitative data suggest that time

spent shopping is not an important factor, especially for retirees who mention having the time since leaving the labour force. So, shopping was not limited by time because they had a lot of time.

Despite findings that around 50 percent of people in later life typically shop for food on a weekly basis, those who live alone may shop more frequently, which is consistent with other research (Turrini et al., 2010). Of the qualitative interviewees who shop more frequently than weekly, the main reasons given were their proximity to shops (i.e., living close by) and as an excuse to get out of the house. Although women were more likely than men to be responsible for food shopping, it was often a shared activity in older couples. Around 40 percent of women reported doing most of the grocery shopping compared with around 13 percent of men, which is consistent with previous findings (Dholakia et al., 1995). In married households in which the man has taken full responsibility for food shopping, changes to work status (i.e., the man leaving employment while the woman continues to work) account for the shift in responsibility. However, most of these men had taken over responsibility for household cooking as well, which suggests that responsibility for food shopping often is linked to meal planning and preparation.

4.5.4 Additional factors. The third research question was concerned with what factors might explain some of the differences in shopping practices amongst people in later life and was addressed using qualitative data. It had already been established that interviewees had different food shopping habits regarding frequency and responsibility and this supports the heterogeneity of shopping practices in later life (Moschis, 2003). Furthermore, different motivations to shop were reported by participants and their attitudes to shopping influenced shopping practices. Some of the changes over time in shopping habits could be accounted for by the transition to retirement, but, equally important were changes to health such as illness or disability. Declines in health, mobility and the ability to drive a car can have implications for independence (Thompson et al., 2011), which is supported by some of the interviewees. Maintaining independence, for food shopping in particular, was of great importance to those with health problems who were no longer able to drive. This potential obstacle has been overcome by shopping online for food or by enlisting the support of others to help with shopping trips.

4.5.5 Limitations. Many of the findings presented in this chapter came from analyses from secondary sources, thus, there are limitations to the use of these datasets and the conclusions that can be made. The purpose of the Food and You survey was to ascertain attitudes to and practices towards eating and food safety and therefore is limited to asking about food shopping. The shopping questions in Understanding Society are in the domestic labour module in which grocery shopping is framed as a household chore. As this module is only asked of couples, there is no account of other family formations, such as older people who live with offspring, and it does not account for widowed people of which there is a higher proportion in later life. Moreover, the TUS was conducted in 2000, thus a considerable amount of time has passed during which retirement age has been reached by a new cohort that has grown up as consumers; thus, shopping practices and indeed shopping motivations may be different for these people. Nevertheless, use of these datasets has enabled an exploration of shopping practices in nationally-representative samples. Although the questions asked have limited the conclusions that can be made, the findings have furthered knowledge in an under-researched domain and have confirmed that shopping is an area in which older people indeed are engaged and in different ways from younger age groups.

4.5.6 Conclusion. Although this chapter has presented findings that demonstrate the heterogeneity of shopping practices in later life, several common themes have emerged that will be explored in subsequent chapters. For food shopping in particular, the responsibility within a household may affect shopping practices. Even though food shopping often is a shared activity amongst couples in later life, findings suggest the actual shopping might be a more gendered activity and, therefore, claiming to have responsibility may not reflect shopping in practice. To unpack this further, the potential interaction between shopping activity, gender and marital status will be explored further in Chapter 5. Moreover, other factors affecting shopping practices, such as how people shop and why they shop when they do, were influenced by personality and individual differences (e.g. attitudes to shopping, being a creature of habit); again, these factors will be considered in more detail in Chapter 5. Motivations to shop included getting out of the house, passing time and the benefits of social interaction while shopping and these motivations will be discussed further in Chapter 6. Equally important were the benefits of physical

activity as a motivation to go shopping, thus, these and other health-related factors concerning shopping will be considered in Chapter 7. In establishing shopping in later life as a worthy area of study, this chapter paves the way to explore further how shopping activities impact on healthy ageing.

Chapter 5

Shopping, Gender and Identity

5.1 Introduction

As argued in the previous chapter, shopping practices in later life are heterogeneous, thus, shopping activity is a complex issue. Although findings suggest that having responsibility for food shopping, in particular, may be shared amongst couples in later life actually doing the shopping as an activity might be more gendered. For example, husbands might claim to be responsible for food shopping when in reality they provide services such as carrying bags and driving their wives to supermarkets. The purpose of this chapter is to explore this relationship further, to explore opinions and attitudes to shopping in later life in order to determine whether there are gender differences and/or an interaction between gender and marital status.

5.1.1 Gender attitudes to shopping. Although there do not appear to be any studies specifically focusing on gender attitudes to shopping in later life, findings from research utilising participants of all ages provide some insight. For example, in previous qualitative research in a population in the northeast city of Leeds, UK, people were asked to express their general attitudes towards shopping (defined as involving treatment of products as potential purchases). Only a minority responded with indifference and while responses ranged from 'love it' to 'hate it', they were modified by indicating a positive attitude towards one kind of shopping but not others (Campbell, 1997). Furthermore, women were found to be more likely to express positive attitudes to shopping than men, and men were more likely to express negative attitudes than women (Campbell, 1997). However, that research was based on younger age groups (aged 25 to 45) and may not be generalizable to those in later life. Moreover, it is important to make the distinction between attitudes to food shopping and non-food shopping activity. When shopping is considered a necessity it is more likely to be viewed as work, while the freedom to browse and choose is experienced as a "free expression of agency" (Miller, 2005). Hence, shopping that involves wandering around in shops and malls may be seen as an enjoyable, playful activity (Lehtonen & Mäenpää, 1997) whereas supermarket shopping may be seen

as mundane (Edwards, 2009). Nevertheless, the authors of a recent book about food and femininity argue that supermarkets can be a place of joy and leisure for women, particularly when providing escapism from the house (and children) (Johnston & Cairns, 2014). Although this may be the case for only a particular subset of women (i.e. middle-class Canadians) and has not been explored specifically with an older population, it is important to note that motivations to shop and attitudes towards shopping may differ depending on the context and an individual's domestic situation.

The need to consider the role of other family members in the shopping practices of individuals has been suggested by the authors of a study looking at changes during the transition into motherhood. Using longitudinal qualitative data from eight women (aged 28-33) in the UK, Burningham et al. (2014) explored how everyday shopping changed as the participants became mothers. The researchers found that the women took more structured approaches (e.g. temporal organisation, more planning and using lists, shopping more economically) but also that shopping was seen as providing care for others (both baby and partner) and was used both as an outing and as a way to enable spending time with a partner (Burningham et al., 2014). Although these results are from a small sample of younger women, they are suggestive of a complex relationship between shopping as a function of meeting needs (both individual and at a household level) and how needs may change over time and affect the meaning of shopping practices.

5.1.2 Masculinity and shopping. There may be gendered associations with shopping activity that persist into later life. Gender is culturally defined and refers to the behaviour seen as appropriate to each sex in a particular society and at a particular time (Lerner, 1986). Thus, in societies with a particularly masculine national culture (as with the UK) there are deep social divisions that may lead to deep gender divisions (Shaw, 2010). Gender roles are learned and acted out, or performed, so that people 'do' gender in everyday activities and interactions (West & Zimmerman, 1987), including shopping (Shaw, 2010). Performance of gender may be seen as gendered ways of seeing things, or by taking different (gendered) approaches to shopping activity (Shaw, 2010). For example, some research has suggested that while men are more prone to seek information and convenience while shopping, women favour assortment, social interaction and browsing (Noble, Griffith,

& Adjei, 2006). However, it may be that 'doing' gender is seen most emphatically when men declare that they never go shopping or hate shopping (Shaw, 2010).

This concept of gendered associations with shopping has been explored in an anthropological study conducted in the UK. Men (of all ages) were less likely than women to distinguish between different types of shopping, and less likely to admit to enjoying any type of shopping (Fox, 2004). Fox attributes this to pleasure from shopping being seen as "effeminate" and, therefore, the correct masculine position to take is that shopping (for anything) is something that has to be done, is a means to an end and is never pleasure in itself. This was especially the case for older men, for whom there may be "an unwritten rule prohibiting any enjoyment of shopping, or at least prohibiting the disclosure or acknowledgement of such enjoyment. Taking pleasure in shopping is regarded as effeminate" (Fox, 2004, p.229). Fox suggests that some men prove their masculinity through emphasising how bad they are at shopping. As shopping is considered a female skill, to prove their masculinity men (particularly older men) should avoid it, say they hate it and be useless at it (Fox, 2004).

5.1.3 Gender, marital status and shopping activity. Nevertheless, gendered attitudes to shopping may not impact on actual shopping activity. Findings from Chapter 4 showed that there were no gender or marital status differences in shopping in later life and no differences in the amount of time those people spent shopping. It has been argued that, with ageing, men and women in many ways become less differential in their masculine and feminine predilections (Moody, 2000) and this convergence could lead to shopping being seen as a less gendered activity. Findings from previous research on gender differences in shopping activity are inconsistent; however, it has been suggested that there may not be gender differences due to an increase in shopping as a leisure activity for both sexes (Bennett, 1998). Thus, gender convergence in later life may lead to no pronounced gender difference in shopping activity (Bennett, 1998). However, in a recent UK study (of those aged 70 and over) there were gender differences in food shopping patterns; women were more likely than men to shop alone, with men more likely than women to shop with their spouse (Thompson et al., 2011). In a cross-European study of those aged 65 and older, although women were more likely to be responsible for household food-related activities, men reported carrying shopping

bags, driving for shopping trips and shopping when their spouse was ill (Turrini et al., 2010).

Consequently, there may be differences in shopping habits depending on marital status and type of shopping activity (food versus non-food). A longitudinal study of more than 1000 older adults (aged 65 and over) from the Nottinghamshire area of the UK assessed physical activity, which included shopping activity (defined as continuous ambulatory behaviour associated with shopping). Although the focus was not on shopping, the authors found that married men participated to a greater extent in shopping activity than widowed and single men; widowed men participated more in shopping activities than single men (Bennett & Morgan, 1993). In addition, there may be differences in motivation and shopping frequency for those who live alone versus those who live with others. For example, a cross-European qualitative study of 640 older adults (aged 65 and over) focused on the impact of informal networks on food procurement, which included grocery shopping. It was found that women who live alone tend to enjoy the social interaction during their shopping trips and may shop more frequently than men (Turrini et al., 2010).

5.1.4 Changing gender roles. Shopping is seen most clearly as a gendered activity in relation to food shopping and, as shown above, this may mean that married men take on responsibilities such as carrying bags and driving to the shops. Traditionally the male role has been defined in terms of paid employment as breadwinner, whereas the female role has been confined to the household, which includes the provisioning of food through shopping (Campbell, 1997). Thus, supermarket shopping often may be seen as a place where basic needs are met through the acquisition of household necessities. This is an area in which women may still be mainly responsible as routine shopping is considered to be part of housework rather than regarded as a leisure activity (Lunt & Livingstone, 1992).

Nevertheless, consumer research in Australia suggests that the changing nature of domestic responsibility and gender roles within the household means that food shopping now is less likely to be considered the woman's domain (Mortimer, 2013). This is particularly the case with younger age groups; however, there is some evidence that traditional roles may be shifting amongst those in midlife to later life. This has been suggested by the authors of an Australian study of the food shopping

habits of (predominantly married) baby boomers (aged 40-70), in which they stated that men take on a greater proportion of household shopping than in the past (Worsley, Wang, & Hunter, 2010). Of course, this may be a cultural shift in Australia that is not applicable to the UK population.

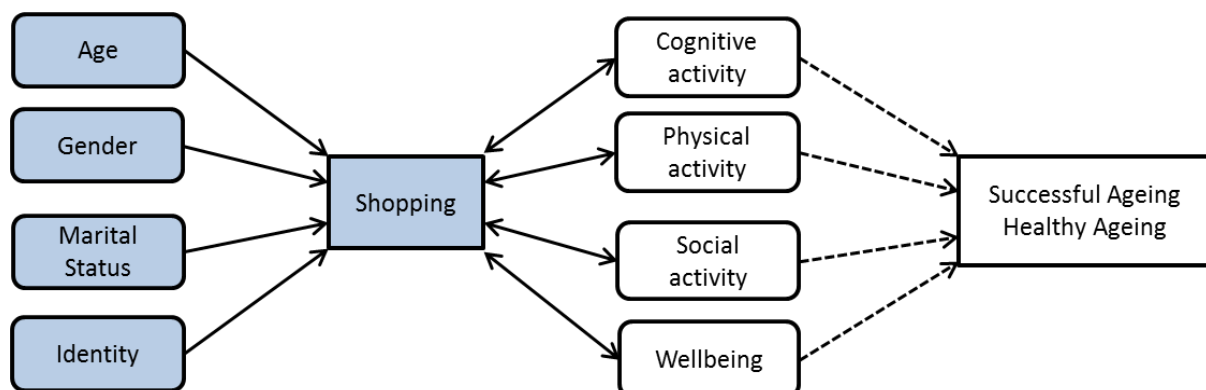
However, it is worth noting that whether gender roles change in later life may depend, in part, on which generation people grew up in. For the majority of married couples born prior to the Second World War, relationships have been structured according to the traditional gendered division of labour (Hislop & Arber, 2003). In this traditional sense, men were providers and protectors and women were servicers and carers within the home (Hislop & Arber, 2003). Cohorts who grew up following the Second World War and entered midlife and later life at the beginning of this century had a different life course experience compared with earlier generations (Arber, Davidson & Ginn, 2003). This may be especially the case for women who had more years as part of the labour market than in previous generations, but other changes include increases in divorce rates and its associated social and economic implications (Arber et al., 2003). Thus, as more women have been economically active as part of the workforce, there has been significant growth in men doing the shopping (Mattingly & Smith, 2010).

Moreover, the transition out of the labour market to retirement may impact on household responsibilities. Retirement may be different from other transitions out of employment (such as unemployment or redundancy) as a socially-sanctioned status that often is a chosen transition. Although now dated, research in the UK suggests that early retirement allowed men to renegotiate the division of domestic labour and this, in turn, formed new notions of masculinity (Cliff, 1993). Although Cliff did not look specifically at shopping activity, he suggested that retirement may have implications for the traditional relationship between masculine identity and household tasks (Cliff, 1993). There has been recent research that lends support to increased gender convergence in household labour after retirement. Using data from 28 waves of the German Socio-Economic Panel Study, Leopold and Skopek (2015) explored the time spent on a typical weekday on household labour for 1302 older couples in which the husband had retired. Household labour consisted of routine housework (considered female-typed), repairs (male-typed) and errands (including shopping, which were considered gender-neutral tasks). The authors found that husbands

doubled up on their total hours of household labour (all activities combined) after retirement and that in the domain of errands husbands approached their wives' levels (Leopold & Skopek, 2015). Although time spent doing errands was a single item (i.e. shopping was combined with trips to government agencies and other such activities) and data did not provide information on whether husbands and wives performed these activities alone or jointly, the authors suggest that gender convergence was evident and spouses increasingly shared these activities (Leopold & Skopek, 2015). Of course, these findings must be considered in a West German context "which is characterised by relatively strong institutional and normative barriers that promote a gendered division of labour following parenthood," (Leopold & Skopek, 2015), but, arguably, this characterisation also applies to the UK.

5.1.5 Aims and research questions. As suggested by the literature, there may not be a clear cut gender difference, at least not one that is not mediated by marital status. Indeed, it may not be possible to explore shopping and identity without considering gender roles. However, for the purpose of subsequent analysis, these concepts will be considered separately where appropriate and brought together again in the discussion. As shown in Figure 5.1, these factors are suggested to influence shopping activity and may impact on the potential pathway between shopping and successful or healthy ageing.

Figure 5.1. Proposed model of the mediating role shopping plays in healthy and successful ageing.



This chapter will be concerned with the following research questions:

- Are there gender differences in attitudes to shopping?
- Does attitude to shopping affect time spent shopping?
- Is there a gender and marital status interaction in attitudes to shopping in later life?
- Are there other factors that influence attitudes to shopping in later life?

As in the previous chapter, results from both secondary and primary data will be presented and integrated where possible.

5.2 Attitudes to Shopping

This section will address people's attitudes to different types of shopping first by comparing all age groups and then by exploring attitudes amongst older people.

5.2.1 Gender and age differences in attitudes. In order to explore whether there are gender differences in whether people like shopping, first TUS was used to look at all age groups. Participants were asked: I am now going to ask you about some household activities. Please can you tell me how much you do or don't like doing them? Participants were asked this question for both shopping for food and shopping for non-food. The response options were: like a lot, like a little; neither like or dislike; dislike a little; dislike a lot; do not do activity. Those who responded that they do not do the activity were not included in the analysis. The response options were collapsed into like (where people specified that they like the activity: like a lot, like a little) and not like (where people did not specify that they like the activity: neither like nor dislike, dislike a little, dislike a lot). As in Chapter 4, the sample was split into four age groups: 16-24, 25-44, 45-64, 65 and over. As shown in Table 5.1, the age group differences for liking food shopping ($\chi^2 = 93.912$; $df = 3$; $p < .001$) were statistically significant for both men ($\chi^2 = 56.888$; $df = 3$; $p = < .001$) and women ($\chi^2 = 79.452$; $df = 3$; $p = < .001$). As shown in Table 5.2, the age group differences for liking non-food shopping ($\chi^2 = 199.073$; $df = 3$; $p < .001$) were statistically significant for both men ($\chi^2 = 86.433$; $df = 3$; $p = < .001$) and women ($\chi^2 = 133.870$; $df = 3$; $p = < .001$).

Table 5.1. TUS: percentage who reported liking food shopping by gender and age group.

Age group	All [95% CI]	<i>N</i>	Males [95% CI]	<i>n</i>	Females [95% CI]	<i>n</i>
16 - 24	50.80 [47.49, 54.11]	876	32.24 [27.23, 37.25]	335	62.29 [58.21, 66.37]	541
25 - 44	44.43 [42.61, 46.25]	2872	40.29 [37.50, 43.08]	1184	47.33 [44.95, 49.71]	1688
45 - 64	45.03 [43.03, 47.03]	2374	41.84 [38.82, 44.86]	1023	47.45 [44.79, 50.11]	1351
65 or more	59.33 [56.68, 61.98]	1323	55.69 [51.58, 59.80]	562	62.02 [58.57, 65.47]	761
	$\chi^2 = 93.912$ $p < .001$		$\chi^2 = 56.888$ $p < .001$		$\chi^2 = 79.452$ $p < .001$	

Note. CI = confidence interval.

Table 5.2. TUS: percentage who reported liking non-food shopping by gender and age group.

Age group	All [95% CI]	<i>N</i>	Males [95% CI]	<i>n</i>	Females [95% CI]	<i>n</i>
16 - 24	83.74 [81.47, 86.01]	1015	70.75 [66.42, 75.08]	424	93.06 [91.01, 95.11]	591
25 - 44	66.77 [65.06, 68.48]	2928	49.67 [46.87, 52.47]	1226	79.08 [77.15, 81.01]	1702
45 - 64	60.57 [58.63, 62.51]	2437	44.80 [41.82, 47.78]	1067	72.85 [70.49, 75.21]	1370
65 or more	59.55 [56.90, 62.20]	1320	47.05 [42.91, 51.19]	559	68.73 [65.44, 72.02]	761
	$\chi^2 = 199.073$ $p < .001$		$\chi^2 = 86.433$ $p < .001$		$\chi^2 = 133.870$ $p < .001$	

Note. CI = confidence interval.

The results show that both those in the youngest and oldest age groups were more likely to have reported that they liked food shopping. When broken down by gender, men in the youngest age group were the least likely to have reported liking food shopping while men in the oldest age group were the most likely to have reported liking food shopping. For women, both the youngest and oldest age groups were the most likely to have reported liking food shopping. This shows that there is more likely to be gender convergence within the oldest age group.

However, the youngest two age groups were the most likely to have reported liking non-food shopping. When broken down by gender, women in the youngest two age groups and men in the youngest age group were the most likely to have reported liking non-food shopping. In addition, this analysis shows that amongst those in later life, women were more likely to have reported liking non-food shopping than men.

Although age differences in attitudes to shopping were not asked about specifically in the interviews, there were two participants who brought up the topic. For example, Barbara enjoys shopping for clothes and compares herself with her adult daughters who do not enjoy shopping:

People are different and a different age group cos [daughter]'s about 45, the other's 49 so you know, it's just a different age group isn't it I think too, whether you like shopping. There is something going round and when you're younger, I mean, yes, girls perhaps go out altogether and they'll be looking at things and say ooh look at this, I like that, you see, I think the younger you are probably you like shopping en masse. (Barbara, 79, widowed, Wales)

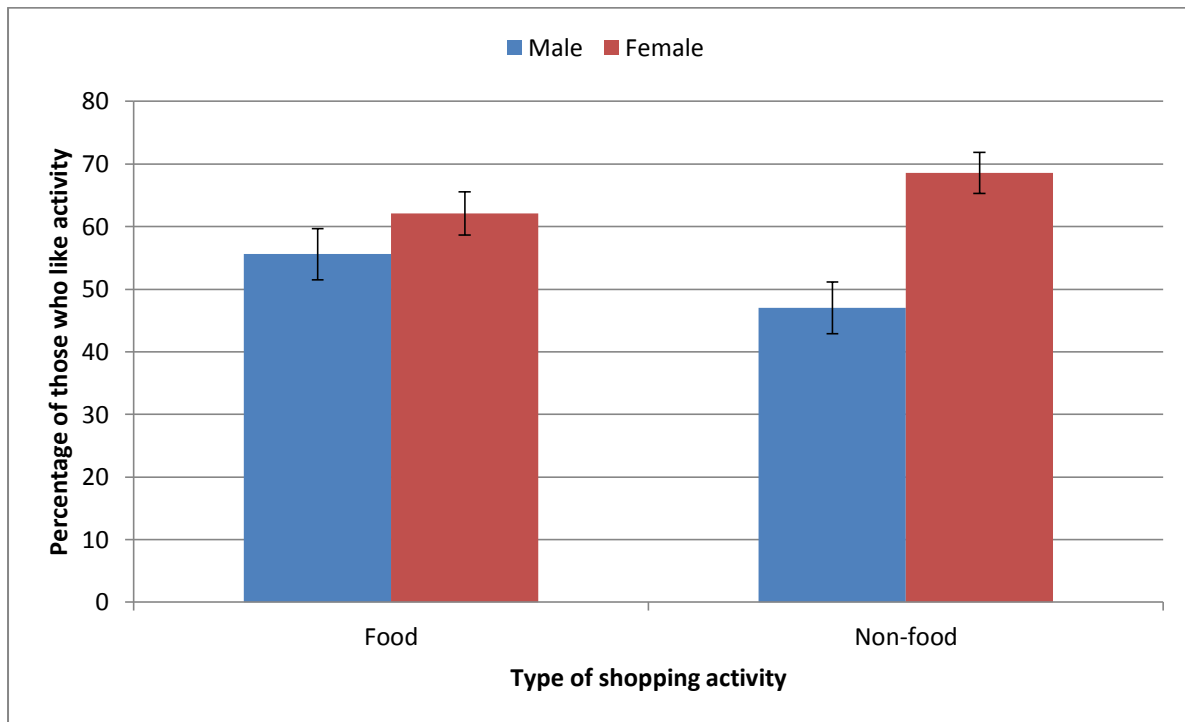
In these remarks, Barbara suggests that it is those in the youngest age group ("girls") and those of her own age group who are more likely to enjoy shopping, especially when compared with those in midlife. She implies that it is the social aspect of shopping with friends that appeals to girls in particular and may be a social norm of this age group; however, as will be discussed in Chapter 6, enjoying the social side of shopping is not restricted to younger age groups. In contrast, Helen attributes to age her no longer having the need to shop for things such as clothes:

Well again, you see, it's an age difference here, if you, you get to my age and everybody says you don't want to buy anything, you've got too many things already, the idea is to try and get rid of them ((laughs)). So what's the point of going browsing and buying more to fill the house up more, mm. (Helen, 72, married, Wales)

Thus, Helen suggests that fewer things are needed in later life and that, as there is no point in amassing more, she "would not go shopping just for the sake of it". This notion that shopping is purposive will be discussed further later in the chapter.

5.2.2 Gender attitudes to shopping in later life. In order to explore whether there are gender differences in whether people like shopping in later life, the TUS data were used for those aged 65 and over. Again, participants were asked whether they liked shopping for food and for non-food. The response options were collapsed into like (like a lot, like a little) and not like (neither like or dislike, dislike a little, dislike a lot). There were 120 (8.3%) who responded that they do not do the activity and they were not included in the analysis. The results for liking both types of shopping by gender are shown in Figure 5.1. The differences for both food ($\chi^2 = 5.631$; $df = 1$; $p = .018$) and non-food ($\chi^2 = 62.884$; $df = 1$; $p < .001$) are statistically significant.

Figure 5.2. TUS: attitude to food and non-food shopping by gender (aged 65 and over).



Note: Error bars represent 95% confidence intervals. $N = 1323$ (food); $N = 1320$ (non-food).

The differences for liking and not liking food shopping lie within gender not between genders. So, more males and females like food shopping than those who do not like it. For non-food there is a difference between genders with more women liking non-food shopping than men.

5.2.3 Attitudes to food shopping. As the previous analysis shows, both women and men in later life are equally as likely to say that they like food shopping. Thus, it seems that individual differences such as personality impact on attitudes to food shopping and this may explain the differences between those who like and do not like food shopping. As what people like about food shopping will be explored in subsequent chapters, here the focus will be on those who say they dislike food shopping. Indeed, attitudes to food shopping amongst the qualitative interviewees are heterogeneous. They include indifference: “It’s not an important part of our lives, as long as we’ve got food in the fridge,” (Gloria, 76, married, Wales); and dislike: “Well no, no, I don’t, I don’t enjoy it... There’s nothing likeable in it, there’s nothing likeable,” (George, 66, married, Wirral); and even hatred: “I, I hate shopping, I will never go around shops. No, it’s not my thing at all, no,” (Huw, 80, married, Wales).

Although Huw is the only person to have used “hate” to describe his attitude to (any) shopping, many of the participants say that they do not like food shopping. This attitude to food shopping often is framed by seeing the activity as a necessity:

Erm I don't really like it because it's such a drag isn't it, you do the same thing every week but then, you know, you need to do it, you have to do it and so I carry on really, basically, but I don't like it. (Gwyneth, 70, married, Wales)

You've got to do it cos you need it and that's it. But I wouldn't do it because I want to go shopping, I don't like ((laughing)) going shopping. (Lyn, 70, married, Wales)

Shopping? No, no, I see it as, we both, it's, it's er it, we go shopping because it's a necessity erm I think. (Bryn, 71, married, Wales)

It's not a thrill, you know, to visit a supermarket, it's just hard work, tedious, boring, yes... I like to go and get it done with, yes... With a purpose ((laughs)). (Helen, 72, married, Wales)

Yeah, yeah, yeah and of course I, I, I must admit I'm not a, not a fan of going to a supermarket, I don't suppose most people are but I don't er I find it a bit of a chore ((laughs)). (Joseph, 75, married, Wales)

It is important to mention, however, that Joseph's dislike of food shopping comes from finding it difficult to park at the supermarket and not from the actual shopping activity. This is in contrast to Ernie, who when asked if he likes shopping replied:

Erm not particularly, no, no, no. Well that's again, that's a contradiction, I'll go shopping but from choice I wouldn't, I wouldn't go shopping ((laughs)) I have to go shopping but I wouldn't, you know, I'd be in and out if I wanted- say <wife> was ill and she gave me a list I'd be off but I'd be back very rapidly. (Ernie, 80, married, Wales)

Although Ernie goes food shopping with his wife at least twice a week, he says “it's not my top of the pops” and that he would prefer not to have to go. Thus, it is clear from these examples that food shopping can be seen as a ‘necessary’ activity that is a ‘chore’, but that regarding it in this way and, therefore not liking food shopping, is

not gender specific. Furthermore, it is worth noting that all those who claim not to like food shopping are doing the activity even when there are other options available.

5.2.4 Food shopping and masculinity. Interestingly, there is only one person who talks explicitly about food shopping as a gendered activity. Although at the time of interview Harold (67, married, Wales) was no longer responsible for food shopping because he was recuperating from illness, he and his wife used to do their weekly shop together. Even though food shopping was an activity he used to do regularly, he says: “I don’t enjoy anything about shopping,” and he distances himself from his past food shopping activity: “I used to take my wife and sister-in-law.” When asked if he *took* them as opposed to *going with* them he responded: “I used to go with them, just to keep an eye on what my wife was buying”. By presenting himself in relation to shopping activity in this way, Harold is an example of ‘doing’ gender. He was going food shopping to “take” (drive) his wife and to “keep an eye on”, or monitor, her purchases. Although Harold seems to give incompetence as a reason for not shopping: “I get told off, I buy all the wrong stuff... I’ll do the garden, shopping, not my style, no”, perhaps the real reason is that he sees food shopping as a gendered activity: “It’s not a man thing to go to, do a weekly shop though is it” (Harold, 67, married, Wales).

Even though this gendering of food shopping was not mentioned explicitly by other interviewees, whether male or female, there were other examples of men ‘doing’ gender either by distancing themselves from food shopping or by performing masculine roles associated with shopping. One such example is Huw (80, married, Wales), who is not responsible for the majority of the food shopping but does top up shop regularly at his local supermarket. When asked if he would know the total cost of his shopping by the time he gets to the till, he responds:

Not really, as I said, my wife does the shopping and that’s it, you know. She brings it home and I pay the bill and that’s it. (Huw, 80, married, Wales)

Thus, Huw makes the distinction between their food shopping responsibility; it is his wife’s responsibility to do (choose and bring home) the food shopping but it is his responsibility to pay for it (i.e. he settles the tab in their local supermarket on a weekly basis). In this way, Huw is making a distinction based on traditional gender roles in domestic labour in which his wife shops but he is the financial provider.

It is important to note, however, that the examples given in this section all come from married participants. This is because disliking food shopping was more likely to be mentioned by married interviewees but this will be discussed further later in the chapter.

5.2.5 Non-food shopping and gender expectations. As shown in the previous analysis of TUS data, there is a gender difference as women are much more likely than men to report liking non-food shopping. Indeed, in the qualitative data, there is a general expectation that men are less likely to enjoy (any) shopping, as illustrated by Rhona's comments about her husband's shopping enjoyment:

Yeah, yeah, <husband> is one of these rare people that's, that loves shopping, he'll walk round- it's me that'll say let's go home ((laughs)) yeah, so he quite likes, quite enjoys it, you know, and we'll just browse in shops, you know, from sports shops to clothes shops to shoe shops, anything. (Rhona, 69, married, Wales)

Rhona implies that when she says "rare people" she really means that her husband is one of those 'rare men' who enjoys shopping. The opinion that liking clothes shopping is something more expected of women also is expressed by George:

Not so much I hate to shop, it's just I'm not like, I think it's a female thing generally speaking, is they like to wander round looking, I like, I want a shirt or need a shirt so I'll know of the certain shops who sell shirts, I'll go to them, see a shirt, buy it and come home. I can't be doing with that, you know. (George, 66, married, Wirral)

However, actually liking shopping is not necessarily gendered and there is not always the expectation that it is. For example, although Fred says he is "not a keen shopper" he compares himself with his father:

I wouldn't go just for the sake of going. My dad used to go regular every Saturday. Cos he liked going. (Fred, 82, widowed, Wirral)

Fred has no expectations that liking shopping is gendered because he grew up with a dad who liked to shop and did so regularly. Moreover, making a (non-gendered) comparison with others is seen with other participants who are not keen shoppers.

For example: “I know some people do like shopping and it’s a hobby almost for some people but no...” (Helen, 72, married, Wales). Helen describes herself as someone who shops with purpose, which is in contrast to those who shop as a “hobby” or as a leisure activity. Even so, she does not make a gender distinction and there is no expectation that it would be only women who would enjoy shopping for leisure.

Likewise, there is not always the expectation that all women like shopping, as shown in Gwyneth’s comments:

I do like that very much, yeah, I enjoy that. Some ladies don’t enjoy clothes shopping do they? I do, I like browsing, looking what’s new and colours, everything. (Gwyneth, 70, married, Wales)

For Gwyneth, who regularly shops for clothes, browsing around department stores is an enjoyable, sensual experience yet she makes it clear that she realises not all women do enjoy the activity. The idea of having a day out shopping is perhaps even scorned by women who are less keen shoppers. One example is Brenda who does not enjoy shopping and compares herself with other women who do like the activity:

Like some women have a day and just go [to a shopping centre] for a meander round, no, can’t be bothered doing that... Usually you buy something you don’t want when you go with someone else! (Brenda, 86, widowed, Wirral)

Brenda implies that she would be under pressure to make unnecessary purchases if shopping with others, and although this is an isolated comment, she suggests that going shopping for a day out is a frivolous activity.

Whereas clothes shopping may be considered (by men in particular) as more enjoyable for women, it is perhaps more acceptable for men to discuss enjoying shops that are seen as masculine. Charles is one example of someone who is dismissive of food shopping, which is seen as his wife’s responsibility. However, when talking about non-food shopping, specifically more masculine shops (e.g. DIY and electrical) he is enthusiastic:

Oh well our daughter lives in <northeast county> you see and when we go up there we go to a Range’s, god the stuff they have there, it’s just an enormous place and er you can buy artistic stuff er and garden stuff and you name it, it’s

there. And now we've got a Range's next to <supermarket> in <town> that was one of the big garden centres, Wickes and it is now gone and this has come in its place, it's astonishing what you can buy in there. It's been there a couple of years, when the garden cen- when the erm places started folding up, you know, the B&Q-type places and er but there's a big B&Q there as well. A big Dixons, a big Currys, all along the line coming out of <town>. (Charles, 81, married, Wales)

It is, perhaps, more acceptable for men to talk enthusiastically about 'masculine' shops, particularly large, out of town superstores. Moreover, there is the expectation that these types of shops are the man's domain:

Well I would but if I'm with her at B&Q then we go up every aisle, yeah, because she, for some reason, she loves B&Q er I don't know why but ((laughs)) it's normally a man thing but, you know what I mean, she loves it. (Donald, 70, married, Wales)

For Donald, DIY shops are masculine and he expresses surprise that his wife enjoys going with him. In this respect she is subverting his gender expectations. As shown above, however, gender expectations regarding liking non-food shopping, where evident, are heterogeneous and not specific to either men or women.

5.3 Shopping Activity and Attitude to Shopping

5.3.1 Time spent shopping. TUS data again were used in order to address the second research question, whether attitude to shopping affects the time people actually spend shopping. As in Chapter 4, time spent shopping included all shopping codes (i.e. any instance of shopping for consumer goods, capital goods or window shopping), which covered all shopping activities in person. The total time spent shopping included all reported instances of shopping activity over the two diary days. For this analysis, the responses to the two shopping attitude questions (Please can you tell me how much you do or don't like doing: shopping for food; shopping for non-food?) were collapsed. So for each respondent any instance of "like" (like a lot, like a little) for either food or non-food shopping was coded 1. If respondents had reported only "not like" (neither like or dislike, dislike a little, dislike a lot) for both food and non-food shopping they were coded 0. As shown in Table 5.3, there were

differences between those who liked (any) shopping and those who did not in the mean time spent shopping. These differences were statistically significant for the whole sample, $t(1275) = -3.22$, as well as for both men, $t(537) = -2.45$ and for women, $t(736) = -1.92$.

Table 5.3. TUS: Mean time spent shopping by attitude to shopping and gender (aged 65 and over).

	<i>M</i>	<i>SD</i> *	Median	<i>P</i> value
All	69.27	79.85	50	0.001
Like	77.36	78.16	60	
Not like	62.01	66.34	40	
Male	66.34	73.26	50	0.02
Like	75.77	75.00	60	
Not like	60.05	62.82	40	
Female	71.54	84.57	50	0.05
Like	78.30	80.03	60	
Not like	64.50	70.69	40	

Note. N = 1291. * Standard deviations are large due to several extreme values and must be treated with caution.

The results show that for each group, respondents were more likely to have spent longer shopping if they had reported liking shopping. However, those who reported not liking shopping still spent an average of an hour shopping over the two diary days. This finding further supports the argument that shopping is a necessary daily activity that people engage in whether or not they like shopping. In addition, this supports findings from Chapter 4 that the time spent shopping was not an important factor amongst the interviewees, and whether or not they considered food shopping to be a chore did not impact on their food shopping frequency.

5.4 Attitude to Shopping and Marital Status

5.4.1 Gender and marital status. In order to address the third research question, whether there is a marital status and gender interaction in attitudes to shopping, the TUS data for liking shopping for both food and non-food shopping

were used. Again, the response options were collapsed into like (like a lot, like a little) and not like (neither like or dislike, dislike a little, dislike a lot). Marital status was collapsed into three groups (married or cohabiting; single, separated or divorced; widowed). The results for food shopping (shown in Table 5.4) show that there were no gender or marital status differences. The results for non-food shopping (shown in Table 5.5) show that there were no marital status differences within gender.

Table 5.4. TUS: percentage who reported liking food shopping by gender and marital status (aged 65 and over).

	Married/cohabiting		Single/separated/ divorced		Widowed		χ^2	<i>P</i> value
	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>		
All	58.19 [54.72, 61.66]	775	57.60 [48.94, 66.26]	125	61.94 [57.31, 66.57]	423	1.763	0.414
Males	56.84 [52.21, 61.47]	424	53.49 [38.58, 68.40]	43	51.58 [41.53, 61.63]	95	0.962	0.618
Females	59.83 [54.70, 64.96]	351	59.76 [49.15, 70.37]	82	64.94 [59.78, 70.10]	328	2.080	0.353

Note. CI = confidence interval. *N* = 1323.

Table 5.5. TUS: percentage who reported liking non-food shopping by gender and marital status (aged 65 and over).

	Married/cohabiting		Single/separated/ divorced		Widowed		χ^2	<i>P</i> value
	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>	[95% CI]	<i>n</i>		
All	58.10 [54.63, 61.57]	778	61.60 [53.07, 70.13]	125	61.63 [56.96, 66.30]	417	1.649	0.439
Males	46.59 [41.85, 51.33]	425	48.84 [33.90, 63.78]	43	48.35 [38.08, 58.62]	91	0.153	0.926
Females	71.95 [67.26, 76.64]	353	68.29 [58.22, 78.36]	82	65.34 [60.17, 70.51]	326	3.461	0.177

Note. CI = confidence interval. *N* = 1320.

The results show that there were no marital status differences for liking food shopping either within or between genders. Thus, regardless of marital status or gender, people were just as likely to have reported liking food shopping, with around 60 percent of respondents doing so. For non-food shopping, although there were no marital status differences within gender there were differences between genders. So, a married man was just as likely to have reported liking non-food shopping as a widowed or divorced man (48 percent) and it was the same for women (79 percent). However, married women (72 percent) were much more likely to have reported liking non-food shopping than married men (47 percent); widowed women (65 percent) were more likely to have reported liking non-food shopping than widowed men (48 percent). The same gender pattern can be seen amongst those who were single/separated/divorced but cannot be extrapolated from because of small numbers of this marital status group in the TUS data.

5.4.2 Married men and food shopping. Amongst the interviewees, some of the married men clearly disassociated from food shopping activity. When asked about supermarket shopping, Robert replied straight away: “Probably asking the wrong person.” He went on to say that his wife has always taken care of that:

She always has done. When she was working she always did the shopping, yeah, no need for me to do it, she does it. (Robert, 67, married, Wales)

A similar response was seen with Donald (70, married, Wales) “You better ask my wife that because I don’t often go with her”. When asked if he ever goes food shopping again he defers to his wife: “Sometimes. ((Calls to wife)) <Wife> supermarket shopping, I don’t often go with you do I?” He does this once more, later in the interview when asked if he adds up costs in his head while he shops: “Erm well I’m the wrong person to ask that, it’s my wife, do you want me to find her?”

Both Robert and Donald are examples of married men who do not do the majority of the food shopping and, therefore, distance themselves from the activity. However, such disassociation with food shopping is seen on several occasions with married men who go supermarket shopping with their wives. For example, Bryn does the grocery shopping with his wife but when asked if they do one big shop a week he responds: “Oh dear, well yes, I suppose so, unless you want another opinion of course ((laughs))” (Bryn, 71, married, Wales). A similar response is seen when

Joseph is asked if he and his wife look out for offers when they shop: “Erm in the main I would say no, I mean, really <wife> should be telling you this, shouldn’t she ((laughs))” (Joseph, 75, married, Wales).

For Charles, food shopping is part of the division of household labour. When asked whether he and his wife do their supermarket shopping together, he responds:

Er well yes, yes, more or less, she does her round of shopping, I have a look in other places in there. (Charles, 81, married, Wales)

For Charles, going supermarket shopping “together” with his wife actually means that they journey there and back but go their separate ways inside the store. He later reiterates that although they go together, the food shopping is his wife’s responsibility: “Erm well er my wife does the er food shopping anyway”. He goes on to say:

Oh yeah, I mean we go to <town> gosh, I would think more than half a dozen times a year, as and when we need to go for certain things. And you’ve got a 24 hour <supermarket> there, a super <supermarket>, where she can get stuff that she can’t here. (Charles, 81, married, Wales)

So, although Charles and his wife travel to the supermarket together, he makes it clear that food shopping is his wife’s domain. This food-related division of household labour is seen with other married men who do the grocery shopping with their wives:

Oh yeah, I’m banned from the kitchen me, I’m banned! Yeah, she won’t let me in there ((laughs)) she’ll let me in but ((laughs)). DIY no problem but I’m not allowed in there ((laughs)). (Ernie, 80, married, Wales)

<Wife>, <wife>’s the one in charge of the food side and I, obviously er the car insurance, there’s the house insurance... (Jack, 79, married, Wales)

In both of these remarks it is clear that they consider anything related to food to be the responsibility of their wives and that they, as men, are responsible for more ‘masculine’ tasks such as handling finances and home repairs. Thus, these men are examples of the persistence of traditional gender norms in which they are providing (finances, physical labour) and their wives are responsible for food.

It seems then that food shopping may still be more of a gendered activity amongst several of the married couples. Nevertheless, there may be occasions when the wife is unable to go and therefore the husband must do the food shopping. Two of the married respondents bring up the necessity of the husband going shopping when the wife is ill. For example, when asked if she does the shopping by herself, Gwyneth responds:

Yes, when I wouldn't be well or something he would come with me but very occasionally. Or when I, I would be ill, I'd say from- I had an operation or something, he would've done the shopping then. (Gwyneth, 70, married, Wales)

From Gwyneth's comments it is clear that her husband helps her with food shopping only if she is unwell and she states that her husband would go shopping alone only if she was unable to go herself. While Ernie regularly does the food shopping with his wife, he notes that he would shop differently if alone:

I have to go shopping but I wouldn't, you know, I'd be in and out if I wanted- say <wife> was ill and she gave me a list I'd be off but I'd be back very rapidly. (Ernie, 80, married, Wales)

This different (i.e. quicker) way of shopping may be because shopping alone is less of an occasion; however, as will be seen in the next section, shopping efficiently may be indicative of performing masculinity.

5.4.3 Masculinity and shopping. As shown above, a gendered approach to shopping is evident with several of the married men. Men 'doing' gender is seen when people claim that they never go shopping or when they distance themselves from the shopping activities that they do. As discussed in the previous section, this is seen particularly with food shopping but masculine notions of shopping are also seen with non-food shopping. Thus, when these men do any kind of shopping, their activity must be seen as purposive and efficient, for example: "If I want something I'll buy something and that's it," (Huw, 80, married, Wales). Likewise, on the few occasions Robert goes shopping he does so as a necessary activity and not as a fun activity:

Well I don't, you know, I shop cos I have to do it, yeah. I don't sort of hunt around for things just for the fun of it, you know. If I want something, I'll look for it, buy it. (Robert, 67, married, Wales)

Thus, Robert makes it clear that he shops efficiently and is perhaps even dismissive about his shopping activities. When he is asked whether for him shopping is a functional activity, he responds:

It is for me, yeah. Yeah, yeah... I just do it, you do it cos you have to do it, you know, it's er yeah. I'm not a great shopper ((laughs))... I'm very limited for what I do, very limited. (Robert, 67, married, Wales)

This claim not to be good at shopping is not unique amongst married men as shown with Harold who says: "I get told off, I buy all the wrong stuff," (Harold, 67, married, Wales); similarly:

I'm probably the world's worst shopper, I always end up buying the most expensive, if there's two items there of the same, the same product I'll probably end up buying the, the dearer one. (Donald, 70, married, Wales)

If shopping is seen as a female activity or female skill, then to profess to not being good at it may be seen as preserving masculinity. These men claim not to shop, or when they do, they do so single-mindedly, with a clear purpose, without wasting time. These masculine notions of shopping are in direct contrast to how married men talk about how their wives shop and, by extension, how women in general shop. For example, Donald compares how he shops for clothes with how his wife does so:

Well it doesn't take me, it takes my wife a long time but it doesn't take me any, I know what I want, I go in there, she'll come with me, I'll try it on, I'll ask her what, you know, what does she think of it and if erm, you know, if we both like it I'll get it but most of the time stuff I pick out she'll like so that's okay, yeah.
(Donald, 70, married, Wales)

Although Donald perhaps shows a sense of pride in his ability to shop quickly and efficiently (in contrast to his wife), he still points out that he seeks and gets his wife's approval before he purchases clothes. On the other hand, Harold (67, married, Wales) says that he "can't remember when I went out and bought meself clothes,"

and when asked if he is a focused shopper he replies (again, with pride): “Yeah, too right I am”. He compares his attitude to shopping with that of his wife’s:

She will browse and browse and browse... She will. In any shop. My wife is the worst person to go shopping with in the world. (Harold, 67, married, Wales)

Yet, when asked if he preferred not to go, he chooses to present himself as an easy going person in his response:

Oh no, I just go along, I’m quite laid back and relaxed. I’ll go and look at the men’s toys and things like that. Or the books. (Harold, 67, married, Wales)

Although he is clearly browsing when looking at “men’s toys” or books while his wife shops, he describes himself as a functional and efficient shopper:

I wouldn’t go browsing. I mean some people will go and look at the price of paint, not me, no. If I need a screw I’ll go and go buy the screw and then out. That’s it. Get what I need and go. (Harold, 67, married, Wales)

Again, there is perhaps a sense of pride shown by men who have a purposive style of shopping. For Robert, he and his wife having different styles of shopping is the reason given for them not going food shopping together. For example:

I don’t spend a lot of time shopping, I just go and do what I want to do and er get out, you know, yeah. There’s always, there’s no, I mean like you’ve gotta go and do it so I don’t erm I don’t pretend that I enjoy shopping, I just go do what I want to do and come out and that’s it. So if I go- and that’s why we don’t shop together cos I rush around the shop and get what I want and come out. So over the years she’s decided that she’d do her own. (Robert, 67, married, Wales)

As mentioned above, even amongst married men who go food shopping with their wives there is evidence that their role is being downplayed. For example, Ernie and his wife shop together regularly and frequently, both for food and as leisure. These shopping trips are activities that he seems not to mind:

Just our <wife> as I say ordinary shopping or sightseeing or whatever er just walking around the shops no problem. (Ernie, 80, married, Wales)

Yet, later in the interview Ernie points out that: “It, it’s, it’s not a shopping expedition, it’s just passing a couple, an hour or so away, you know,” and seems to distance himself from any enjoyment of the activity:

Yeah, oh that’s all, food shopping, yeah, yeah, no shopping doesn’t interest me that much, I’ll obviously, I’ll go with <wife> or if she’s going about- I wouldn’t say under duress but she knows ((laughs)) it’s not my top of the pops. (Ernie, 80, married, Wales)

This distancing himself from enjoying shopping seems evident when later he talks about going to sporting supplies shops, something he does occasionally with male friends:

So I enjoy looking at it but I wouldn’t, wouldn’t go out me way to, you know, find something like that. (Ernie, 80, married, Wales)

Similarly, Donald seems to temper his language when discussing the pleasure gained from finding a bargain:

We sometimes call into <discounter> and they have special deals of various things, bits and bobs, and I bought a pair of binoculars at a very reasonable price erm well ((laughs)) I was thrilled about it if you want me to say that, you know, I was quite pleased that I’d got a decent pair of binoculars for, for, at a reasonable price. Erm but no, I mean I, I wouldn’t start shouting it from the rooftops you know ((laughs)) if I got a bargain somewhere, you know, yeah. (Donald, 70, married, Wales)

Although not explicit, these are perhaps examples of performing gender; if liking shopping is seen as feminine, these (masculine) men are quick to point out that they do not like it too much.

The remarks presented here show that these men are more likely to profess to shopping efficiently and with purpose. For some married men at least, browsing or window shopping may be seen as frivolous and perhaps as the way in which women shop. This is not to say that this opinion is limited to married men, just that it is a distinction more likely to be made by married men.

5.5 Women as Functional Shoppers: a Non-Shopper Identity?

In order to address the next research question, which is to explore whether there are other factors that influence individual attitudes to shopping, qualitative data will be used. As shown in the above analyses from TUS, there were no marital status differences amongst women for either food or non-food shopping. Furthermore, it has been shown so far that browsing is seen as a feminine trait typically and that purposive shopping is seen as more masculine. However, findings from TUS suggest that in later life men and women are equally likely to like food shopping and that there may be gender convergence with ageing. Indeed, there are many examples of women who display the (perhaps masculine) tendency to disassociate from leisure shopping and who present with a non-shopper identity:

I'm not one for going shopping ((laughs))... as I say, we like to go out for the day but we like to know what we're going for, I'm not a shopper, I won't wander round shops aimlessly, I need to go for something. (Betty, 70, married, Wales)

Similarly, as Sheila's husband does their food shopping and she does not go shopping often herself, she apologises for not being able to discuss shopping activity in much detail: "Sorry I feel as though I'm not helpful cos I'm not a major shopper," (Sheila, 65, married, Wirral). On the few occasions that Sheila does go to shops she presents as someone who is functional and needs a purpose:

Again, I'm not a moocher when I get over there... But I've got to need something before I go, I don't go just for the sake of it... (Sheila, 65, married, Wirral)

As shown with some of the married men, some of the women profess to shopping with speed and efficiency. For example, Anna describes herself as a functional shopper: "Oh not a lot, I'm a in and out person, you know." (Anna, 66, married, Wirral). However, she contrasts her food shopping activity with that of her weekly days out with a friend. Although the primary purpose of these days out is as a social occasion, Anna and her friend also visit shops and shopping centres:

Then we wander round there, you know, cos she, she likes wandering around the shops, I do but you know er I'm not as bad as she is, you know. (Anna, 66, married, Wirral)

Anna implies that her friend is more of a shopper than she is but as a social occasion “wandering around the shops” is something that she enjoys.

Finding enjoyment in some shopping activities also is seen with some of the other women who seem to display non-shopper identities. One example is Bessie who professes to not enjoying shopping usually, yet she likes looking around her local market: “I can go to <town> market, which I quite enjoy,” (Bessie, 84, widowed, Wirral). Similarly, Helen is a self-professed functional shopper but says:

I quite like looking at clothes, yes. I wouldn't go and browse just for the sake of browsing ((laughs)). (Helen, 72, married, Wales)

As shown above, although Helen makes no judgement on those who do shop for pleasure, as a “hobby”, she is disdainful of the idea of doing so herself. When asked if she uses shopping as a way to pass the time Helen replies:

No ((laughing)) I can't imagine anything I'd like less. I only go to a shopping centre if I wanted to look for something. (Helen, 72, married, Wales)

From remarks such as these it is clear that even for those who generally do not like shopping, there is some enjoyment gained from certain shopping activities or types of shopping. Notwithstanding, it is important to note that for those with a non-shopper identity in particular, a distinction is made between the necessity of food shopping and the more pleasurable aspects of non-food shopping.

5.6 Discussion

5.6.1 Introduction. The aim of this chapter was to explore opinions and attitudes to shopping in later life in order to determine whether there were gender differences and/or an interaction between gender and marital status. The intention was to unpack such associations to see whether they influence attitudes to shopping activity above or in addition to other factors such as personality.

5.6.2 Age and gender differences in attitudes to shopping. The first research question explored whether there were gender differences in attitudes to shopping for different age groups. For food shopping, the results suggest gender convergence in later life. In data from TUS, for both men and women those in the oldest age group were the most likely to have reported liking food shopping. Results

from the qualitative data support this finding albeit from a different perspective. By looking at those who dislike food shopping it was clear that the most cited reasons were that it is seen as a 'necessary' activity that is a 'chore'. However, regarding it in this way and, therefore not liking food shopping, was not gender specific.

Returning to TUS, for non-food shopping there were significant age differences. Those in younger age groups (both men and women) were more likely to have reported liking the activity. Yet, in later life, women were more likely than men to have reported liking non-food shopping. Amongst those in the qualitative data who discussed shopping in terms of gender, there was some evidence that people expected men to be less likely to enjoy any type of shopping. While there was a tendency for some men to distance themselves from food shopping in particular, it was perhaps seen as more acceptable to discuss shopping in masculine (e.g. hardware) shops. However, liking shopping was not necessarily gendered and there was not always the expectation that it is. For instance, women were as likely to have mentioned that they realise other women do not like shopping as they were to have mentioned other women having a social day out shopping. Indeed, the concept of shopping as social activity will be discussed in more depth in Chapter 6.

The gender expectations regarding liking non-food shopping, where evident, were heterogeneous and such expectations were not specific to either men or women. In contrast, regarding food shopping there were clear gender distinctions made by some of the married men. Such distinctions were based on traditional gender roles in domestic labour in which the women shops and the man drives her to the shops and/or is the financial provider. As this was explicitly the case with only two of the married men, these results suggest that indeed there may be a gradual shift in traditional gender roles (e.g. Mortimer, 2013).

5.6.3 Attitudes and time spent shopping. The second research question was concerned with whether people's attitudes to shopping affected the actual time they spend shopping. Results from TUS showed that people were more likely to have spent longer shopping if they had reported liking shopping; however, even those who reported not liking shopping spent an hour on average shopping. This further supports the earlier findings that time spent shopping was not an important factor

amongst the interviewees, and whether or not they considered food shopping to be a chore did not impact on their food shopping frequency.

5.6.4 Marital status and gender. The third research question was to determine whether there was a gender and marital status interaction in attitudes to shopping in later life. Again using TUS, the results showed that there were no marital status differences for liking food shopping either within or between genders. Thus, regardless of marital status or gender, people were just as likely to have reported liking food shopping, with around 60 percent of respondents doing so. Even though in practice, food shopping is often a shared activity for couples in later life, it seems that food shopping may still be considered a gendered activity for several of the married interviewees. For example, some of the married men clearly disassociated from food shopping activity and considered anything related to food to be the responsibility of their wives. Although this disassociation with food shopping was more explicit among those who were not primarily responsible for food shopping, it was seen on several occasions with married men who regularly go supermarket shopping with their wives. The findings suggested that for some people there is a persistence of the traditional gender division of labour, in which the men are being providers (finances, physical labour) and their wives are responsible for any food-related activities.

Returning to TUS, for non-food shopping, although there were no marital status differences within gender there were differences between genders. So, women (of any marital status) were more likely to have reported liking non-food shopping than men (of any marital status). As shown above, a gendered approach to shopping was evident with several of the married men who were interviewed. Men 'doing' gender was seen when people claimed that they never go shopping or when they distanced themselves from shopping activities that they do. This was seen with married men who downplayed their involvement in household shopping activities. In addition, when married men talked about their shopping activity it must be seen as purposive and efficient. These findings are consistent with previous research that suggests that some men prove their masculinity through declaring that they do not go shopping or find no pleasure in it (Fox, 2004; Shaw, 2010). Thus, if liking shopping is seen as feminine, these (masculine) men were quick to point out that they do not like it too much. For some married men at least, browsing or window shopping may be seen

as frivolous and perhaps as the way in which women shop, which has been suggested before (Shaw, 2010). This is in contrast to the 'masculine' way of shopping, which is efficiently and with purpose. This is not to say that this opinion is limited to married men, just that it is a distinction more likely to be made by married men. Although non-married men also may see shopping as a necessary activity or chore, they were less likely to disassociate from it and did not do so as strongly. It may be that the married men were able to disassociate as they have wives who they can rely on to take care of the household shopping, which is not a luxury shared by those who live alone.

5.6.5 Non-shopper identity. The final research question concerned other factors that influence attitudes to shopping in later life and, in particular, explored the potential existence of a non-shopper identity. In effect, this was to determine whether some of the more 'masculine' shopping traits that several of the married men clearly identified with were evident amongst women too. Indeed, this was the case with a number of women also describing themselves as functional shoppers or as being 'not a shopper'. For these interviewees, it was important to shop with speed and efficiency and although there was evidence of some enjoyment from shopping-related activities, having a purpose to shop was the driving force. Hence, it is proposed that there is a non-shopper identity, for which gender is not the primary factor. This can be defined as the tendency to disassociate from 'feminine' shopping traits (e.g. browsing, leisure shopping) and identify with those that are considered 'masculine' (e.g. being efficient, purposive).

5.6.6 Limitations. There are limitations that must be considered. First, results presented in this chapter utilised data from TUS, which was conducted in 2000. Thus, it is possible that attitudes to shopping have changed somewhat in the past 14 years. Although efforts were made in the original study to ensure that the diary data covered an equal distribution of days and months across the entire year, the study period may not have captured the weekly main food shop, for example, and therefore may underestimate the time spent shopping typically.

Furthermore, there are limitations to what can be extrapolated from the qualitative data. Gender roles and attitudes were not specifically asked about in the interviews. Nor were they explored further in relation to family history or context in

order to determine whether they perhaps reflect cohort or generational attitudes. Thus, some of what is seen as lack of enthusiasm or even disdain for shopping may reflect attitudes framed by living through post-war austerity in contrast to those who were brought up during a new period of mass consumption. Yet, perhaps this weakness also is a strength; as the interview questions were not framed in terms of gender norms or expectations, such themes emerged organically. Consequently, disassociating from the concept of being 'a shopper' or distancing the self from shopping activity did not emerge as gendered, hence the introduction of the (non-gendered) non-shopper identity.

5.6.7 Conclusion. This chapter has presented evidence that, in general, food shopping is enjoyed equally by men and women in later life but non-food shopping is enjoyed more by women. However, liking food shopping may not impact on the actual doing of it for the majority of people. The exception is perhaps married men who are not responsible for food shopping and who clearly disassociate from the activity by presenting a non-shopper identity. Yet, presenting with a non-shopper identity was seen with both men and women. It has been argued that the disassociation is from what is seen as feminine shopping traits as opposed to shopping *per se*. In this way, the emergence of a non-shopper identity (which is not gender specific) may be further evidence of gender convergence in later life. This chapter predominantly has been concerned with reasons for not enjoying shopping, which may affect whether people actually go shopping and, therefore, have implications for the potential health benefits that shopping activity could provide. Although individual attitudes to shopping cannot be ignored when considering shopping behaviours, subsequent chapters will focus more on its benefits and as a site for health promoting activities.

Chapter 6

Social Activity

6.1 Introduction

The previous chapter established that attitudes to shopping can influence and be influenced by how and why people shop. Furthermore, although there may not be clear cut gender and marital status differences, it was argued that identifying with specific shopping behaviours can affect whether those behaviours are undertaken and how they are experienced. Consequently, motivations to shop with others or to engage in social activity while shopping may be influenced by attitudinal variation. These concepts will be explored further in order to establish a more complete picture of the role of shopping in later life. This chapter will discuss in what ways shopping may be perceived as a social activity as well as to show the purpose and potential benefits of shopping-related social activity in later life.

6.1.1 Social engagement and health. Although shopping is an area that has the potential to contribute to both social engagement and health there has been little research done in this area. The health benefits of maintaining social engagement in later life have been well documented. Social engagement has been linked to better physical (Mendes de Leon et al., 2003) and mental health outcomes (Kawachi & Berkman, 2001), cognitive functioning (Seeman & Crimmins, 2001) and lower mortality (Seeman et al., 2001). When compared with those who are socially isolated, older people with strong social relationships are able to maintain independence for longer (Michael, Berkman, Colditz, & Kawachi, 2001). Furthermore, meaningful participation and social integration have been shown to contribute to ageing well (Fast & de Jong Gierveld, 2008). It is plausible that shopping may contribute to the maintenance of social networks and support; older people may go to the shops more frequently than younger adults. Yet, when shopping has been included in models of social activity and physical health, it has been considered as instrumental (along with cooking and housework) and therefore, separate from social or leisure activities. Even so, maintenance of instrumental activities has been shown to be associated with greater physical health (Everard, Lach, Fisher, & Baum, 2000).

6.1.2 Social activity and shopping. As already suggested, shopping research typically has focused on younger age groups and has largely been ignored by social gerontologists (Hyde et al., 2009). However, for those in later life, it has been suggested that shopping often is considered to be a social event (Moschis, 2003). Shopping is: “seeing and being seen, meeting and being met, a way of interacting with others” (Fiske, Hodge & Turner, 1987, p.96). Nevertheless, there has been little research to identify the role that shopping in later life may play in a social context. Generally research focuses on how to make shopping centres age-friendly, on food shopping behaviours amongst older adults and the instrumental support older people receive when shopping. Yet, shopping in later life can be a leisure activity in its own right (Myers & Lumbers, 2008) as shopping centres are used by older people as a place to meet up with others and for ‘hanging out’ (White, 2007). Those who feel lonely may be more motivated to visit shopping centres; therefore malls and other shopping areas may play a role in providing a potential avenue for alleviating loneliness (Kim et al., 2005), which has implications for psychological wellbeing. It has been suggested that, for UK men at least, shopping may provide an important leisure activity that contributes to psychological wellbeing (Bennett, 1998).

In addition, perhaps for women in particular, shopping with someone else can make shopping a more pleasurable experience. This already has been alluded to in the previous chapter and is supported by consumer research, particularly in the US. For example, in a study of mall shoppers of all ages, it was found that greater shopping value and positive affect is reported when shopping with others and that shopping with friends in particular is likely to enhance the hedonic value of shopping (Borges et al., 2010). Thus, although for some people shopping may be enjoyed as an end in itself, one of the primary motivations to shop may be to enjoy the social interaction with friends or family members (Bäckström, 2011). Again, this research is drawn from samples in other countries and may not be applicable to an older population in the UK, yet it suggests that there may be individual differences in how (i.e. with whom) people shop and motivations to go shopping (e.g. social interaction).

6.1.3 Food shopping as social activity. Food shopping can provide a purpose for those in later life to get out of the house and the social interaction provided by shopping trips often is considered a positive experience (Hare, Kirk, & Lang, 2001) and a major benefit of shopping (Myers & Lumbers, 2008). Thus, as

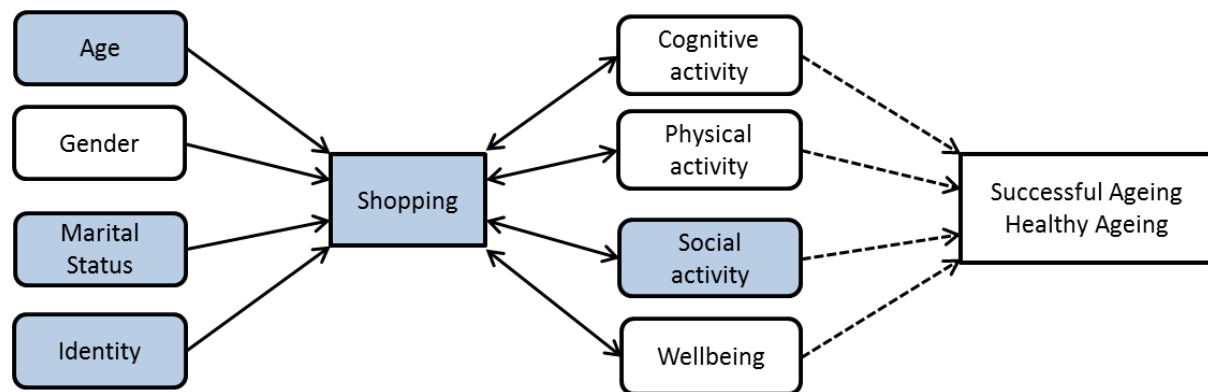
shown in Chapter 4, older people may regularly conduct top-up shopping as an opportunity for social engagement and as a reason to get out (Meneely et al., 2009). Research both in the US (Huang, Rosenberg, Simonovich, & Belza, 2012) and in the UK (Angell, Megicks, Memery, Heffernan, & Howell, 2012), suggests that, for some, a significant driver of grocery store choice is the ability to socialise and interact with other customers and staff. Furthermore, for those who receive instrumental support for their food shopping, being accompanied by others is frequently seen as making shopping a more enjoyable experience (Wilson et al., 2004) and considered a social activity (Turrini et al., 2010).

6.1.4 Shopping and environment. However, changes to the physical structure of retailing may have implications for shopping-related social engagement. The rise in online shopping and self-service checkouts as well as the decline of the high street and the closure of post offices and local independent shops may lead to a loss of much of the valued social contact that local shopping can facilitate (Vincent, 1999). As suggested by recent research in Australia, having accessible local shops in which to engage socially may enable people to remain active and independent community members (Stewart et al., 2014). Older people may not have as many public connections (e.g., through places of work or education) as younger people. So, socially inclusive public spaces such as shopping centres enable older people to remain connected with public life (Holland et al., 2007). Small, single-purpose shops may be more accessible (both physically and socially) to older people and facilitate social interaction (Gardner, 2011). This may be especially important for those ageing in rural areas, which have comparatively limited shops and services. Furthermore, Canadian research shows that older (aged 65 and over) rural residents without transportation are much less likely to do their own shopping, which affects their ability to live independently (Dobbs & Strain, 2008). Thus, for people ageing in rural communities in the UK, there may be more need to rely on volunteers for support with services (Keating & Phillips, 2008), which might include shopping.

6.1.5 Aims and research questions. The literature presented above has suggested ways in which shopping may be experienced as a social activity and how these may impact on shopping activity in later life. As an everyday activity, shopping can provide many opportunities for social interaction; however, previous research typically has neglected shopping as a social activity in later life. To fill this lacuna, it

is first necessary to determine whether shopping is seen as a social activity or is combined with other social activities. As shown by the analysis in the previous two chapters, there are several factors that influence shopping activity in later life. These factors (as shown in Figure 6.1) will be explored further to consider the meaning and value of shopping-related social activity in later life.

Figure 6.1. Proposed model of the mediating role shopping plays in healthy and successful ageing.



This chapter will be concerned with the following research questions:

- Does social activity co-occur with shopping?
- Do older people shop with others and if so who?
- How do people experience shopping as a social activity?
- What are the social benefits of shopping activity in later life?

Again, results from both secondary and primary data will be presented, and integrated where possible, and the qualitative data will be used to illustrate and elaborate on quantitative findings.

6.2 Shopping as a Social Activity

6.2.1 Social activity and age. To determine whether people are engaging in social activity while shopping, data from the sample of shoppers in TUS were analysed. For each time slot, respondents were given the option to specify primary and secondary activities if they were doing more than one thing. In order to assess the extent to which people reported taking part in social activities at the same time as

shopping, the data were examined for secondary social activity codes that occurred during the same time slots as shopping codes. As before, the sample was restricted to those who reported doing any shopping and split into four age groups (16-24, 25-44, 45-64, 65 and over). The results for reported social activity while shopping are shown in Table 6.1.

Table 6.1. TUS: percentage who reported social activity while shopping by age group.

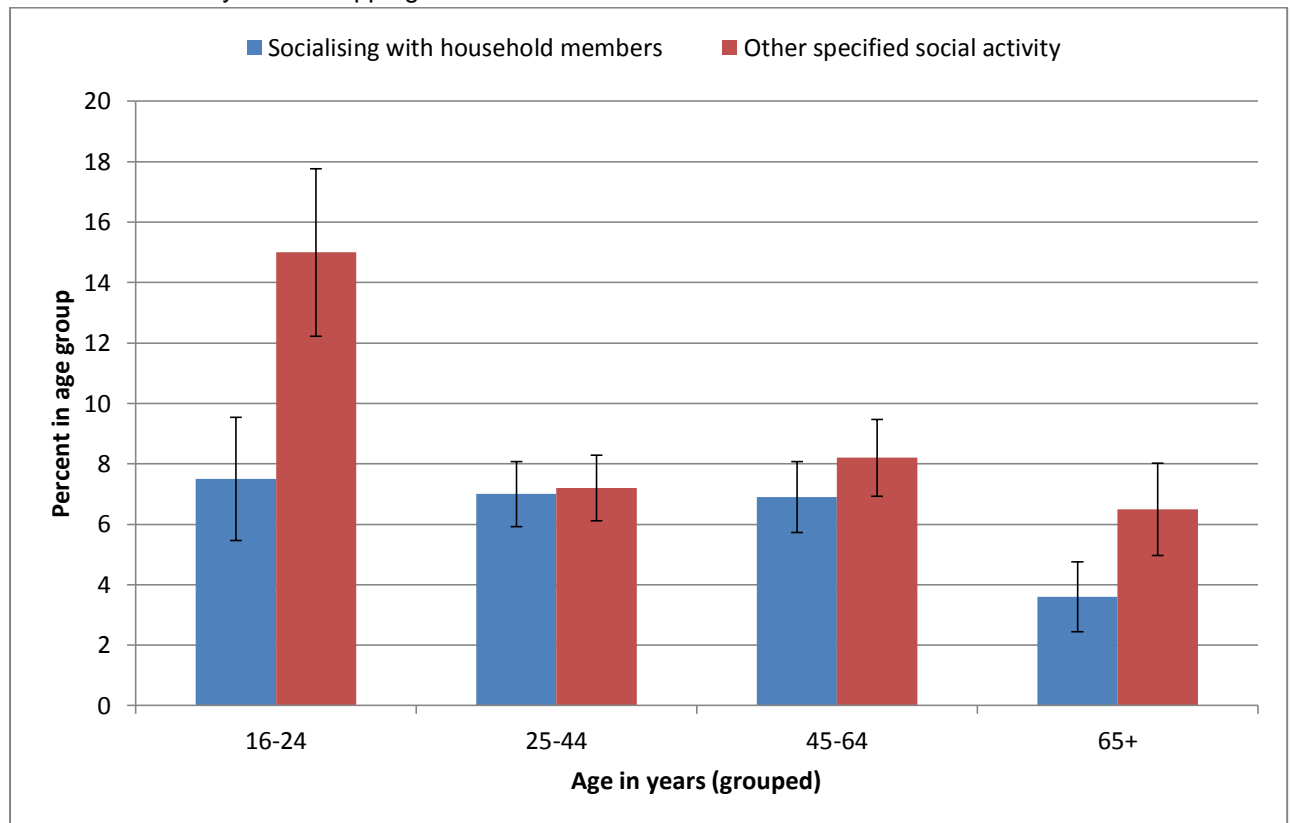
Age group	Social activity	95% CI	<i>n</i>	χ^2
16-24	21.8	[18.60, 25.00]	638	
25-44	13.8	[12.35, 15.25]	2177	47.359
45-64	14.4	[12.78, 16.02]	1800	$p < .001$
65+	9.7	[7.86, 11.54]	993	

Note. CI = confidence interval. Sample includes all those who reported any shopping activity during the study period.

Respondents aged 65 and over were the least likely to have reported social activity while shopping ($\chi^2 = 47.359$; $df = 3$, $p < .001$) with only 10 percent of those who shopped doing so.

6.2.2 Types of social activity. Clearly older people do engage in social activity while shopping but to unpack this further, social activity codes (socialising with household members; other specified social life) were analysed separately. Figure 6.2 shows the percentage of people in each age group who reported each of these social activities while shopping. The results by age group for socialising with household members ($\chi^2 = 16.007$; $df = 3$, $p = .001$) were statistically significant with around 7 percent of those aged 64 or younger reported socialising with household members while shopping. Those in the 65 and over age group were the least likely to have reported socialising with household members while shopping with only 4 percent doing so.

Figure 6.2. TUS: percent in each age group who reported socialising with household members or other social activity while shopping.



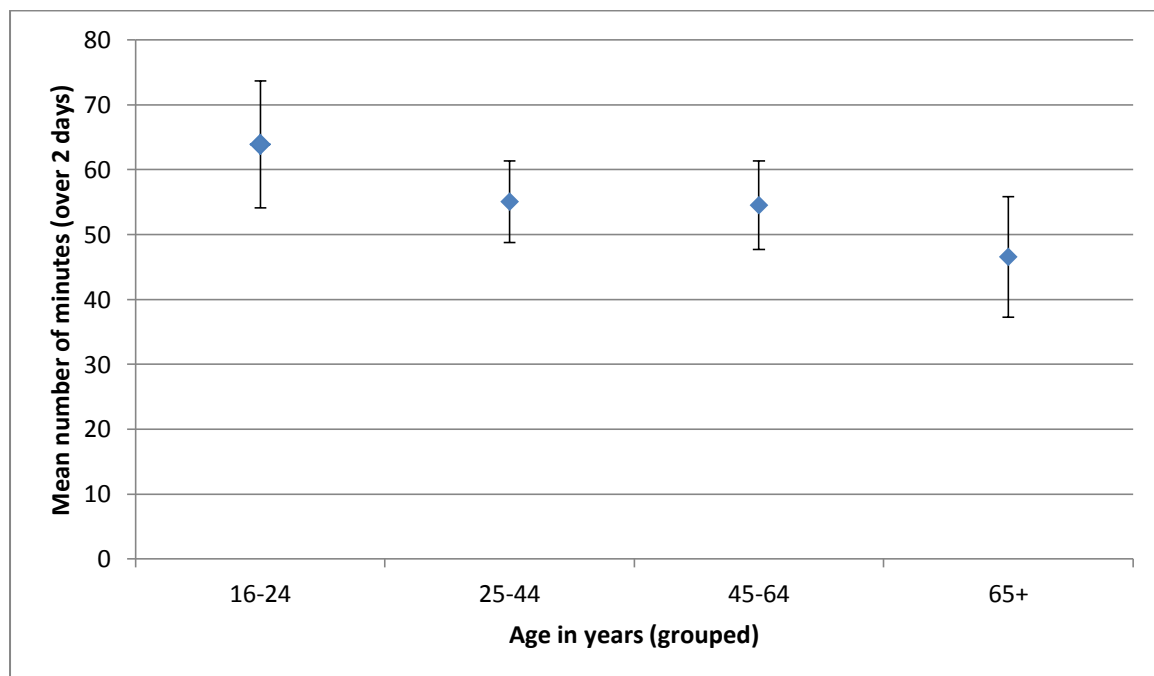
Note. Error bars represent 95% confidence intervals. Sample includes all those who reported any shopping during the study period ($N = 5608$; 638 aged 16-24; 2177 aged 25-44; 1800 aged 45-64; 993 aged 65 and over).

The results by age group for other specified social life were statistically significant ($\chi^2 = 45.527$; $df = 3$, $p < .001$) with around 7 percent of those aged 25 and older reporting this activity while shopping. Those in the youngest age group (16-24 year olds) were the most likely to have reported other specified social activity while shopping with 15 percent doing so.

6.2.3 Time spent socialising. However, although these results show that there are differences in whether people in different age groups were more or less likely to take part in social activities while shopping, they reveal little about how long people spend on social activities while shopping. It is possible that, although older people are less likely to engage in social activities, older people spend longer socialising when they do so. Thus, to explore whether there were age differences in time spent socialising while shopping, the sample was first restricted to those who reported engaging in social activities. As for previous analyses of total time spent shopping

(Chapter 4), the time use diary slots (each representing 10 minutes or part thereof) were multiplied by 10 to give a number of minutes of the total time spent on socialising with household members and other specified social activity separately. Then, the total reported time spent on these two activities was summed to create a global measure of social activity and the mean number of minutes calculated per age group. The results by age group are shown in Figure 6.3.

Figure 6.3. TUS: mean number of minutes spent on social activity while shopping by age group.



Note. Error bars represent 95% confidence intervals. $N = 794$; 139 aged 16-24; 300 aged 25-44; 259 aged 45-64; 96 aged 65 or older.

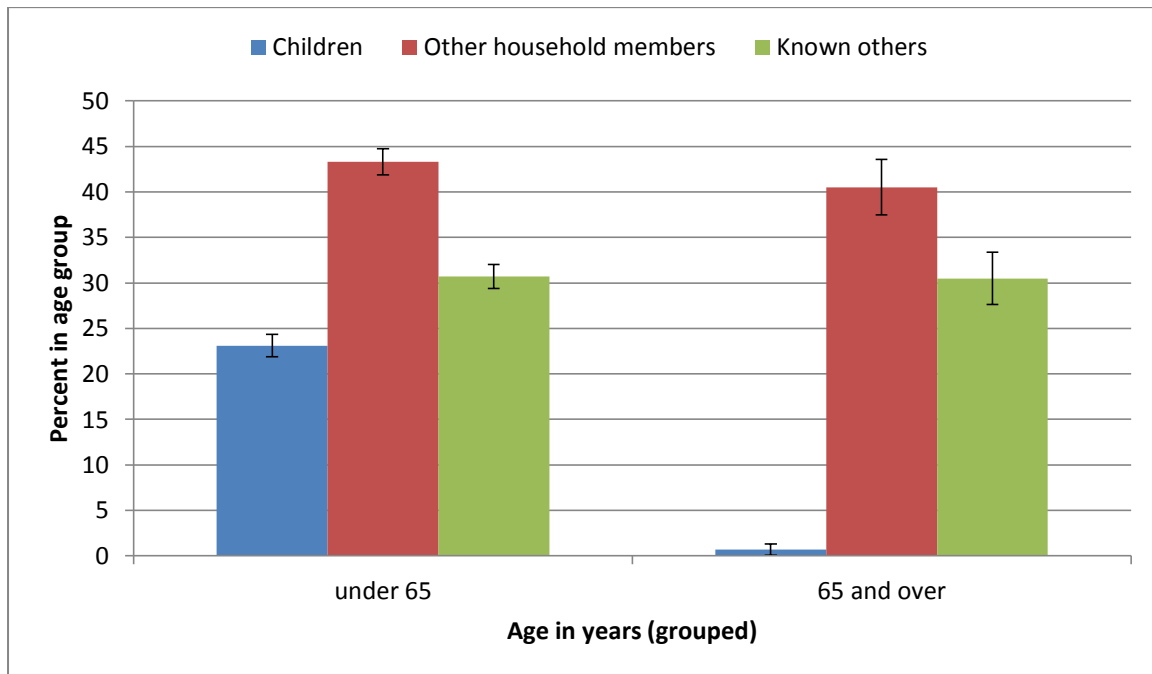
These results show that there are no significant age group differences in the time spent socialising while shopping ($F(3, 793) = 1.95, p = .120$) with people spending just under an hour on average. Taken together, findings from TUS show that social activity indeed does occur with shopping but that those aged 65 and over were the least likely to have reported social activity while shopping.

6.3 Shopping with Others

6.3.1 Who people shop with. Data from TUS were analysed to explore who people were with when shopping. For each 10 minute time slot, participants could record with whom the activity was carried out. Note that for the purpose of these analyses, three categories have been used (children; other household members;

known others) and age categories were collapsed (under 65; 65 and over). The results in Figure 6.4 show with whom people shopped for those who reported any shopping activity during the study period. Unsurprisingly, those aged 65 and over were the least likely to have shopped with household children ($\chi^2 = 265.175$; $df = 1$, $p < .001$).

Figure 6.4. TUS: with whom people shopped by age group.

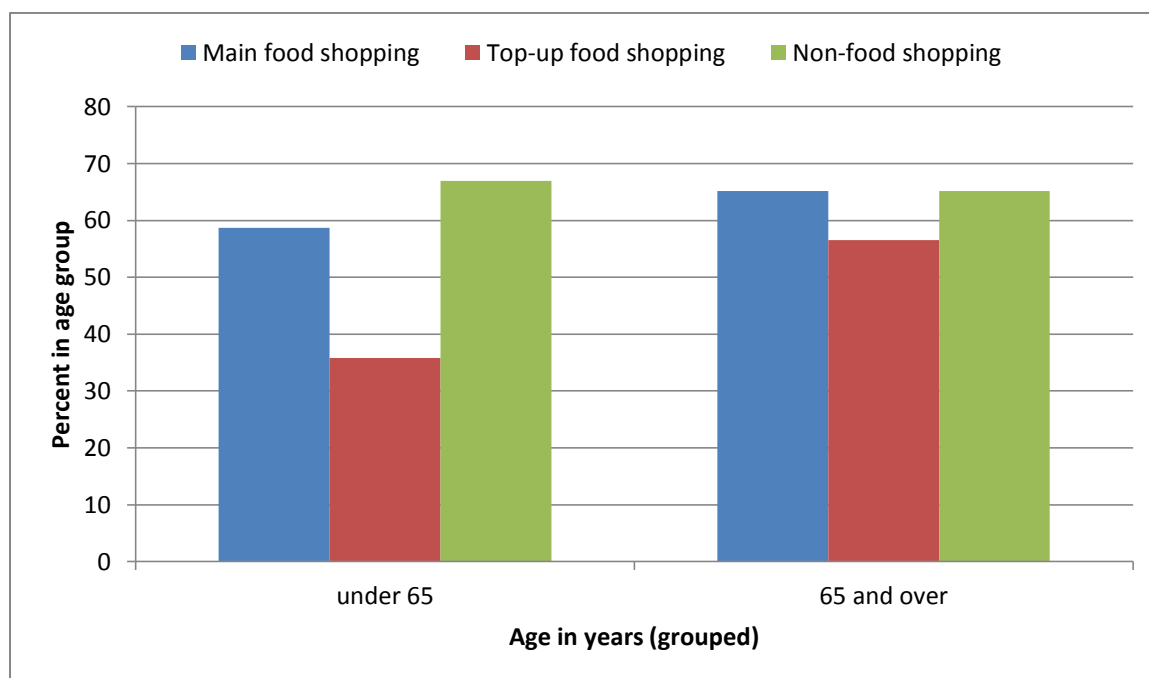


Note. Error bars represent 95% confidence intervals. Sample includes all those who reported any shopping activity during the study period. $N = 5608$; 638 aged 16-24; 2177 aged 25-44; 1800 aged 45-64; 993 aged 65 and over.

Those aged 65 and over were as likely to have shopped with other household members ($\chi^2 = 2.596$; $df = 1$, $p = .107$) or other known people ($\chi^2 = 0.021$; $df = 1$, $p = .885$) as those aged less than 65.

6.3.2 Shopping with others. In order to illustrate this further, SFQ provides more in-depth data on the question of shopping with others. Respondents were asked whether they shop alone or with others for three types of shopping: main food shopping, top-up food shopping, and non-food shopping. The sample was collapsed into two age groups (under 65; 65 and over) and the results are shown in Figure 6.5.

Figure 6.5. SFQ: percent (by age group) who shop with others for different shopping types.



Note. $N = 132$; 13 aged 18-24; 55 aged 25-44; 41 aged 45-64; 23 aged 65 and over.

For all three types of shopping trip, more than half of respondents aged 65 and over shop with others. Perhaps unsurprisingly, the shorter trips for top-up shopping are more likely (than other shopping types) to be undertaken alone, especially for those aged under 65 in this sample.

6.4 How Shopping is Experienced as a Social Activity

The data presented so far are useful to give a background picture of who people shop with and whether social activity co-occurs with shopping. However, the qualitative data can be used to explore these findings further and to achieve a greater understanding of how shopping is perceived as a social activity in later life.

6.4.1 Food shopping and social activity. As discussed in Chapter 5, older married people are more likely to shop with their spouses; however, some of the non-married participants go food shopping with other people. For example, two of the divorced interviewees do their food shopping regularly with friends:

Wherever we go we'll, we'll go to the various places to shop.... I think probably er at least twice a week.... my mate, he always wants to shop er he likes, he likes shopping. (Ken; 74, divorced, Wales)

We go every day. Every day, yeah, except a Sunday.... And then we go to the café for a milky coffee. (Gaynor; 69, divorced, Wales)

Although Gaynor and her friend are shopping for food, they make their trips more social by stopping at a local café. In contrast, Ken says of his friend: “it’s usually him phoning me [to shop]”, but goes on to suggest that their shopping trips are social by saying: “he needs somebody with him er just to sort of bounce off I suppose, you know, we, we’re good mates”. Even though Ken makes it clear that it is his friend who usually initiates their shopping trips, there is a strong implication that they use food shopping to engage with each other on a social level.

Moreover, there are instances when food shopping is actively made into an opportunity for social engagement. One example of this is Marjorie who shops infrequently but sometimes makes trips to the supermarket with her son into a social occasion:

There’s quite a nice hotel and we sometimes go in for a little drink before we go shopping, sit there and have a little glass of wine and talk, which is very nice... and then we go shopping sort of feeling more in the mood to shop, you know. (Marjorie; 87, widowed, Wirral)

As Marjorie is limited by her mobility, her son offers to shop alone yet she expresses her desire to go food shopping because of its social aspect:

Well there’s social really... often he says “I’ll do the shopping alone mum, don’t worry”. And I say “no,” and he says “well why”. I say “well I just come along for the ride and to meet people”. I mean in the shop I always meet someone I know... It is really being with people and I’ll always find someone, it is a social thing as well. (Marjorie; 87, widowed, Wirral)

Clearly for Marjorie, who considers herself to be a sociable person, these weekly shopping trips provide an important social outlet, enabling her to engage socially with both her son and other shoppers.

Only one of the married participants talks about her and her spouse making their regular food shopping trip into a social occasion. Jill and her husband travel

further afield to do their weekly food shop for both the choice offered in a larger town and as a day out:

It's an outing to go to <town> to go to <supermarket> so we, you know, we make it a day out.... <have> your lunch out and make it a bit more of an occasion. (Jill; 79, married, Wales)

Thus, although not a common theme throughout the data, for these interviewees food shopping with others is a social occasion.

6.4.2 Non-food shopping and social activity. Conversely, other social activities such as combining shopping with drinking or eating out and making shopping trips into a day out is more usual for non-food shopping. Indeed, most of the married participants go non-food shopping together with their spouses. Again, this sort of shopping often is for leisure and not particularly to purchase things:

Ooh not necessarily to buy anything but we will go off at least two or three times a month.... <husband> is one of these rare people that's, that loves shopping, he'll walk round- it's me that'll say let's go home ((laughs)) yeah, so he quite likes, quite enjoys it, you know, and we'll just browse in shops, you know, from sports shops to clothes shops to shoe shops, anything, you know. (Rhona; 69, married, Wales)

Making a shopping trip into a social event is common with the keen shoppers and several of the female participants shop with others socially on a regular basis. One such example is Gwyneth:

<Friend>, I go to <city> with her, we go about every 6 weeks on the train from the village, we make a day out.... Yes, it is nice mm I enjoy it. (Gwyneth; 70, married, Wales)

For some of those who shop with friends, although the social aspect is the primary focus they choose to meet up at a shopping centre or to visit shops while they are out. For example, Carol talks about planning to meet a friend in the shopping centre for the sales: "It's sort of social but we'll most likely spend while we're there" (Carol; 65, divorced, Wirral). Likewise, two other participants go on weekly day trips with

friends that usually involve shopping. Again, often they choose to meet up at shopping centres even though the primary focus of the outing is the social aspect:

I go out every Thursday with a friend and we've been doing it for years... we go round somewhere different every week... And while I'm there I do a bit of shopping, you know, we'll do a bit of window shopping, maybe buy something, clothes. (Maureen; 80, widowed, Wirral)

Both of these participants mention that although they are shopping, the primary reason for their days out is as a social occasion:

It's a day out but maybe we'll ... buy things, you know, shop and that, but the main thing is for us to go out together for the day. (Maureen; 80, widowed, Wirral)

We just have a nose, see what there is and if there's any sales on, if there's something there we like, well if it's not too expensive, we'll get something, you know. But it's mostly for pleasure and that. (Anna; 66, married, Wirral)

Indeed, actively choosing to go shopping for its social benefits (rather than to make purchases) is mentioned by other participants:

Yeah so like a social thing really, you know, it's just oh shall we go round the shops, you know, it's- sometimes it's not cos I want something, you know, do you fancy a look round the shops or something, you know what I mean. Like it's ages since I've been to <department store> and maybe in a week or two I might say to somebody do you fancy a look round <department store>, you know. (Carol; 65, divorced, Wirral)

So far the examples presented here have been limited to women, who seem to be much more likely to talk about social shopping with friends. However, there is one man who also talks about occasionally shopping with friends:

In fact I was invited to go tomorrow with a friend of mine to <city>, he's going for some golf stuff. (Ernie; 80, married, Wales)

The women's remarks above show that they will go shopping with friends just to browse. In contrast, although Ernie goes on to say of his shopping trips with friends:

“I enjoy looking,” he chose not to go on that occasion because he did not need to purchase anything. Thus, implying that for him the need to purchase outweighs the potential social interaction these shopping occasions with friends could give him.

6.4.3 Types of social activity. So far, the qualitative data have been discussed in terms of shopping with others; however, TUS data suggest that there is a range of other social activities that people engage in while shopping. Yet, the categories used in TUS were rather general. Thus, in order to explore this in more detail, data from SFQ were analysed to examine which social activities respondents typically engage in while doing any type of shopping. Respondents were asked which activities generally they do while shopping, which included: visiting a café or restaurant; watching other people passing by; meeting up with family or friends; recognising someone; talking to someone known; talking to a shop employee. The results by age group are shown in Table 6.2.

Table 6.2. SFQ: percentage (by age group) who engage in each social activity while shopping.

	Under 65	65 and over
Talk to someone known	55.05	78.26
Go to café	71.56	73.91
Talk to shop employee	66.97	65.22
Recognise someone	44.95	34.87
Meet up with family or friends	42.20	30.43
People watch	22.94	17.39

Note. $N = 132$; 13 aged 18-24; 55 aged 25-44; 41 aged 45-64; 23 aged 65 and over.

Again, with a small, non-representative sample generalisations to the wider population cannot be made but it is clear that respondents in this sample are engaging in social activities. The majority (78 percent) of participants in the older age group report that they generally talk to someone they know while out shopping. Although those younger than 65 were more likely to have reported meeting up with family or friends, the social activities shown above are not limited to the social aspect of shopping with other people. It seems common amongst all ages to combine shopping trips with eating out or stopping for a drink, an activity frequently mentioned by interviewees. In addition, results from the SFQ show that social interaction with

shop employees seems usual with around two thirds in both age groups having reported talking to shop employees.

6.4.4 Unplanned social encounters. Indeed, most of the interviewees mention unplanned social encounters or “bumping into” people they know while out shopping. There were several unprompted mentions of unplanned social encounters when talking about the effect on the length of time participants spend shopping: “It depends if you meet somebody, half an hour and then if you meet somebody and have a chat...” (Pat; 75, widowed, Wirral);

Wherever I go I am usually bumping into somebody that I know and I just won't ignore people, I will stop and chat. And no, you know, maybe a half an hour's journey may turn into an hour and a half journey because I've bumped into so many people. (Albert; 68, married, Wirral)

This is especially the case in supermarkets, which are often talked about in explicitly social terms: “I'm round and out... unless you meet somebody and meet friends there, you know, you have a chat, things like that” (Fred; 82, widowed, Wirral);

I mean if you go to <supermarket>, I always meet people I know, in fact it drives <husband> mad cos that's, he says he doesn't really like me going cos he spends more money and he takes twice as long, if I go with him. So that's another thing, that's what he says to everybody anyway. (Dorothy; 71, married, Wirral)

Furthermore, participants often mentioned the enjoyment they get from unplanned social encounters:

Especially when I go to <shopping centre>...I quite enjoy that because I always, always meet somebody, always. Cos I've lived here a long time and sort of erm so that can take a while because, you know, you stand and talk and whatever or erm yeah, it's just nice, it's just nice... in fact, I'm sure I always meet somebody when I go down. (Sheila; 65, married, Wirral)

It's very, very rare that you can go <to village shops> and not see somebody you know, very, very rare. Which is nice, isn't it. (Lyn; 70, married, Wales)

Bumping into people was a prevailing theme throughout the interviews and the pleasure gained from unplanned social encounters while shopping is expressed even by some of those who are less keen shoppers. For example:

Sometimes I do meet friends there but it's just that they're shopping there at the same time. It's always nice to see them but I'm usually scuttling along sort of glad to get home again. I'm not terribly keen on shops. (Bessie; 84, widowed, Wirral)

Such unplanned social encounters while shopping were consistently expressed in positive terms. For example, although Linda mentions that: "<it's> not very often that I'm sort of free and bored really, you know, enough to go just for the sake of it" (Linda; 83, widowed, Wirral), she talks about the social interaction she gained from an impromptu visit to a shopping centre on the previous day:

<I went> just in a way because unusually I hadn't anything else on and I stayed in in the morning so I thought I'll go and get something and I did meet two people amazingly and chatted to them, you know... (Linda; 83, widowed, Wirral)

She continues by saying that unplanned social encounters happen "not often enough really" and that: "Anyone who goes irregularly I think, you would always hope to meet somebody or chat to somebody" (Linda; 83, widowed, Wirral). To have this excuse to go to shops for social interaction seems especially important for others living alone:

Erm but it's nice to have a reason to go out, you know cos, you know, I'll often bump into somebody and have a little chat. (Edith; 66, widowed, Wirral)

Indeed, most respondents mention unplanned social encounters while out shopping at supermarkets and their local shopping centres: "Might see somebody that you haven't seen for a long, long time, of course you stop and have a chat to them" (Anna; 66, married, Wirral); "Well yeah if you know them you'll stop and talk won't yer... pass the time of day type of thing, you know" (George; 66, married, Wirral).

Several of the participants refer to supermarkets in explicitly social terms: "It's quite a sociable place in a way" (Fred; 82, widowed, Wirral); "I think <supermarket> is a good place for meeting people... people you know but then you come across

people you haven't seen for a while... you meet quite a selection of people" (James; 80, widowed, Wirral); "<You> always meet somebody you know in the supermarket" (Dorothy; 71, married, Wirral);

You see the same shelf fillers and you know the same staff in the bakery and the chemist and the restaurant and then as I say you'll bump into everybody you know and of course you'll be blocking up the trolleys <laughing> chatting for half an hour. (Albert; 68, married, Wirral)

I meet people that I know while I'm shopping so it, it ends up like spending half the time chatting and a bit more ((laughing)) buying the stuff. (Philip; 78, widowed, Wales)

Invariably you meet someone that you know in the shops, don't you.... mostly in <supermarket>, guaranteed mm. I can guarantee one er I mean it's been known er several times, it's two but that I love, that I enjoy. (Doris; 92, widowed, Wales)

So far it has been established that people do experience shopping as a social activity and this was a recurrent theme throughout the interviews. Such social activity can take the form of shopping with others, which is typically (although not limited to) non-food shopping. In addition, it was common for people also to see shopping as a social activity through unplanned encounters with people they know.

6.5 The Social Benefits of Shopping Activity in Later Life

In order to address the fourth research question, what the social benefits of shopping activity in later life are, first analyses will focus on the qualitative data.

6.5.1 Non-shopper identity and social activity. As established in the previous section, incorporating social activity into shopping trips is common among the keen shoppers. However, for non-keen shoppers, a distinction is made between the act of shopping and the social aspects of shopping with others. For example, occasionally Helen has shopping trips with her friends and at other times has day trips with her husband during which they will "go to the art galleries and go shopping"; yet, when asked whether shopping is social for her, Helen simply replies "No". When further pressed she responds:

Well if you go shopping then that's a social activity but it's the, it isn't the shopping that's the social activity ((laughing)) it's the being with your friends that's the social activity. Shopping is not a social thing. (Helen; 72, married, Wales)

Similarly, Bryn distinguishes between shopping and social activity. Occasionally he and his wife take trips to shopping centres further afield "for the day" and may meet up with friends, yet, when asked if he considers it to be social he replies:

No, no, I see it as, we both, it's, it's er it, we go shopping because it's a necessity erm I think. (Bryn; 71, married, Wales)

Such differentiation also is evident with Robert who goes to shopping centres with his wife during which they combine shopping with other activities such as eating out. When asked if they make it a social occasion he says: "Well sort of, yeah, yeah, yeah", but later when he is asked if he ever uses shopping as a social activity he responds: "No not really, I'm not that sort of person" (Robert; 67, married, Wales). As mentioned in Chapter 5, making the distinction between shopping as a necessary or frivolous behaviour and shopping enjoyment can be linked to a non-shopper identity. For example, Betty who says: "I'm not a shopper, I won't wander round shops aimlessly", goes on monthly shopping trips with her husband:

We like to go out for the day.... like went out the other Saturday and we were out more or less all day, we've got our favourite place in <town> that we have a breakfast. (Betty; 70, married, Wales)

Betty says about shopping with her husband: "I enjoy it cos we enjoy each other's company," and these shopping trips with her husband provide one of the few occasions they spend time together outside of the home. Yet when asked if she sees shopping in a social sense, she responds:

Shopping? No, no, I see it as, we both, it's, it's er it- we go shopping because it's a necessity er I think. (Betty; 70, married, Wales)

Again, social activity while shopping is not limited to interaction with shopping companions. Harold considers himself a non-shopper and says "I don't enjoy anything about shopping", yet when asked about social activity while shopping he

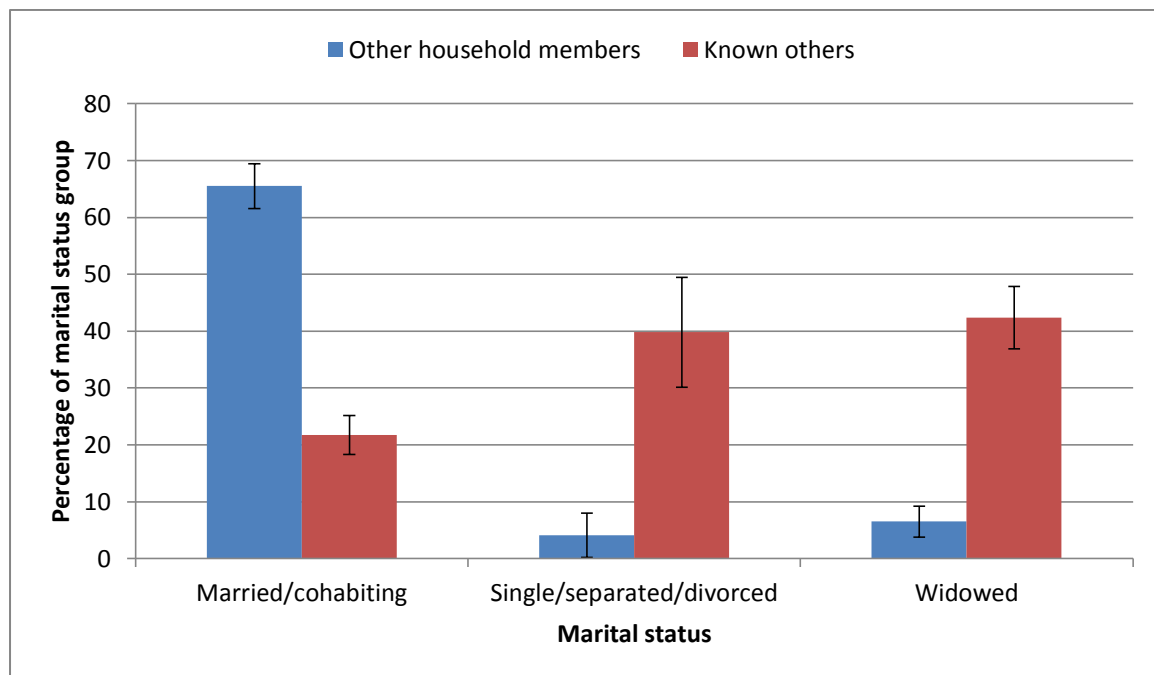
replies: “I wouldn’t say it was greatly a social thing but I do meet people”, (Harold; 67, married, Wales). He goes on to talk about social interaction with the employees of the café in which he and his wife punctuate shopping trips:

There was this one girl in there who was limping.... And I asked her “how are you?”.... and since asking her every Saturday morning I’m met with this big beaming smile. And there’s another one and er I always pull her leg and I walk in and she says “I’m going now, I’m not having my leg pulled by him again!” (Harold; 67, married, Wales)

Evidently, such social interaction with shop and café employees is enjoyable for participants, even for those who consider themselves to be non-shoppers. Furthermore, the pleasure gained from being with others while shopping and this sense of connection and identity is not limited to people who enjoy shopping.

6.5.2 Marital status and shopping with others. As suggested above, people do not have to be keen shoppers to enjoy the social activity involved when shopping with others, whether it is with family, friends or spouses. However, it would be expected that who people shop with is influenced by marital status. Thus, to explore whether there are differences by marital status, data from TUS can be analysed. The sample of shoppers aged 65 and over was separated into three marital status groups: married or cohabiting; single, separated or divorced; widowed. Again, participants could record who shopping activities were carried out with (other household members; others you know) and the results are shown in Figure 6.6.

Figure 6.6. TUS: percent in marital status group (aged 65 and over) who shopped with others.

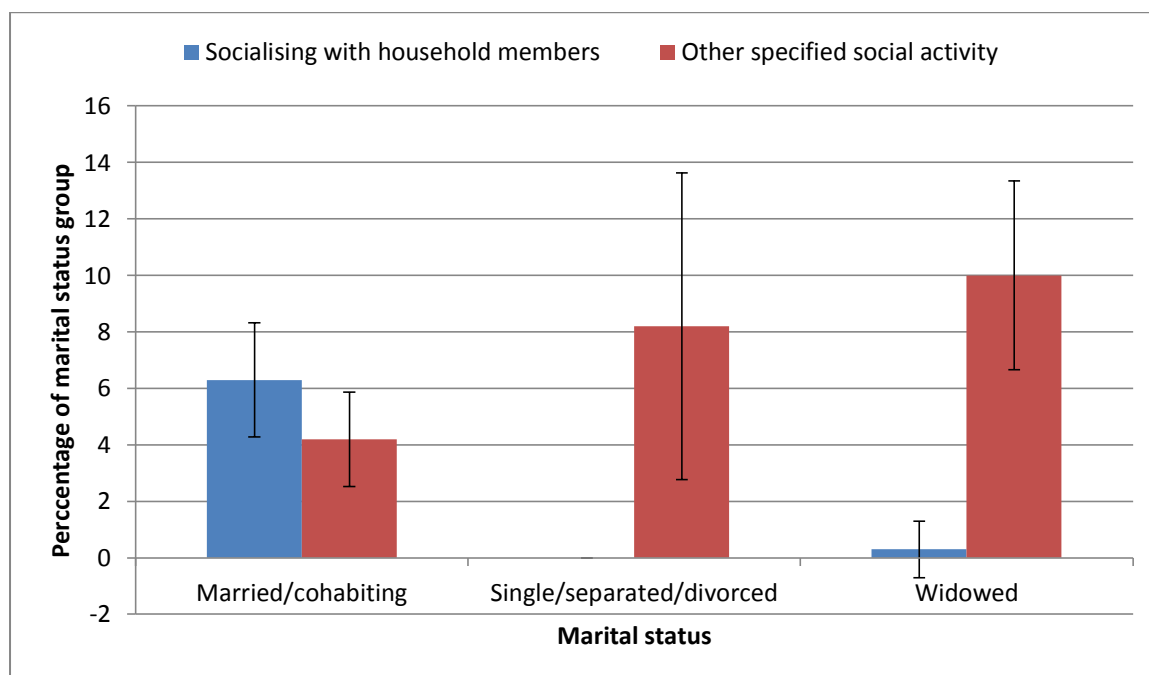


Note. Error bars represent 95% confidence intervals. $N = 961$; 554 married or cohabiting; 98 single, separated or divorced; 309 widowed.

Those who are married (or cohabiting) were much more likely to have reported shopping with household members ($\chi^2 = 346.982$; $df = 2$, $p < .001$) with 66 percent doing so. As expected, very few people in the other marital status groups reported shopping with household members. Conversely, married (or cohabiting) participants were much less likely than those in the other marital status groups to have reported shopping with known others ($\chi^2 = 45.264$; $df = 2$, $p < .001$) with 22 percent doing so.

6.5.3 Marital status and social activity while shopping. As shown previously, although numbers in the overall sample were small, those in the 65 and over age group were the least likely to have reported socialising with household members. To explore whether this finding is influenced by marital status, the secondary social activity codes (socialising with household members; other specified social life) were analysed. Figure 6.7 shows the percentage of people in each marital status group who reported each of these social activities while shopping.

Figure 6.7. TUS: percent in each marital status group (aged 65 and over) who reported socialising with household members or other social activity while shopping.



Note. Error bars represent 95% confidence intervals. $N = 961$; 554 married or cohabiting; 98 single, separated or divorced; 309 widowed.

Again, those who are married (or cohabiting) were much more likely to have reported socialising with household members ($\chi^2 = 24.012$; $df = 2$, $p < .001$), even though only 6 percent reported doing so. Those who are widowed were more likely than married participants to have reported other specified social activity ($\chi^2 = 11.896$; $df = 2$, $p = .003$).

6.5.4 Getting out of the house. Although it is not possible to determine what ‘other specified social activity’ refers to for TUS participants, it was clear from the qualitative data that social activity while shopping is not limited to shopping with other people. For example, using shopping as a means to get out of the house is a common theme throughout the interviews, as shown with Ernie: “We probably go shopping about three times a week, more for just getting out the house basically” (Ernie; 80, married, Wales). Ernie and his wife also regularly go further afield to visit shopping centres:

We just walk round the shops, might go to <town1> or we might go wander round <town2>, you know, and all we did we had fish and chips ((laughs)) and

er there's a massive <supermarket> store in <town> and we hardly bought anything, just wandering around. (Ernie; 80, married, Wales)

However, using shopping to get out of the house is especially common with those who live alone. This is evident with Fred who mentions twice that he would “never get out” if he waited for others to invite him: “Well I am on my own so I'd never get out otherwise” (Fred; 82, widowed, Wirral). Some of the participants imply that shopping to get out of the house is a way to alleviate boredom: “I was doing nothing so I thought oh I'll just see if there's anything I fancied, just walk in the shop, you know” (Carol; 65, divorced, Wirral); or to pass the time: “Yeah, it's erm... to kill time. Yeah” (Edith; 66, widowed, Wirral). Such comments may reflect a loss of identity due to marital status change and living alone or an under-occupation post-retirement.

Either when I need something or when I've got nothing better to do... Usually I need to go for at least one thing or I want to go for one thing and that gets me out. (Pat; 75, widowed, Wirral)

These examples suggest a circular relationship between the need to purchase items as a reason to get out of the house and the need to get out of the house as a reason to go shopping.

6.5.5 Being around others as social activity. Furthermore, going shopping to get out of the house may be considered actively social even without involving direct social interaction:

Particularly if I'm not going out at night, I don't want to stay in all day so I think I might just go... And I'll go just for a browse round then so that's more like a social outing, for me on my own, without meeting anybody. (Dorothy; 71, married, Wirral)

It's a trip out, you know. I mean my daughters can't believe it, cos sometimes I'll go <to the supermarket> at night time, just to get out and, you know, it's like a bit of company. (Edith; 66, widowed, Wirral)

If I didn't go out I'd probably not see or talk to anybody, you know, so if the day was nice I might think oh I'll take myself over, now I might not talk to anybody when I'm out shopping but you might- if you buy anything obviously you talk to

the person behind the counter but, you know, it's probably just to get out, to be with people. (Barbara; 79, widowed, Wales)

In these examples the participants are using visits to supermarkets as an excuse to be around other people, for "a bit of company" or "social outing", and this social need provides the driving force behind these shopping trips rather than a need to purchase anything. The participants remark that their shopping trips may not involve direct social interaction (or perhaps no conversation beyond a quick exchange at the checkout) so the act of being in a public space, around other people, is in itself a social activity. In this way, supermarkets are serving as an important social environment, which may be even more important for those who live alone. Indeed, choosing to go shopping to be around others and for social interaction is a conscious decision made by people who live alone:

I don't buy a lot, you know, I prefer to go out- because I like meeting people you see, I don't want to be in the house all the time. (Allun; 87, widowed, Wales)

Moreover, there is also explicit evidence of being aware of the benefits of such social interaction as shown when Bessie talks about visiting the post office:

You know just ordinary conversation, the odd word. It helps to keep you talking. Some people say that when they're in every day with nobody to speak to, not even an animal to talk to, they almost forget how to speak. (Bessie; 84, widowed, Wirral)

An explicit awareness of the psychological benefit of social interaction while shopping also is evident with Barbara:

Oh yes, I think you have to be around people a lot, if you're not around people then psychologically you can go down, if you never go out or you, you know, you get people say, which they're very lonely by themselves and things, yes, I can understand if you, you have nothing. (Barbara; 79, widowed, Wales)

Accordingly, qualitative data show that people are choosing to go shopping for the psychological benefits of social activity and that these benefits may be gained even without social interaction. Moreover, such benefits may be of more importance to those who live alone.

6.5.6 Social engagement and rurality. The meaning and value of social engagement while shopping may be different for those ageing in more rural communities. Indeed, several of the Welsh participants talk about the inherently social nature of living in a rural area and that “it’s different living in a village to a big town,” (Gwyneth; 70, married, Wales). Huw mentions that he “can’t leave the house without knowing somebody” and goes on to say:

Yes it’s very, very different here from the big town erm you notice here that if you walk around here people notice you, you have eye contact with people whereas you don’t in big towns, you know, nobody notices you mm. (Huw; 80, married, Wales)

Knowing a lot of people in the area means that social interaction is likely whenever people go out shopping:

Well you know everybody don’t you, you know, you’ve known them all since you’ve grown up with them. (Frank; 77, married, Wales)

One of the things about shopping in <town> is actually you do know so many people in the town that it does take quite a long time to do the shopping, yes, yeah.... Oh yes, yeah erm people are chatty, people are friendly. (Gloria; 76, married, Wales)

For Lyn, this means that when shopping “you’re always queuing and chatting” but that “it’s part and parcel of village life really ((laughs)),” (Lyn; 70, married, Wales). She goes on to say that this may be difficult for people from urban areas to relate to:

Yeah for strangers who come in and go to the shops it annoys them because, well, it’s time wasting as far as they’re concerned ((laughing)). And very often if you’re in the queue and you’re perhaps next or next again or whatever they’ll involve you in that conversation then you’re- so you’re all talking in a big group, you know ((laughs)). (Lyn; 70, married, Wales)

Even though for those in rural areas social interaction while shopping may be a usual occurrence, there is evidence that such interaction is actively sought, for example with Rhona and her husband:

Then we'd see somebody, have a chat, ooh we'll have a coffee while we're having a chat so it's, I, I suppose you would call it social wouldn't you, you know, it's not er a necessity thing that you- so and if we go to <town> we will always walk up, even if we go to <supermarket> we will always walk up and down the street. (Rhona; 69, married, Wales)

So, several of the interviewees who live in rural areas discuss the inherently social nature of village life and how that includes shopping-related social engagement. Although social interaction while shopping is usual, even expected, it is something that may also be actively sought.

6.5.7 Implications of structural changes. The social nature of rural areas may mean that structural changes, such as the closure of shops or post offices, may be felt even more in small communities in which there are limited venues for incidental social interaction to take place. Donald says that although he uses the village post office weekly, he would not be inconvenienced to lose it, yet: “the community would, would on the whole, I think the community would miss it,” (Donald; 70, married, Wales). Indeed, such loss is evident in villages that have lost their post office:

<Supermarket> in the town came and it knocked out a lot of the village shops round about, which is a pity, yes. It was a, it was a shop and post office erm and you used to see the guys meeting there about 11 o'clock in the morning and they would all go and have a chat actually, it was a great place for it ((laughs)). (Gloria; 76, married, Wales)

There used to be a little post office there and paper shop and grocery shop and it was brilliant, it was ideal because er as I say 15 years ago we moved first, it was a focal point, everybody went up for their pensions on a Monday morning er I mean, <wife> used to say “Where've you been?” I said “I went for the paper.” “How long does it take to get that?” ((Laughs)). After a while I'd get to know- and you came away from the counter and somebody'd come in and you'd finish up with about 5 or 6 people talking ((laughs)). I mean men as well as women and it, it was, it was a lovely atmosphere, you know, you'd just be “How's so and so?” “He's not so well.” And it- a real little community spirit about the place and I used to love it. (Ernie; 80, married, Wales)

Evidently such social interaction is enjoyable and, as a consequence, there is a sense of loss when it is no longer available. This is verbalised by Marjorie when she talks about the regular social interaction she used to get with a shop owner in her local high street:

Always on a Tuesday I go walking with friends and we always used to go in [to a local boutique], sit down and talk to the lady even if we weren't buying anything... we'd just talk and then suddenly I'd see a card or something I wanted... It was so sad when she closed. (Marjorie; 87, widowed, Wirral)

As a consequence, although it could be argued that the closure of local shops or post offices may be felt more strongly in rural communities, Marjorie's comment provides evidence of a loss of social engagement that was formerly facilitated by independent shops in more urban areas as well.

6.5.8 Online shopping. As mentioned in Chapter 4, even though several of the participants shop online, few regularly do their food shopping online. When asked why not, Linda responded simply: "But then you lose the social side." (Linda; 83, widowed, Wirral). Similarly, Bronwyn sometimes shops online but when talking about her choice to go supermarket shopping in person a couple of times a week (even though other people offer to shop for her), she says:

I quite enjoy that, you meet people and you chat and er even if it's just to say well it's cold today or ((laughs)) something like that yes, yes.... people talk to me and erm you know so have a little chat, say goodbye, I don't know their names usually but I know them by sight. (Bronwyn; 90, widowed, Wales)

Bronwyn also talks about her preference to use public transport to go shopping because of the social aspect of travelling that way:

When you have a car you're isolated in the car aren't you, you go in the shops and you don't interact with people in the same way. So from my point of view it's better to use, and I can only use, the public transport. (Bronwyn; 90, widowed, Wales)

Clearly for Bronwyn, who rarely goes out except for shopping trips, the social interaction gained on her bus journeys and at the shopping centre is an enjoyable experience.

6.5.9 Physical health and mobility. For other interviewees, health and mobility problems are potential obstacles to going shopping. In order to overcome these, two of the widows with mobility problems get help doing their weekly food shopping. For Alice the only time in the week that she leaves the house is to go food shopping, of which she says: “It’s quite nice to have a little outing,” (Alice; 95, widowed, Wales). Similarly, although Doris is active and goes out other than for shopping, she considers her weekly food shops to be: “a lovely social occasion which I do enjoy,” (Doris; 92, widowed, Wales). Nevertheless, she implies that the incidental social interaction she gets while shopping means that she feels rushed by the person who takes her: “<At> other times I think oh please no, I know she’s waiting for me”;

She’s Helping Hands, it’s a lady called <name> and she’s very nice but she also shops for two people on, on the basis that she shops for them and you see she shops for two and she’s already been back to her car and loaded up their sh- their shopping, then she sets out to look for me and so often I’m talking to somebody and then I’ll look up and see somebody, a figure standing a few yards away, you know, you know, and enjoy- you see I enjoy talking don’t !!
(Doris; 92, widowed, Wales)

Despite this, because of their functional limitations, getting instrumental support to do their shopping is necessary and, as a consequence, provides these women with social interaction that otherwise would be less possible.

6.6 Discussion

6.6.1 Introduction. The aim of this chapter was to explore whether shopping is a social activity in later life and how shopping is experienced as a social activity. It has been shown that social activity co-occurs with shopping activity but also that going shopping is a vehicle for social interaction. Results from both secondary and primary data were presented to explore four research questions. The findings from

each of these questions will be outlined and the limitations will be presented before a conclusion is provided.

6.6.2 Shopping activity and social activity. The first research question, regarding whether social activity co-occurs with shopping, was addressed with secondary data analyses from TUS. Results showed that, when compared with other age groups, those aged 65 and over were the least likely to report social activity while shopping and the least likely to report socialising with household members. However, when socialising with others while shopping was reported, there were no age differences in time spent doing so, with people spending just under an hour on average. As shown in Chapter 4, the time spent shopping may not be an important factor in later life, especially since retirement and, in this way, perhaps being time rich enables people to shop in a more leisurely way. Previous research has shown that shopping often is considered to be a social event in later life (Moschis, 2003) and, although these findings from TUS do not support that directly (as older people were less likely to have reported social activity while shopping), they suggest that social activity actually does co-occur with shopping.

6.6.3 Who people shop with. The second research question was to determine whether older people shop with others and who they shop with. Analyses from TUS showed that those aged 65 and older shop with other household members and other known people. Furthermore, SFQ showed that more than half of respondents aged 65 and over generally shop with others for their main food shop, top-up food shopping and non-food shopping. Although it is not possible from these data to determine whether shopping with others is seen as pleasurable, previous research shows that shopping with someone typically enhances the overall shopping experience (Borges et al., 2010). This is, in part, supported by the qualitative data, as discussed below.

6.6.4 How shopping activity is experienced as social in later life. The third research question explored how people in later life experience shopping as a social activity. Although not common amongst interviewees, some people experience food shopping with others as a social occasion and this may be simply being with other people when food shopping. However, data show that it is more usual to experience non-food shopping as an explicitly social event. Indeed, most of the married

participants make shopping trips into a day out with their spouses and many of the female participants also shop with friends. Visiting shops with others can be a social event, whether or not purchases are made. As suggested by others (Bäckström, 2011; Borges et al., 2010), for some, shopping with others increases the pleasurable aspect of the experience and shopping trips are used as an opportunity for social engagement with friends or family members. As suggested by previous research, such shopping trips may be for leisure purposes only (Myers and Lumbers, 2008) and not to make specific purchases. Moreover, the social aspect may be the primary focus of a day out that happens to take place at a shopping centre and involve shopping activity. The finding that older people utilise shopping centres as a place to meet up with others and to engage in social activity is consistent with previous research (Fiske et al., 1987; White, 2007). Not all participants choose to shop with others but for those who do, outings may be either primarily for shopping or primarily as a social activity, as suggested elsewhere (Bäckström, 2011).

Findings presented from SFQ showed that there is a variety of social activity that people engage in while shopping. These activities include combining shopping with eating out and talking to others while shopping. To illustrate this further, qualitative data showed that shopping is seen as a social activity through unplanned encounters with known people while in or around shops. Moreover, such unplanned social encounters while shopping were consistently expressed in positive terms, a finding which is consistent with previous research (Hare et al., 2001).

6.6.5 Shopping activity and social benefits. The fourth research question was concerned with determining what the social benefits of shopping activity were. It had been established already that incorporating social activity into shopping trips was common amongst the keen shoppers. However, for those who are less keen shoppers, often a distinction was made between the act of shopping and the social aspects of shopping with others, which supports the concept of a non-shopper identity as introduced in Chapter 5. Furthermore, differences by marital status were found in the likelihood of shopping with others. Findings from TUS, perhaps unsurprisingly, showed that married people were more likely to shop with household members but less likely to shop with other known people, which suggests a tendency for married people to shop with spouses (rather than friends or relatives they do not live with). On the other hand, widowed people were more likely to have reported

other specified social activity taking place while shopping. Again, it is not possible to ascertain what that social activity involves but it suggests that shopping-related social activity may play an important role for those who live alone.

Indeed, using shopping as a means to get out of the house was a common theme throughout the interviews, especially for those who live alone. Shopping was considered an important means of socialisation especially for people in single-person households, which has been suggested elsewhere (Myers & Lumbers, 2008). Equally important, going shopping to get out of the house may be considered actively social even without involving direct social interaction; that is, going shopping simply to be around other people. Hence, there is an awareness of the psychological benefits of social activity while shopping and people choose to go shopping for these social benefits. The finding that people in later life use shopping as a reason to get out and as an opportunity for social engagement is consistent with previous research (Hare et al., 2001; Meneely et al., 2009; Myers & Lumbers, 2008).

It was suggested that people who live in more rural areas find these areas inherently social. Thus, as rural dwellers know many other people, shopping is always a social activity even when having to travel to shop at larger villages or towns. Although social interaction while shopping is usual, even expected, it is something that may also be actively sought, as has been previously suggested (Fiske et al., 1987). Consequently, there is a sense of loss from the diminished opportunities for social contact after the closure of local shops or post offices, as suggested by Vincent (1999).

For some of those with health or mobility problems, shopping may be the only time (or one of few opportunities) to leave the house and to get social interaction. As suggested by others, rural communities may rely heavily on volunteers to help with maintaining services (Keating & Phillips, 2008) such as shopping. Such was the case with those who receive instrumental support to do their weekly food shopping. For those people in particular, their functional limitations mean that they must rely on others to take them shopping. These weekly shopping trips were seen as important both for maintaining independence and as an enjoyable social experience (Wilson et al., 2004). Thus, perhaps it is less important whether or not people say (or think) that

they like food shopping. As a necessary activity, which gives a reason to get out of the house, going shopping enables people in later life to get valuable social contact.

6.6.6 Limitations. There are several limitations that must be considered. In the TUS analyses, it is likely that social activity has been underestimated as episodes of social activity (i.e., coded as a primary activity) occurring in between shopping episodes would not have been captured. In a hypothetical example of someone shopping alone, two episodes of shopping activity punctuated by a visit to a café to meet with friends (coded as social activity) would not be taken into account. Furthermore, although findings show that social activity occurs with shopping, numbers (in each age group) were comparatively low, which suggests that social activity while shopping could have been under-reported. In addition, there is no way to explore grandparenting as TUS can only account for co-resident children (i.e., from the same household as the respondent). So shopping activities with grandchildren who live in a different household would be captured only by the 'known others' code.

It is also important to note that there are differences between TUS and SFQ for reported shopping with others. TUS had around 40% older people who reported shopping with others compared with 60% in SFQ; however, different questions had been asked. Again, there may have been under-reporting in TUS; SFQ results were drawn from a self-selected sample and it may be people who are more sociable anyway. Nevertheless, as SFQ asked about shopping in particular, responses were framed by shopping so results allow a more global perspective and may more accurately reflect the behaviours of respondents. Despite the methodological limitations of SFQ, results (for shopping patterns, etc.) are similar to those of the nationally-representative datasets and, therefore, still can be considered as providing useful information that furthers knowledge.

6.6.7 Conclusion. This chapter has presented evidence that shopping is considered to be a social activity in later life. Although the data revealed that there were differences in the meaning and value people attributed to social activities while shopping, it is clear that shopping can be a social activity whether or not social benefits are actively sought out. Consequently, whether engaging in incidental social interaction or shopping with others, the social interaction gained during shopping

trips often was expressed as a pleasurable experience. Clearly there are implications for the changing nature of the structural environment with closures of small shops and post offices (particularly in rural areas) and how this may lead to a restructuring of social connections. Equally important, there was an awareness of the psychological benefits of social activity while shopping and, indeed, people choose to go shopping for its social benefits. As a result, the psychological and other health benefits of shopping activities will be explored further in the following two chapters.

Chapter 7

Shopping and Physical Health

7.1 Introduction

The previous chapter discussed shopping as a social activity and its value and meaning in later life. It was evident that people were aware of the psychological benefits of social activity while shopping and that people choose to go shopping for those benefits. However, along with potential psychological benefits, it is proposed that shopping activities may provide additional health benefits in later life. Thus the proposition that shopping activities may contribute to healthy ageing will be explored in this chapter and the next.

7.1.1 Healthy ageing. As discussed in previous chapters, there are several biological, psychological and psychosocial determinants of healthy ageing. Thus, although there is no consensus on a definition of healthy ageing, typically it is operationalised as the absence of major chronic disease, having no major cognitive impairment, having no major functional limitations and having good mental health (Depp & Jeste, 2006). Shopping is one of the items included in instrumental activities of daily living (IADL) scales, which assess an individual's ability to live independently. Although other tasks such as food preparation and housekeeping are assessed in such scales, shopping is unique in being an instrumental activity that is both essential and potentially involves key areas the National Institutes of Health (NIH) have associated with healthy brain ageing. These areas are: cognitive activity, social engagement and physical activity (Hendrie et al., 2006). Although there is an association between each of these activities when considering shopping behaviours, they will be discussed separately where possible. Thus, the purpose of this chapter is to explore physical health and physical activity as they relate to shopping behaviours.

7.1.2 Physical activity and shopping. Recent research suggests that sustained physical activity is associated with improved healthy ageing, defined as absence of disease, freedom from disability, high cognitive and physical functioning as well as good mental health (Hamer et al., 2014). Furthermore, although social

engagement is not the focus here, it is important to note the potential relationship between social engagement and physical health. For example, a recent study investigating the effect of social engagement and living arrangements concluded that those who live alone and/or have low rates of social participation were more likely to experience mobility problems (Nilsson, Avlund, & Lund, 2011). Although that study was with a Danish sample (of people aged 75 and over), it suggests an interesting association between social isolation and physical functioning that may have implications for increasing numbers of widowed people in later life in the UK. Furthermore, a survey of adults in Galway, Ireland concluded that in “traditional” more walkable neighbourhoods people walk more, feel more connected to their community and are more likely to know their neighbours (Leyden, 2003). Thus, the more places such as shops and cafés that people reported being able to walk to, the more likely they were to be socially engaged with others (Leyden, 2003). However, the physical environment may not always enable people to walk to shops (especially in rural areas) and even if shops are in close proximity, mobility problems in later life may make such activity increasingly difficult.

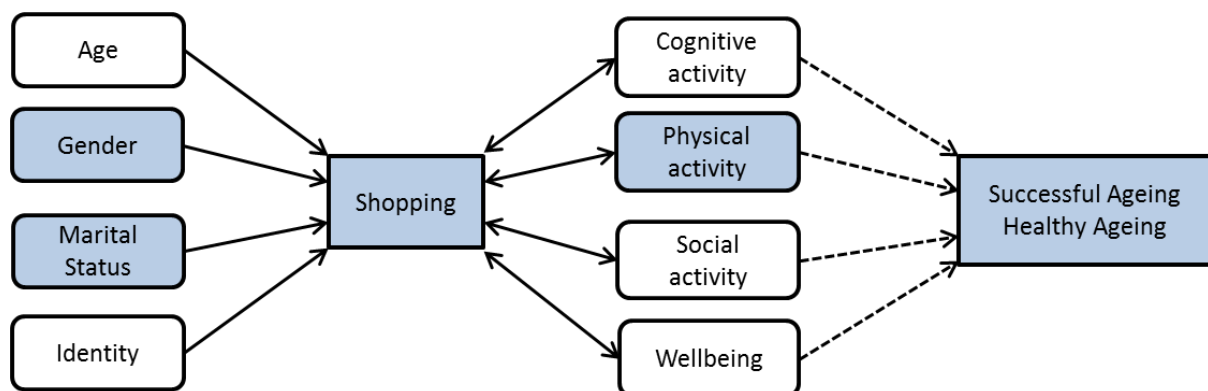
Yet shopping activity can contribute to physical fitness, with one UK study of adults (aged 65 and older) finding that 40 percent of their reported time walking was for shopping (Dallosso et al., 1988). Physical activity such as walking has been shown to impact on cognitive health (Prohaska et al., 2009), as will be discussed in the following chapter. Furthermore, higher levels of physical activity are associated with higher frequency of visiting main food shopping venues (Thompson et al., 2011). However, this relationship may be circular as greater independence in food-related activities such as food shopping has been shown to be significantly associated with fewer health problems and greater physical strength in older adults (Thompson et al., 2011). In a cross-European study of older people, although women were more likely to be responsible for household food-related activities, men reported carrying shopping bags, driving for shopping trips and shopping when their spouse was ill (Turrini et al., 2010).

7.1.3 Physical health and shopping. Furthermore, food shopping, in particular, contributes to a sense of independence and can become increasingly difficult for older people as they experience declines in health, mobility and the ability to drive a car (Thompson et al., 2011). Should an older person become physically

frail or disabled and unable to get their own shopping, they will require assistance from others in order to remain living in the community (Arber, Price, Davidson & Perren, 2003). Thus, not being able to go food shopping because of physical or sensory limitations in later life has implications for healthy ageing. An Australian study concluded that decreased mobility or disability may be associated with restricted food access in later life due to a greater risk of having difficulty carrying groceries and of not having access to a car (Burns et al., 2011). Similarly, in a US study, functional impairments measured by activities of daily living (ADLs) and IADLs, were significantly related to food insecurity among older people after controlling for low income, low education and social isolation (Lee & Frongillo, 2001). Yet, a recent study exploring the food access patterns of older adults in the US shows that having food locations in proximity to where older adults live can promote physical activity among people with mobility disabilities (Huang et al., 2012). In addition, it may be that people find ways to overcome the potential barriers to shopping that arise from having physical impairments, as suggested by the use of shopping carts in later life (Kong & Chua, 2014).

7.1.4 Aims and research questions. It is suggested that having access to shopping facilities allows people to conduct shopping-related physical activity, and that this activity contributes to physical health and, therefore, to healthy ageing. The proposed relationship between shopping activities and healthy ageing is shown in Figure 7.1.

Figure 7.1. Proposed model of the mediating role shopping plays in healthy and successful ageing.



Thus, as shown above, physical activity is one of four key areas in which it is proposed that shopping contributes to healthy ageing. However, for the purpose of this chapter, the focus will be on exploring physical health and physical activity as they relate to shopping behaviours. To this end, this chapter will be concerned with the following research questions:

- Is there a relationship between shopping and health?
- Does shopping impact on physical health?
- Does shopping contribute to health through physical activity?

As in previous chapters, results from both secondary and primary data will be presented and integrated where possible.

7.2 Shopping and Health

7.2.1 Self-reported health and shopping activity. In order to address the first research question, whether there is a relationship between shopping and health status, first data from TUS were analysed to explore whether self-rated health affected reported shopping activity. As described in previous chapters, shopping activity included all shopping codes, which were collapsed to indicate whether or not shopping was reported. A self-report measure of general health has been used extensively in health research (Arber, Fenn, & Meadows, 2014) and studies have found that subjective health assessment is related to objective measures of health and mortality (Farmer & Ferraro, 1997; Mackenbach, Simon, Looman, & Joung, 2002). Respondents were asked: How is your general health? The response options: were very good, good, fair, bad, or very bad. These were collapsed into good health (very good or good) or not good health (fair, bad or very bad), as in previous studies (Arber et al., 2014; Kunst et al., 2005; Mackenbach et al., 2002). As shown in Table 7.1, there are statistically significant effects on whether people shopped or not depending on self-rated health.

Table 7.1. TUS: percentage of those who reported doing any shopping by self-rated health, gender and marital status (aged 65 and over).

	Good health	Not good health			
	[95% CI]	[95% CI]	<i>n</i>	χ^2	<i>P</i> value
All	68.16 [64.93, 71.39]	58.49 [54.87, 62.11]	1514	15.268	0.001
Males	68.00 [63.11, 72.89]	60.26 [54.83, 65.69]	662	4.312	0.038
Married	68.12 [64.02, 72.22]	58.37 [54.04, 62.70]	497	5.045	0.025
Not married	67.12 [59.93, 74.31]	64.84 [57.53, 72.15]	164	0.094	0.759
Females	68.29 [64.00, 72.58]	57.11 [52.27, 61.95]	852	11.397	0.001
Married	68.22 [61.98, 74.46]	53.53 [46.03, 61.03]	384	8.659	0.003
Not married	68.35 [62.43, 74.27]	59.57 [53.23, 65.91]	467	3.915	0.048

Note. CI = confidence interval. Figures shown are the percentages of those who reported shopping within each sub-sample.

Overall, respondents were less likely to have reported shopping activity if they had poorer health. Furthermore, women with poorer health were less likely to have reported shopping than either women with good health or men with poorer health. Moreover, for both genders, married people with poorer health were much less likely to have reported shopping than married people with good health. This further supports findings from previous chapters that married people are more likely to get help with shopping from their spouses.

7.2.2 Health as predictor of shopping activity. Thus, it can be expected that there will be a difference in shopping activity between those in good health and not good health depending on both gender and marital status. To explore this further, logistic regression was performed to assess the impact of health, demographic and socioeconomic variables on the likelihood of shopping activity (as earlier, whether or not people had shopped over the two-day study period). As above, self-rated health was dichotomised: good health (very good or good) or not good health (fair, bad or very bad). Education was in three levels (no qualifications; up to GCSE; more than GCSE). The measure of socio-economic classification was in four classes (managerial and professional; intermediate occupations; routine and manual work; never worked). As there are many classifications to divide areas into rural and urban, a cut-off point was chosen based what would be meaningful for comparative purposes. Thus, being rural was defined as living in an area with a population density of 999 or fewer per 10 hectares.

In the unadjusted model (shown in Table 7.2, model 2), those in good health were almost one and a half times more likely to have shopped (OR 1.47; CI 1.19, 1.83). For each year increase in age, people were 6 percent less likely to have shopped (OR 0.94; CI 0.93, 0.96). In addition, married respondents were 29 percent less likely to have shopped (OR 0.71; CI 0.55, 0.91).

Table 7.2. TUS: logistic regression of factors contributing to shopping activity (aged 65 and over).

	Model 1		Model 2		Model 3	
	OR	95% CI	OR	95% CI	OR	95% CI
Good health	1.55**	[1.25, 1.91]	1.47**	[1.19, 1.83]	1.49*	[1.18, 1.87]
Age			0.94**	[0.93, 0.96]	0.95**	[0.93, 0.96]
Female			0.90	[0.71, 1.13]	0.90	[0.70, 1.15]
Married			0.71**	[0.55, 0.91]	0.71*	[0.55, 0.91]
More than GCSE					1.00	-
Up to GCSE					0.91	[0.59, 1.41]
No qualifications					0.76	[0.53, 1.09]
Managerial & professional					1.00	-
Intermediate occupations					1.04	[0.70, 1.53]
Routine & manual					1.03	[0.73, 1.45]
Never worked					0.88	[0.60, 1.29]
Rural					0.74*	[0.59, 0.93]
Pseudo R ²	1%		3%		4%	
Model <i>p</i>	<.001		<.001		<.001	

Note. *N* = 1373. OR = odds ratio; CI = confidence interval. **p* < .05. ***p* < .001

After controlling for all other factors the results alter only marginally. The full model again shows that those in good health were one and a half times more likely to have shopped and a 5 percent less likelihood of having shopped for each year increase in age. Married respondents were still 29 percent less likely to have shopped, which supports earlier findings (Chapter 4) that shopping is a shared activity amongst married couples. In addition, people were 26 percent less likely to have reported shopping if they live in a rural area. The full model containing all predictors (shown in Table 7.2) was statistically significant ($\chi^2 = 66.59$, *df* = 10, *p* < .001) but accounts for just 4 percent of the variance.

7.2.3 Shopping activity as predictor of health. To explore whether the relationship between shopping and health is bidirectional, logistic regression was performed to assess the impact of shopping activity (i.e., whether or not shopping activity was reported), demographic and socioeconomic variables on the likelihood of having good health (dichotomised as above). In the unadjusted model (Table 7.3,

model 2), those who shopped were almost one and a half times more likely to have good health (OR 1.47; CI 1.19, 1.83). For each year increase in age, people were 3 percent less likely to have good health (OR 0.97; CI 0.96, 0.99).

Table 7.3. TUS: logistic regression of factors contributing to good health (aged 65 and over).

	Model 1		Model 2		Model 3	
	OR	95% CI	OR	95% CI	OR	95% CI
Shopping activity	1.55**	[1.25, 1.91]	1.47**	[1.19, 1.83]	1.49*	[1.18, 1.87]
Age			0.97*	[0.96, 0.99]	0.98*	[0.96, 0.99]
Female			1.07	[0.86, 1.33]	1.12	[0.89, 1.42]
Married			1.21	[0.97, 1.53]	1.16	[0.91, 1.48]
More than GCSE					1.00	-
Up to GCSE					0.57*	[0.37, 0.87]
No qualifications					0.57*	[0.40, 0.81]
Managerial & professional					1.00	-
Intermediate occupations					1.00	[0.69, 1.46]
Routine & manual					0.69*	[0.50, 0.96]
Never worked					1.11	[0.76, 1.61]
Rural					1.06	[0.85, 1.33]
Pseudo R ²	1%		2%		3%	
Model <i>p</i>	< .001		< .001		< .001	

Note. *N* = 1373. OR = odds ratio; CI = confidence interval. **p* < .05. ***p* < .001

In the fully adjusted model (Table 7.3, model 3), after controlling for all other factors, those who shopped were one and a half times more likely to have good health, suggesting that there is a bidirectional relationship. As to be expected, an increase in age leads to decreased likelihood of having good health. Furthermore, those who had routine and manual jobs or had less education were more likely to have reported poorer health, which is consistent with previous research (Breeze et al., 2005; Grundy & Glaser, 2000). Thus, when controlling for socioeconomic position, the effect of shopping activity on health remains statistically significant ($\chi^2 = 63.61$, *df* = 10, *p* < .001), but explains only 3 percent of the variance.

7.2.4 Dose effect of shopping activity. In order to explore whether there is a dose effect of shopping activity on good health, logistic regression was performed to assess the impact of the amount of shopping activity, demographic and socioeconomic variables on the likelihood of having good health. Shopping activity was collapsed into no shopping, less than 60 minutes shopping (10-60 minutes) and 60 minutes or more shopping. In the adjusted model (shown in Table 7.4, model 2), those who shopped for 60 minutes or longer were more likely to have had good health (OR 1.32; CI 1.03, 1.70). Again, for each year increase in age people were 3 percent less likely to have had good health (OR 0.97; CI 0.95, 0.99).

Table 7.4. TUS: logistic regression of factors contributing to good health controlling for amount of shopping activity.

	Model 1		Model 2		Model 3	
	OR	95% CI	OR	95% CI	OR	95% CI
No shopping	1.00	-	1.00	-	1.00	-
<60 mins shopping	1.30	[0.99, 1.70]	1.27	[0.97, 1.67]	1.22	[0.91, 1.62]
60+ mins shopping	1.38*	[1.08, 1.78]	1.32*	[1.03, 1.70]	1.28	[0.98, 1.67]
Age			0.97**	[0.95, 0.99]	0.97*	[0.96, 0.99]
Female			1.07	[0.86, 1.33]	1.12	[0.89, 1.42]
Married			1.22	[0.97, 1.54]	1.16	[0.91, 1.48]
More than GCSE					1.00	-
Up to GCSE					0.57*	[0.37, 0.86]
No qualifications					0.57*	[0.40, 0.81]
Managerial & professional					1.00	-
Intermediate occupations					1.00	[0.68, 1.44]
Routine & manual					0.69*	[0.49, 0.96]
Never worked					1.10	[0.76, 1.60]
Rural					1.05	[0.84, 1.31]
Pseudo R ²	<1%		1%		3%	
Model <i>p</i>	.03		< .001		< .001	

Note. *N* = 1356. OR = odds ratio; CI = confidence interval. **p* < .05. ***p* < .001

In the fully adjusted model (Table 7.4, model 3), after controlling for all other factors those who shopped for longer were no more likely to have had good health. Thus,

the model suggests that there is no dose effect of shopping activity on good health when controlling for all other variables. Again, the model shows that an increase in age leads to decreased likelihood of having good health and those who had routine and manual jobs or had less education were more likely to have reported poorer health. The full model was statistically significant ($\chi^2 = 54.84$, $df = 11$, $p < .001$) and explained 3 percent of the variance. Although in this model the effect of more time spent shopping on health was attenuated, these findings suggest that shopping activity can contribute to the relationship with health and this will be explored further below.

7.3 Poor Physical Health as a Potential Barrier to Shopping

7.3.1 Physical health measures. In the following analyses, three measures of physical health will be considered: ADLs, self-rated health and gait speed. ADLs (e.g. ability to dress, eat, bathe) are primary activities of daily living that are commonly used to clinically assess an individual's level of disability or physical functioning. As mentioned above, self-rated health is used extensively in health research and is related to objective measures of health and mortality (Arber et al., 2014). Gait speed is considered a reliable, valid, sensitive and specific measure of functional capacity (Guedes et al., 2014). As discussed earlier, ability to shop is one of the items included in IADLs, which assess higher level functional competence than ADLs. Although designed to be used as a scale (Lawton & Brody, 1969), the individual shopping item will be considered and controlled for in subsequent analyses.

7.3.2 Shopping IADL. In order to provide context for the following analyses, those who reported functional limitation as measured by the shopping IADL will be shown below. In CFAS, this question was asked as follows: "Are you able to shop and carry heavy bags? (If yes: Do you have difficulty?)". The response options were: no, needs help; yes, some difficulty; yes, no difficulty. In ELSA, the question asked is: "Do you have difficulty shopping for groceries because of physical, mental, emotional or memory problems?" The response options were either mentioned or not mentioned. The table below (Table 7.5) shows the percentage from CFAS who reported not being able to shop as well as the percentage from ELSA who mentioned that they had difficulty shopping.

Table 7.5. Percentage who reported not being able to shop without help (CFAS) and difficulty grocery shopping (ELSA).

	CFAS-Wales	ELSA
<i>N</i>	1766	3123
All	19.30	16.47
Female	26.59	20.37
Male	10.68	11.29
Married	15.05	9.26
Not married	26.49	25.33
Aged 65-74	11.90	8.04
Aged 75+	28.21	21.29

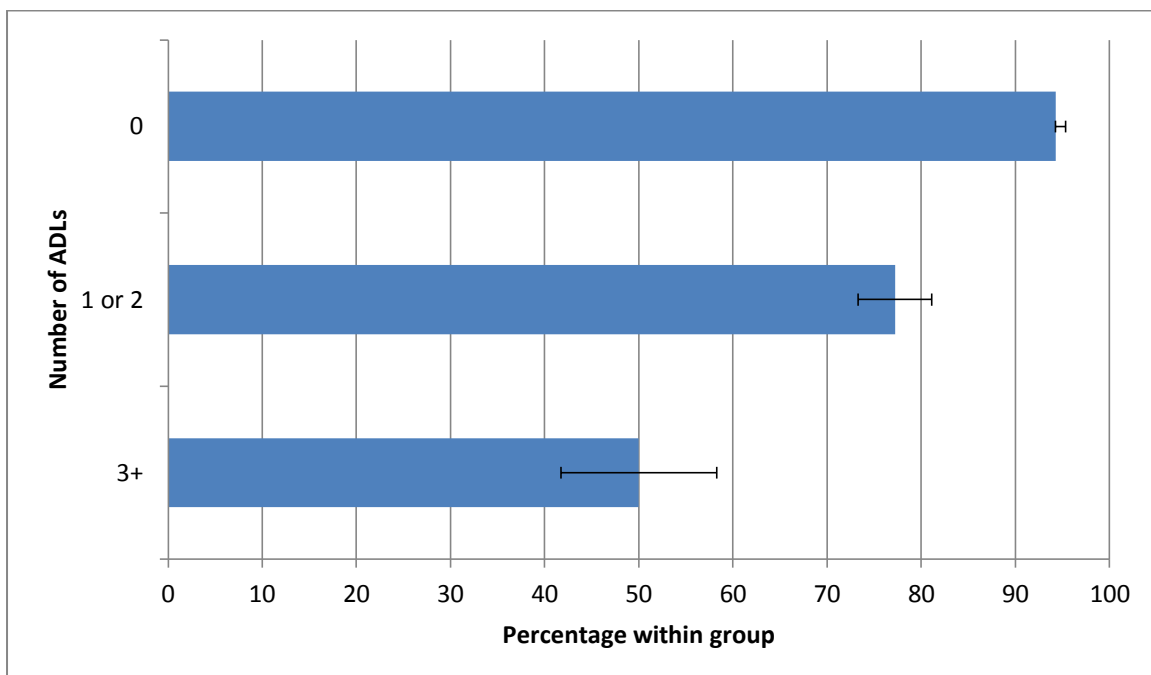
Note. CFAS data include North Wales respondents only. ELSA data for wave 6.

Both datasets show similar results with women, those who were not married, and those who were in the oldest age group more likely to have difficulty shopping. As different surveys treat this question slightly differently, it is difficult to compare these results directly. CFAS treats the IADL as a two-part question (shop; carry heavy bags) with three levels of response. In contrast, ELSA asks whether difficulty is due to any of a number of factors (physical, mental, emotional, memory) with a binary response. Thus, it is not possible to determine what aspect of functional ability is being assessed for either measure. However, it is important to note that these results show that at least 80 percent of people are able to shop.

7.3.3 Physical health and the ability to shop. So far data from TUS have been used to investigate the impact of shopping activity on self-rated health; however, data from ELSA can be used in order to explore whether functional health status affects the ability to go shopping. ELSA asks respondents: How easy or difficult would it be for you to get to each of the following places, using your usual form of transport? The places include corner shop, medium or large supermarket, and shopping centre. However, as shown in Chapter 4, results from Food and You show that 96% of people aged 65 and over shop in medium or large supermarkets so, as the typical food shopping venue, only access to supermarkets was used for the following analyses. The response options are: very easy, quite easy, quite difficult, very difficult, unable to go, do not wish to go. For the purposes of the

following analyses, the responses were collapsed into easy (very easy, quite easy) or difficult (quite difficult, very difficult, unable to go). Those who specified that they do not wish to go have not been included. Three measures of physical health were explored: ADLs, self-rated health and gait speed. First, to investigate the impact of functional ability on ease of access to supermarkets, the presence of ADLs was used. ADLs were collapsed into three categories, 0 ADLs, 1-2 ADLs, 3 or more ADLs. The results of ease of supermarket access by presence of ADLs, shown in Figure 7.2, were statistically significant ($\chi^2 = 334.024$, $df = 2$, $p < .001$).

Figure 7.2. ELSA: ease of access to supermarkets by presence of ADLs.



Note. Source: ELSA Wave 6. $N = 2548$ (0 ADL = 1965; 1 ADL = 307; 2 ADL = 136; 3 ADL = 64; 4 ADL = 39; 5 ADL = 26; 6 ADL = 11). Error bars represent 95% confidence intervals.

This shows that among those who wish to go to a supermarket, the majority of those with no ADLs (94%) find it easy to access supermarkets but this drops to 50 percent of those who have three or more ADLs. Thus, access to supermarkets becomes increasingly difficult with more functional impairment as measured by ADLs. However, it is worth noting that amongst those with 6 ADLs, 36 percent report that it is easy to access supermarkets suggesting that these respondents still are highly functional. As these people are still able to take part in the study, they may be a

highly resilient group and, therefore, may not be representative of the population with severe functional impairment.

7.3.4 Shopping with physical health limitations. Data from ELSA do not allow exploration of actual shopping activity in later life; consequently, a greater understanding of whether and how people with physical health limitations go shopping can only be achieved using the qualitative data. It would be expected that declining physical function limits the possibility of using shopping as a physical activity. However, shopping may provide a considerable amount of physical activity even for those with mobility problems who do not go walking for other purposes. One example of this is Fred:

I'll use the car rather than walk now whereas I'd walk. Well, I timed myself today actually erm it was just, just before 10 o'clock when I parked the car and when I got into the car again it was quarter to 11, so I was out three quarters of an hour in <shopping centre>. I was walking on the go all the time, yeah. (Fred, 82, widowed, Wirral)

So, although Fred does little physical activity and says: "I've stopped walking", he spends 45 minutes walking around his local shopping centre each Friday. Similarly, James has mobility problems but continues to walk to local shops, albeit on a less frequent basis than in the past. More often now he will drive and try to limit the need to walk:

And sometimes I go in the car then have a walk round and that sort of thing, especially if you've got a lot of shopping to do... supermarkets are all right if you erm if you get a good spot parking, you know, you don't have to walk so far but erm you can get one of the trolleys and use that. (James, 80, widowed, Wirral)

Indeed, using a shopping trolley is one of the ways in which those with mobility problems are able to overcome their physical limitations when shopping:

I don't use a stick inside, but outside I use a stick. Or a shopping trolley, you know, which I can lean on. (Doreen, 78, widowed, Wirral)

For Doreen and others with mobility problems their physical limitations do not prevent them from shopping and their resilience is evident:

But when I had this arthritis, this sciatica, I could hardly walk there, I had to stop and lean against a wall halfway there. (Bessie, 84, widowed, Wirral)

Although Bessie found it difficult to walk to the shops, her physical health did not become a barrier. For others, decline in physical functioning means that they adapt their shopping behaviours accordingly. For example, Carol now drives to the supermarket that in the past she would have walked to:

I mean years ago I could walk to <supermarket>. I mean I most probably still could but I've got the slight problem and I get a bit worried about it... I wouldn't mind walking but it's coming back with the shopping, I've got to carry heavy things now, you know so. (Carol, 65, divorced, Wirral)

For the interviewees, the problem of having heavy shopping bags to carry is solved in different ways. Again supporting findings from Chapter 4, those who do not drive tend to go more frequently and pick up fewer items or use wheeled shopping carts in which to transport their shopping. However, although those who are still able to drive do not have to carry bags as much or as far, some also shop frequently and may still feel the effects of the weight:

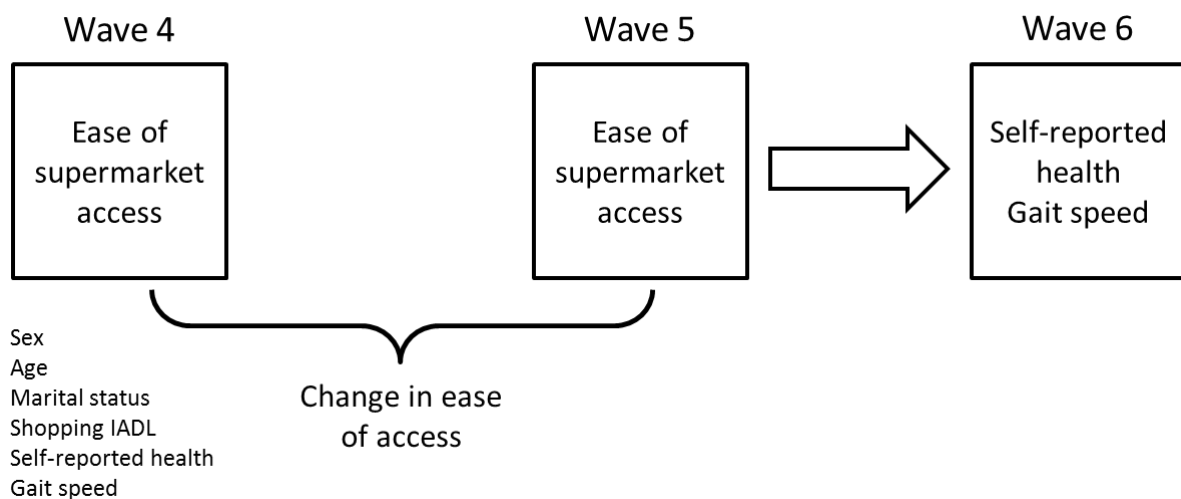
It's when you have shopping, you don't realise that you're walking as much as you are, actually are. You can go up an aisle, down another aisle and it doesn't worry me that I'm getting tired but if I'm carrying a basket and that gets a bit full eventually, that's the time when it's, it tells on my physical wellbeing erm I should've taken a little trolley, you know, one of those little trolleys where you can put your basket in it. But er that's the only time when it, when your basket gets overloaded a bit, too much weight in it. (Allun, 87, widowed, Wales)

Again, although Allun has difficulty walking, he continues to do his own shopping. Even though sometimes he finds carrying his shopping tiring it is not a barrier to him performing these activities for himself.

7.3.5 Ease of access as a predictor of physical health. In order to explore whether ease of access to supermarkets predicts physical health, logistic regression

was performed using ELSA to assess the impact of change in ease of supermarket access over time and demographic variables on the likelihood of having good physical health. As not every question is asked at each wave of ELSA, the waves chosen for this analysis are those that were able to contribute relevant data. Specifically, as shown in Figure 7.3, Wave 4 provided T1 shopping and demographic variables. Wave 5 was used as T2 and the most recent wave with physical health variables (Wave 6) was used as T3.

Figure 7.3. ELSA: contribution of waves to physical health analyses.



Note. Data collection period per wave: Wave 4: 2008-2009; Wave 5: 2010-2011; Wave 6: 2012-2013.

7.3.6 Access and self-rated health with IADL. The first measure of physical health used in regression analysis was self-rated health. Respondents were asked: would you say your health is excellent, very good, good, fair or poor? These responses were collapsed to create an outcome measure of good health (excellent, very good, good; coded 0) or not good health (fair, poor; coded 1). The change over time of ease of supermarket access was determined as follows: easy at both T1 and T2; from easy at T1 to difficult at T2; from difficult at T1 to easy at T2; difficult at both T1 and T2. Difficulty in shopping at T1 was controlled for using the IADL shopping item. This asked: “Do you have difficulty shopping for groceries because of physical, mental, emotional or memory problems?” The response was binary coded (0 for not mentioned; 1 for mentioned). Demographic variables included gender, marital status

(single/separated/divorced; married; widowed) and age (grouped as 65-74; 75-84; 85 and over).

In the unadjusted model (Table 7.6, model 1), compared to those who reported that it was easy to access supermarkets at both T1 and T2, those who found it easy at T1 but difficult at T2 were more than twice as likely to not have good health (OR 2.84; CI 1.96, 4.11). Those who found it difficult at T1 but easy at T2 were four times as likely to not have good health (OR 4.10; CI 2.57, 6.55). Furthermore, those who found it difficult to access supermarkets at both time points were more than six times as likely to not have good health (OR 6.65; CI 4.11, 10.77). After controlling for sociodemographic variables and the shopping IADL, the odds were reduced but remain statistically significant. Those who reported finding it difficult to access supermarkets at one time point (either T1 or T2) but easy at the other time point were more than twice as likely to not have good health. Those who found it difficult at both time points were more than three times as likely to not have good health.

Table 7.6. ELSA: logistic regression of factors contributing to reporting not good health at T3.

	Model 1		Model 2	
	OR	95% CI	OR	95% CI
Easy at both waves	1.00	-	1.00	-
From easy to difficult	2.84**	[1.96, 4.11]	2.34**	[1.58, 3.46]
From difficult to easy	4.10**	[2.57, 6.55]	2.76**	[1.68, 4.54]
Difficult at both waves	6.65**	[4.11, 10.77]	3.22**	[1.87, 5.54]
Shopping IADL at T1			4.10**	[2.75, 6.12]
Female			0.75*	[0.62, 0.91]
Single/separated/divorced			1.00	-
Married			0.76*	[0.57, 1.00]
Widowed			1.13	[0.82, 1.55]
Aged 65-74			1.00	-
Aged 75-84			1.28*	[1.05, 1.57]
Aged 85+			0.80	[0.51, 1.25]
Pseudo R ²	7%		11%	
Model <i>p</i>	< .001		< .001	

Note. *N* = 2348. OR = odds ratio. CI = confidence interval.

p* < .05. *p* < .001

After controlling for other factors, the model shows that finding it difficult to access supermarkets at any time point increases the likelihood of reporting not good health. This suggests that it is not the sequencing of finding it difficult to access but rather that the number of periods of exposure to difficulty have a cumulative effect. The full model containing all predictors was statistically significant ($\chi^2 = 199.473$, $df = 9$, $p < .001$) and explains 11 percent of the variance.

7.3.7 Ease of access and self-rated health. The regression analysis using self-rated health (good health coded 0; not good health coded 1) was repeated without the IADL shopping item. The change over time of ease of supermarket access was as above. In this analysis, self-rated health at T1 was controlled for and demographic variables included gender, marital status and age (grouped as 65-74; 75-84; 85 and over). In the adjusted model (Table 7.7, model 2), compared to those who reported that it was easy to access supermarkets at both T1 and T2, those who found it easy at T1 but difficult at T2 were almost twice as likely to not have good health (OR 1.96; CI 1.26, 3.05). Those who found it difficult at T1 but easy at T2 were twice as likely to not have good health (OR 2.41; CI 1.40, 4.18). Furthermore, those who found it difficult to access supermarkets at both time points were three times as likely to not have good health (OR 3.13; CI 1.77, 5.52).

Table 7.7. ELSA: logistic regression predicting the likelihood of reporting not good health at T3.

	Model 1		Model 2	
	OR	95% CI	OR	95% CI
Easy at both waves	1.00	-	1.00	-
From easy to difficult	2.84**	[1.96, 4.11]	1.96*	[1.26, 3.05]
From difficult to easy	4.10**	[2.57, 6.55]	2.41*	[1.40, 4.18]
Difficult at both waves	6.65**	[4.11, 10.77]	3.13**	[1.77, 5.52]
Health at T1			9.78**	[7.82, 12.25]
Female			0.73*	[0.60, 0.91]
Single/separated/divorced			1.00	-
Married			0.72*	[0.53, 0.98]
Widowed			1.13	[0.80, 1.61]
Aged 65-74			1.00	-
Aged 75-84			1.23	[0.98, 1.54]
Aged 85+			0.85	[0.52, 1.38]
Pseudo R ²	7%		31%	
Model <i>p</i>	< .001		< .001	

Note. *N* = 2348. OR = odds ratio. CI = confidence interval.

p* < .05. *p* < .001

After controlling for other factors, the model shows that finding it difficult to access supermarkets at any time point increases the likelihood of reporting not good health at T3. Once more, this suggests that it is not the sequencing of finding it difficult to access but rather that the number of periods of exposure to difficulty have a cumulative effect. The full model containing all predictors was statistically significant ($\chi^2 = 591.472$, $df = 9$, $p < .001$) and explains 31 percent of the variance. The additional variance explained in this model is accounted for by the strong relationship between self-rated health at T1 and outcome health at T3 (OR 9.78; CI 7.82, 12.25).

7.3.8 Access and gait speed with IADL. The second measure of physical health used in regression analysis was gait speed. Physical functioning was assessed using walking speed measured over a 2.44 metre (8 foot) course. As determined in previous waves of ELSA, poor gait speed at T3 was calculated as less than or equal to 0.4 metres per second (coded as 1) and good gait speed was greater than 0.4 metres per second (coded as 0). The demographic variables and change over time of ease of supermarket access were as above and difficulty in shopping at T1 was controlled for using the IADL shopping item.

In the unadjusted model (Table 7.8, model 1), compared to those who reported that it was easy to access supermarkets at both T1 and T2, those who found it easy at T1 but difficult at T2 were almost seven times as likely to have poor gait speed at T3 (OR 6.98; CI 3.99, 12.22). Those who found it difficult at T1 but easy at T2 were six times more likely to have poor gait speed (OR 6.47; CI 3.21, 13.04). Furthermore, those who found it difficult to access supermarkets at both time points were more than 11 times as likely to have poor gait speed (OR 11.46; CI 5.73, 22.94). After controlling for sociodemographic variables and the shopping IADL, the odds were reduced but remain statistically significant. Those who reported finding it difficult to access supermarkets at any time point were around three times as likely to have poor gait speed at T3. However, those who found it easy at T1 but difficult at T2 were almost four times as likely to have poor gait speed (OR 3.77; CI 2.01, 7.08).

Table 7.8. ELSA: logistic regression of factors contributing to poor walking speed at T3.

	Model 1		Model 2	
	OR	95% CI	OR	95% CI
Easy at both waves	1.00	-	1.00	-
From easy to difficult	6.98**	[3.99, 12.22]	3.77**	[2.01, 7.08]
From difficult to easy	6.47**	[3.21, 13.04]	2.92*	[1.29, 6.62]
Difficult at both waves	11.46**	[5.73, 22.94]	2.66*	[1.16, 6.06]
Shopping IADL at T1			5.73**	[3.25, 10.10]
Female			0.89	[0.56, 1.42]
Single/separated/divorced			1.00	-
Married			0.59	[0.30, 1.13]
Widowed			1.42	[0.73, 2.78]
Aged 65-74			1.00	-
Aged 75-84			3.21**	[2.03, 5.08]
Aged 85+			3.42*	[1.62, 7.21]
Pseudo R ²	11%		23%	
Model <i>p</i>	< .001		< .001	

Note. *N* = 2084. OR = odds ratio. CI = confidence interval.

p* < .05. *p* < .001

After controlling for other factors, the model shows that finding it difficult to access supermarkets at any time point increases the likelihood of having poor gait speed at

T3. Furthermore, an increase in age increases the likelihood of having poor gait speed. It should be noted that those who had difficulty shopping (as controlled for using the shopping IADL) at T1 were almost six times as likely to have poor gait speed at T3 (OR 5.73; CI 3.25, 10.10). This suggests that the shopping IADL is accounting for some sort of physical function limitation. The full model containing all predictors was statistically significant ($\chi^2 = 168.290$, $df = 9$, $p < .001$) and explained 23 percent of the variance.

7.3.9 Ease of access and gait speed. The regression analysis using gait speed (good gait speed coded 0; poor gait speed coded 1) was repeated without the IADL shopping item. The change over time of ease of supermarket access was as above. In this analysis, poor gait speed at T1 was controlled for and demographic variables included gender, marital status and age groups. After controlling for other factors, the model (shown in Table 7.9) again shows that finding it difficult to access supermarkets at any time point increases the likelihood of having poor gait speed at T3. People who found it difficult to access supermarkets at both time points were the most likely to have poor gait speed (OR 4.31; CI 1.78, 10.46) once more suggesting that the number of periods of exposure have a cumulative effect.

Table 7.9. ELSA: logistic regression predicting the likelihood of poor walking speed at T3.

	Model 1		Model 2	
	OR	95% CI	OR	95% CI
Easy at both waves	1.00	-	1.00	-
From easy to difficult	6.18**	[3.40, 11.22]	2.84*	[1.33, 6.08]
From difficult to easy	5.45**	[2.55, 11.63]	3.36*	[1.39, 8.11]
Difficult at both waves	8.56**	[3.89, 18.87]	4.31*	[1.78, 10.46]
Gait speed at T1			41.92**	[20.64, 85.12]
Female			0.95	[0.57, 1.59]
Single/separated/divorced			1.00	-
Married			0.56	[0.26, 1.21]
Widowed			1.55	[0.70, 3.43]
Aged 65-74			1.00	-
Aged 75-84			3.93**	[2.34, 6.59]
Aged 85+			2.76*	[1.11, 6.87]
Pseudo R ²	8%		31%	
Model <i>p</i>	< .001		< .001	

Note. *N* = 1999. OR = odds ratio. CI = confidence interval.

p* < .05. *p* < .001

Again the model shows that finding it difficult to access supermarkets at any time point predicts the likelihood of poor physical functioning, measured by gait speed, at T3. Furthermore, as would be expected, being older predicts poor physical functioning. Thus, after controlling for baseline function, people who have continuous ease of access are more likely to retain good mobility as measured by walking speed. The full model containing all predictors was statistically significant ($\chi^2 = 216.432$, *df* = 9, *p* < .001) and explained 31 percent of the variance.

7.4 Shopping as a Physical Activity

In order to explore whether shopping contributes to health as a physical activity, analyses will draw from qualitative data in which interviewees discuss walking for shopping. However, to put this in context, SFQ respondents aged 65 and over report spending an average of 32 minutes (*SD* = 20.33) walking during their main food shopping trip; 18 minutes (*SD* = 12.67) during top-up food shopping trips; and 58 minutes (*SD* = 52.40) during non-food shopping trips. Yet, shopping trips may

involve a considerable amount of walking and, for some of the interviewees, walking for shopping provides their main form of physical activity:

I don't think I do much in the way of physical activity except that exercise you would get from doing your housework erm and walking round the town... that sounds pathetic but I don't know, it's surprising how long, you know, going up and round the high street several times. (Gloria, 76, married, Wales)

I'd walk into town, very rarely would I get the bus, apart from when it's lashing with rain, but no I mean I'd always walk, I'd never dream of getting a bus to walk, you know, into town, I'd always walk, it only takes about 10 minutes and I'd even walk back too. (Barbara, 79, widowed, Wales)

Indeed, Barbara, who lives on the outskirts of a town, enjoys walking and walks for all of her local shopping trips including those to the supermarket:

[It takes] about 20 minutes, you know, cos you sort of go across the fields and things and it's quite nice... Oh I would have to walk, you know, it's only just down the road I wouldn't ((laughing)) take a bus. (Barbara, 79, widowed, Wales)

Although Bronwyn lives in a rural area and would be able to get help with her shopping, she chooses to go out at least twice a week:

That's better for me to go out because there's the exercise involved as well, I have to walk to the bus erm and, you know, I have to- I need the exercise so erm it is better for me to go out. (Bronwyn, 90, widowed, Wales)

In contrast, Edith lives close to a shopping centre and frequently walks there and back even if she does not need to make purchases. Furthermore, her trips to the supermarket, which is located further away, involve a lot of walking and she mentions how such physical activity helps her to sleep:

Cos I don't drive er so if I do go I usually walk up there to <supermarket>... you won't believe this, [I spend] about three hours... Yeah! I come home and I go uhh! But it helps me to sleep. (Edith, 66, widowed, Wirral)

Using shopping trips as a form of physical activity is common even amongst those who drive:

[I go food shopping] several times a week really... Well yes because I use it as an exercise, just to keep walking... I like to get out cos you go stir crazy on your own, I like to get out and walk, take the fresh air. (Philip, 78, widowed, Wales)

But I walk a lot, yeah, I walk into <town>, say if I, I needed just a couple of things, pack on my back and I'll walk in, not take the car. Takes about 40 minutes. (Rhona, 69, married, Wales)

Indeed, choosing to walk to the shops rather than to drive is especially common amongst those who live close to shopping centres. For example, Ruth (66, married, Wales) walks to town and back "most days" and will only take the car if a larger shop is necessary. Similarly:

Sometimes I take the longer route round instead of going direct... just to get a walk, just get a bit of exercise... just because I'm out for a little bit of exercise rather, as much as to shop, you know. (Pat, 75, widowed, Wirral)

Yeah, I mean I'm quite active anyway, I play some sports and ride me bike but I do walk to the shops, like I say cos it's just round the corner so I go there and back most days. (Gary, 65, divorced, Wirral)

The finding that living in more walkable neighbourhoods results in more walking to places such as shops is consistent with other research (Leyden, 2003). Thus, moving to a more rural area has meant less shopping-related physical activity for Jill:

That's what I do miss because where we lived before I could walk to the shop and it gave me a bit of exercise but you've got to take the car now. It was a 15 minute walk up to the shop, which gave you an outing each day. (Jill, 79, married, Wales)

Perhaps as to be expected, walking for shopping is usual amongst the more physically able interviewees and may be seen as enjoyable:

Oh I'm all right walking, I'm, I'm a very active person. I like to walk, I've just walked to <town centre> this morning and walked back again. (Anna, 66, married, Wirral)

Likewise, Albert estimates that he spends 4 hours a week walking for shopping:

Oh yeah I would say so. I would say so. And it doesn't bother me, you know, it doesn't, I'll do it and I don't realise I've done it, you know, that's it. I suppose while you're healthy you do these things, you just don't think about it. (Albert, 68, married, Wirral)

For some of those who are less physically able, shopping-related physical activity is considered a way to prevent further decline in physical functioning:

And the mobility is not as good as it should be but it doesn't stop me going out every day and walking 'cause I think if you stop walking, making the effort that's, that's when the trouble starts ((laughs)). Yes, I would do it myself and just walk around slowly and get, do the round, 'cause I do the round, I go this way and walk all the way round and walk into, near to the village and- or even to the village and then walk back. That's my walk for the day to keep me mobile. And going to the post office and things like that, you know, which is, I'd go this way, go the long way round to the post office in the village. (Marjorie, 87, widowed, Wirral)

I think it's good for me to move though, I don't like sitting too much and, and just go round <supermarket> even is exercise I think, it does make you go, rather than sit on your bum and do nothing ((laughing)) I don't think that's good for you, no, especially for your back. (Gwyneth, 70, married, Wales)

Thus, it is evident that going shopping is used by many interviewees as a form of exercise and, although declining physical function presents some challenges, shopping may provide a considerable amount of physical activity even for those with mobility problems.

7.5 Discussion

7.5.1 Introduction. The aim of this chapter was to explore a potential relationship between shopping activity and physical health. To do so, results from

both secondary and primary data were presented to explore three research questions. Thus, the findings for each of those will be outlined and relevant limitations will be presented before a conclusion is provided.

7.5.2 Bidirectional relationship between shopping activity and health. The first research question asked whether there is a relationship between shopping and health. Initial results from TUS showed that respondents were less likely to have reported shopping activity if they had poorer self-rated health, which has been found by others (e.g. Thompson et al., 2011). Moreover, for both genders, married people with poorer health were much less likely to have reported shopping than married people with good health. That people were less likely to shop if married (which seemingly contradicts findings in previous chapters) was only significant once age was introduced. Therefore, there is the need to take into account that age confounds the relationship between being married and shopping because more people in the oldest age group will be widowed. However, it also suggests that married people share food shopping responsibility, especially when ill or in poor health, which is consistent with findings outlined in preceding chapters as well as in previous research (Turrini et al., 2010). In addition, results from regression analyses show that there is a bidirectional relationship between health and shopping activity: having good health predicts shopping activity and taking part in shopping activity predicts good health. Findings also suggested that there is no dose effect of shopping activity on good health, so shopping for longer did not provide a greater health benefit than shopping for shorter periods. This could mean that, although there may be an upper threshold, shopping for any length of time provides a health benefit in later life. However, it is important to remember that the study period covered only two days. As shown in this chapter (as well as in Chapter 4), older people are more likely to shop more frequently and may even shop every day, albeit for shorter periods at a time. In this analysis, these frequent shoppers (who buy little and often) would appear as people who had had little shopping activity, although on a weekly basis they may in fact spend longer overall.

7.5.3 Impact of shopping on physical health. The second research question, regarding whether shopping impacts on physical health, was addressed with analyses from ELSA. For those analyses, three measures of physical health were used: ADLs, self-rated health and gait speed. Results showed that among those who

wished to go to a supermarket, having more functional impairment, as measured by ADLs, meant that access to supermarkets became increasingly difficult.

Furthermore, regression analyses exploring change over time showed that finding it difficult to access supermarkets at any time point (even if ease of access improved) predicted both the likelihood of reporting not good health and the likelihood of poor physical functioning (as measured by gait speed). Thus, after controlling for baseline health, results showed that people who had continuous ease of access to supermarkets were more likely to have good health and to retain good mobility. These results may reflect greater independence in food shopping, which previous research has shown to be significantly associated with fewer health problems (Thompson et al., 2011). Again, it is important to note that even if access to supermarkets improved, there was a significant effect on physical function, although not as strong as if difficulty was experienced at both time points. This suggests that it is not the sequencing of finding it difficult to access but rather that the number of periods of exposure to difficulty have a cumulative effect. Therefore, the physical health decline shown at the later time point may be reflecting an accumulation of disadvantage, which is consistent with cumulative disadvantage theory (Dannefer, 2003).

7.5.4 Physical activity, shopping and health. The third research question explored whether shopping contributes to health as a physical activity from the perspective of those in later life. These data showed that walking while shopping may provide physical activity for people in later life. Data from SFQ provided an idea of how long people estimate they spend walking during shopping trips but it was not possible to calculate this with any accuracy; however, previous research suggests that in later life 40 percent of reported time walking is for shopping (Dallosso et al., 1988). Indeed, many of the respondents choose to go shopping in order to stay physically active and will walk to shops rather than drive or get others to shop on their behalf. This is especially the case for those who live in close proximity to shops and, therefore, their physical environments enable such activity. This has been shown by previous research considering walkable neighbourhoods in Ireland (Leyden, 2003). However, it may be that proximity to shops promotes physical activity among those with mobility disabilities too, as suggested by research in the US (Huang et al., 2012). It certainly seems that, for these respondents, physical

function limitations are not barriers to shopping-related physical activity; indeed, people continue to go to the shops even when it is physically difficult for them to do so. It may be that, for those who are experiencing declines in physical health, shopping-related physical activity is protective against further physical decline. Consequently, because it has been shown that this relationship is bidirectional, for those who are currently healthy, shopping-related physical activity may be protective against declines in health.

7.5.5 Limitations. There are limitations that must be considered. In the ELSA analyses, the shopping questions are limited to self-reported ease of access to certain shops and do not allow for inferences about shopping activity. For example, someone could report that it is easy to access supermarkets but does not actually go to supermarkets. Furthermore, it is not possible to determine what “ease of access” really means to the respondents. It may be that difficulties accessing shopping locations are due to living in an area in which shopping facilities are not available rather than that people are experiencing difficulty for health reasons. In spite of these limitations, ELSA provides representative longitudinal data with comprehensive health measures, which would not be available elsewhere. In addition, it is worth noting that data provided by SFQ probably under-estimate the amount of time respondents spend walking for shopping.

7.5.6 Conclusion. This chapter has presented evidence that shopping provides a customary physical activity in later life and has suggested that such physical activity may contribute to physical health. Although the data show that poorer health may lead to people shopping less, the relationship between shopping activity and health is bidirectional; thus, if you are healthy you are more likely to go shopping and if you go shopping you are more likely to be healthy. However, it seems that physical function limitations were not barriers to going shopping for the interviewees. On the contrary, people with mobility problems continued to go to the shops even when other options (e.g. help from others) were available. It is suggested that, as shopping provides a regular excuse or reason to be physically active, shopping-related physical activity may help to slow physical health decline.

Chapter 8

Cognition and Wellbeing

8.1 Introduction

The previous chapter established that the relationship between shopping activity and physical health is bidirectional. Yet, physical health is only one component of healthy ageing. In this chapter the focus will be on shopping activity as it relates to both cognitive and psychological health. To begin with, literature concerning cognitive activity as it relates to shopping behaviour will be outlined, preceding that of shopping activity and wellbeing in later life. Furthermore, as there is a strong social element to psychological wellbeing, this chapter will tie in findings from Chapter 6.

8.1.1 Cognitive activity and shopping. Normal cognitive ageing includes established declines in cognitive processes affecting functional abilities that relate to everyday tasks such as shopping, which involves cognitive activity through decision making, memory use and money handling. Intelligence, learning and memory are key cognitive domains that normally change during ageing and have implications for maintaining independence and quality of life (Hooyman & Kiyak, 2007). The changes observed with cognitive ageing are usually explained by changes in psychological or behavioural processes. These include sensory declines, working memory limitations and declines in executive functioning (Spiro & Brady, 2011).

Shopping requires making decisions regarding where to go, how often, what to buy and how much to spend. These decisions, as well as the handling of money, may contribute to the possible protective factor of cognitive activity. Mentally stimulating activities have been associated with significantly reduced risk of incident dementia (Karp et al., 2006). Furthermore, there may be a cumulative effect as engaging in activities that cover more than one mental, physical and social component (as shopping activity can do) seem to be more beneficial than to be engaged in one type of activity (Karp et al., 2006).

Food shopping requires the cognitive ability in order to plan and carry out the accessing of food, which may become more challenging due to functional limitations in later life (Huang et al., 2012). To date there has been little research to determine

the cognitive processes necessary for shopping activity or how people with cognitive impairment cope. However, it is worth considering some general insights into planning behaviours from consumer research. The planning stage prior to a shopping trip often takes the form of making a list and the authors of a New Zealand study (of all ages) found that around two thirds of people do so, which equates to some measure of pre-planning for grocery shopping (Thomas & Garland, 2004). Similarly, in an Australian study of the food shopping habits of baby boomers (aged 40-70), around 70 percent of participants reported using a list when shopping (Worsley et al., 2010). There were some gender differences as women tended to conduct more planning before food shopping than men did and older women in particular spent more time planning their food shopping (Worsley et al., 2010). Although the authors did not say why this may be the case, it is possible that the consequences of forgetting items may be greater for some groups depending on factors such as proximity to food locations and access to transportation.

An experimental approach was taken in a Canadian study of older married couples (aged 65 or older) and their ability to remember items on a shopping list. Participants chose items from a catalogue before being taken to a supermarket to get those items without the aid of their shopping list. It was found that those who were the usual grocery shoppers, i.e. the “experts”, remembered more items on a shopping list than their non-expert spouses (Ross, Spencer, Linardatos, Lam, & Perunovic, 2004).

It has been claimed that the main purpose of lists is not forgetting or not over buying (Thomas & Garland, 2004). Thus, shopping lists are effective external memory aids and there is some evidence that the likelihood of buying an item on the list is higher if the person who wrote the list also does the shopping (Block & Morwitz, 1999). However, 70 percent of those who do not use a physical list commit their list to memory or know what is wanted when shopping (Thomas & Garland, 2004). While this suggests an element of pre-planning, it also may be indicative of a considerable amount of cognitive activity taking place during the shopping trip.

8.1.2 Wellbeing in later life. Positive mental health can be defined as a combination of subjective wellbeing and of being fully functional (Huppert, 2005). Models of successful psychosocial ageing emphasise social interaction, life

satisfaction and wellbeing as major determinants (Lupien & Wan, 2005). With age, people tend to become happier and have better mental health (Lupien & Wan, 2005) and have a higher degree of life satisfaction (Horley & Lavery, 1995). Cross-national research using single-item measures of life satisfaction has found a U-shaped relationship between wellbeing and age; so, after reaching its lowest point in middle age, life satisfaction increases in later life (Blanchflower & Oswald, 2008). Recently it has been argued that an individual's satisfaction with the ability to cope with changes that come over time is one of the key components of successful ageing (Troutman-Jordan & Staples, 2014). Yet, wellbeing in later life from a researcher's standpoint may differ from that of a lay person. Using both survey and qualitative data from people aged 65 and older in Britain, Bowling and Stenner (2011) found that the central components of quality of life emphasised by respondents included psychological well-being, having health and functioning, social relationships, leisure activities, neighbourhood resources and independence.

As yet, there have been few studies that have examined whether higher levels of wellbeing might protect against cognitive decline (Allerhand, Gale, & Deary, 2014). However, one such study examined the association between perceptual speed and wellbeing using longitudinal data of 516 people (aged 70 and over) from 13 years of the Berlin Aging Study. The authors found that greater positive wellbeing (measured using items on life satisfaction and satisfaction with ageing) was linked with slower decline in perceptual speed (measured by Digit Letter and Identical Pictures tests) (Gerstorf, Lövdén, Röcke, Smith, & Lindenberger, 2007). A recent study (Allerhand et al., 2014) using four waves of ELSA (10985 people aged 50-90 at wave 1) found small but significant associations between cognition (measured by tests of verbal fluency, immediate recall, delayed verbal memory, and attention) and wellbeing (measured by CASP-19). Although most variation in cognition was explained by age and most variation in wellbeing was explained by depression, the small association between cognition and wellbeing remained after variation in age and depression were controlled (Allerhand et al., 2014). However, the authors noted that while at a population level (i.e. between-person effects) greater wellbeing may be linked with a reduced risk of cognitive decline, at an individual level the apparently protective relationship of wellbeing on cognition does not hold (Allerhand et al., 2014).

8.1.3 Shopping and psychological wellbeing. In later life, shopping activity may fulfil fundamental needs that play an important role in psychological wellbeing, particularly as older people in the UK consider such factors as independence, having social contacts, and access to services and local facilities as integral to ageing well (Bowling, 2008). So, having access to shops facilitates the ability to shop and to maintain shopping independence, which has implications for wellbeing. A recent study of 425 older (aged 65+) New Zealanders found several factors that predicted overall life satisfaction, which included levels of activity in domains of daily living (including shopping), independence in those domains, and respondents' satisfaction with their independence (Good, Grow, & Alpass, 2011). This study was limited to community-dwelling individuals in one area of New Zealand; however, it is interesting to note that, although almost all (93%) reported impairments or health conditions, the number of impairments was not significantly correlated with life satisfaction. Moreover, the authors found that the level of performing shopping activities was not significantly different across age groups (65-74, 75-84, 85+), with 76 percent of participants engaged in local shopping activity at least weekly (Good et al., 2011). So, being able to go shopping, having shopping-related independence and having satisfaction with levels of independence can impact on life satisfaction.

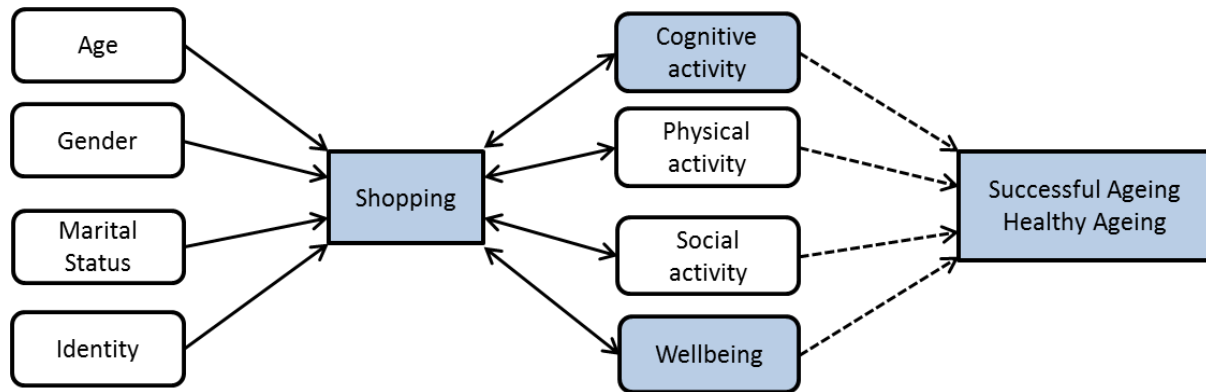
While there has been limited research exploring an association between shopping activity and wellbeing, there is further evidence to suggest a potential link. For example, a US study explored the clothes shopping behaviour of women aged 55 and over. The authors concluded that clothes shopping was significantly correlated with life satisfaction and that leisure activity (including shopping) had a significant effect on life satisfaction (Joung & Miller, 2007). Although the authors point out that social activity is a key factor in life satisfaction, they failed to include shopping as a social activity in their analysis. However, another US study of women aged 55 and over found that those who were more engaged in social interactions and interpersonal relations while shopping had more positive self-esteem and lower levels of depression than those who were less engaged in social shopping activities (Kang & Ahn, 2014). One potential pathway between social shopping and wellbeing may be the alleviation of emotional or social isolation, which might be of particular importance for those who live alone. It has been suggested that, as an outlet for social participation, visiting shopping malls provides older people with an avenue for

reducing feelings of loneliness (Kim et al., 2005). Again, these studies are limited to the US and may not be representative of a UK population or reflect the places (e.g. shopping malls) in which older people in the UK shop. Moreover, they have taken a narrow view of shopping activity (shopping for clothes) that is limited to women (see Joung & Miller, 2007; Kang & Ahn, 2014). However, when considered alongside findings from previous chapters that show the importance of shopping as a social activity in later life, these studies suggest that it is worth considering the potential association between shopping activity and wellbeing.

Recent years have seen a focus on researching motivations for recreational shopping, which refers to leisure-time enjoyment (Bäckström, 2011). Accordingly, shopping has been researched for its pleasure inducement or hedonic value; for example, there may be much pleasure derived from bargain hunting (Arnold & Reynolds, 2003). Moreover, people engage in 'gratification' shopping as stress relief, a way to alleviate negative mood, or as a treat to oneself (Arnold & Reynolds, 2003). Another focus has been on examining the social benefits derived from shopping, in particular, regarding the social interaction with friends or family members as a motivation for shopping (Bäckström, 2011). It has been posited that the benefits of shopping with a companion include the shared experiences and getting help with decision making (Borges et al., 2010). Furthermore, shopping with companions may encourage social exchange with others; hence, there may be more positive affect when shopping with a friend compared with either being alone or being with a family member (Borges et al., 2010). Consequently, shopping motives are a function of many variables, some of which are unrelated to the buying of products (Tauber, 1972) and include, but are not limited to, the hedonic value derived from the act of shopping and social engagement, either from shopping with others or from being around others.

8.1.4 Aims and research questions. The literature suggests that shopping requires cognitive ability and that the cognitive activities that take place while shopping may provide a protective factor against cognitive decline. In addition, shopping may contribute to wellbeing in later life as social activity and for its hedonic value. Both cognitive function and wellbeing are major components of healthy ageing; thus, the proposed relationship between shopping activities and healthy ageing is shown in Figure 8.1.

Figure 8.1. Proposed model of the mediating role shopping plays in healthy and successful ageing.



As shown above, cognitive activity and wellbeing are two of four key areas in which it is proposed that shopping contributes to healthy ageing. Therefore, the purpose of this chapter will be to explore cognitive health and cognitive activity as they relate to shopping behaviours, as well as to show how shopping may contribute to psychological wellbeing. To this end, this chapter will be concerned with the following research questions:

- Does shopping activity contribute to cognitive health?
- What types of cognitive activity are evident in shopping practices?
- How and why does shopping contribute to psychological wellbeing?

As in previous chapters, results from both secondary and primary data will be presented and integrated where possible. As mentioned earlier, social activity is strongly associated with wellbeing so findings from Chapter 6 will be considered where relevant.

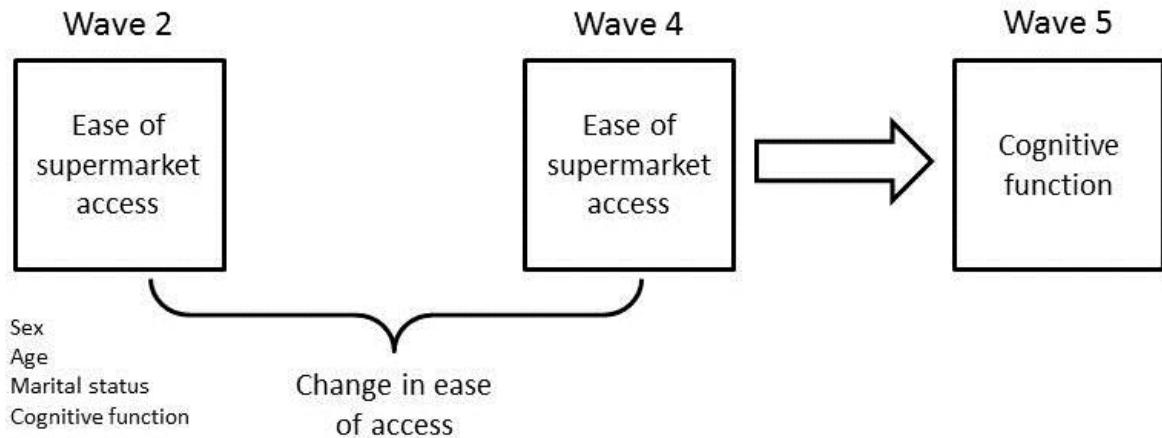
8.2 Cognitive Health and Shopping

This section will show how shopping activity may contribute to cognitive health by providing results from longitudinal data analyses of cognitive function measures.

8.2.1 Cognition and ease of supermarket access. In order to explore whether shopping activity impacts on cognitive health, longitudinal data from ELSA were used. As not every question is asked at each wave of ELSA, the waves chosen for this analysis are those that were able to contribute relevant data. Specifically, as shown in Figure 8.2, Wave 2 provided T1 shopping and sociodemographic variables.

As Wave 3 did not contain shopping questions Wave 4 was used as T2. The most recent wave with cognitive functioning measures (Wave 5) was used as T3.

Figure 8.2. ELSA: contribution of waves to cognitive function analyses.



Note. Data collection per wave: Wave 2: 2004-2005; Wave 4: 2008-2009; Wave 5: 2010-2011.

8.2.2 Ease of access as a predictor of cognitive function (memory). In

order to explore whether perceptions of ease of access to supermarkets predicts cognitive function, logistic regression was performed to assess the impact of change in ease of access over time, controlling for sociodemographic variables, on the likelihood of having impaired cognitive function. As memory and executive function are different measures of cognitive function they were analysed separately. As in previous analyses, the change in ease of access was in four levels: easy at both waves (easy with no change from T1 to T2); from easy to difficult (easy at T1 and difficult at T2); from difficult to easy (difficult at T1 and easy at T2); difficult at both waves (difficult with no change from T1 to T2). For this analysis, memory (delayed recall) was used as the measure of cognitive function. Participants were presented with a list of 10 words and were asked to recall those words after an interval during which other cognitive tasks were performed. A high score on the index shows good cognitive function. This index was used to control for cognitive function at T1. However, for the dependent variable, this was dichotomised into those with impaired cognitive function (scored as 1) and those without impairment (scored as 0). In order

to do this, scores on the index were standardised and a score of less than -1 SD from the mean was used to define impairment, as described elsewhere (Hamer et al., 2014).

As shown in Table 8.1, in the unadjusted model, compared to those who reported that it was easy to access supermarkets at both T1 and T2, those who found it easy at T1 but difficult at T2 were almost twice as likely to have impaired cognitive function (OR 1.87; CI 1.13-3.10). However, those who found it difficult at both time points were over three times as likely (OR 3.16; CI 1.65-6.05). After controlling for sociodemographic variables and cognitive function (memory) at T1, the odds were substantially attenuated. Those who reported access to supermarkets was easy at T1 and difficult at T2 no longer have a statistically significant increased likelihood of having impaired cognitive function and for those who found it difficult at both T1 and T2, the odds ratio had been reduced to 2.06 (CI 1.03-4.11).

Table 8.1. ELSA: logistic regression predicting the likelihood of impaired cognitive function (memory).

	Model 1		Model 2	
	OR	95% CI	OR	95% CI
Easy at both waves	1.00	-	1.00	-
From easy to difficult	1.87*	[1.13, 3.10]	1.26	[0.74, 2.14]
From difficult to easy	1.95	[0.89, 4.24]	1.26	[0.54, 2.94]
Difficult at both waves	3.16**	[1.65, 6.05]	2.06*	[1.03, 4.11]
Cognitive function at T1			0.98**	[0.98, 0.99]
Female			0.94	[0.68, 1.30]
Single/separated/divorced			1.00	-
Married			0.83	[0.50, 1.36]
Widowed			1.17	[0.70, 1.98]
Aged 65-74			1.00	-
Aged 75-84			2.55**	[1.87, 3.50]
Aged 85+			4.81**	[2.25, 10.28]
Pseudo R ²	2%		13%	
Model <i>p</i>	.001		< .001	

Note. *N* = 1957. OR = odds ratio. CI = confidence interval. **p* < .05. ***p* < .001

Furthermore, the model shows that, among those who wished to go to a supermarket, being older increases the likelihood of having impaired cognitive function, after controlling for other factors in the model. Prior cognitive function is inversely associated with the risk of later impairment; however, it is important to remember that at T1 a high score on the cognitive index indicates good cognitive function. So this shows that having good cognitive function at T1 is a protective factor against later cognitive decline. The full model containing all predictors was statistically significant, $\chi^2 = 129.917$, $df = 9$, $p < .001$, and accounts for 13 percent of the variance.

8.2.3 Ease of access as a predictor of executive function. Again, logistic regression was performed to assess the impact of change in ease of access over time and demographic variables on the likelihood of having impaired cognitive function. The change in ease of access was in four levels, as above. For this analysis, executive function (verbal fluency) was used as the measure of cognitive function. Participants were asked to name as many animals as they could in 1 minute and a high score shows good cognitive function. As above, the cognitive function index was used to control for cognitive function at T1. However, for the dependent variable, this was dichotomised into those with impaired cognitive function (scored as 1) and those without impairment (scored as 0). In order to do this, scores were standardised and a score of less than -1 SD from the mean was used to define impairment, as described elsewhere (Hamer et al., 2014).

In the unadjusted model (shown in Table 8.2), compared to those who reported that it was easy to access supermarkets at both T1 and T2, those who found it easy at T1 but difficult at T2 were more than three times as likely to have impaired cognitive function (OR 3.45; CI 2.24-5.33). In addition, those who found it difficult at T1 but easy at T2 were almost four times as likely (OR 3.78; CI 1.95-7.33). After controlling for sociodemographic variables and cognitive function (executive function) at T1, the odds were reduced but remain statistically significant. Those who reported access to supermarkets was easy at T1 and difficult at T2 were almost twice as likely to have impaired cognitive function (OR 1.95; CI 1.22-3.13). For those who found it difficult at T1 and easy at T2, the odds ratio had been reduced to 2.45 (CI 1.19-5.05).

Table 8.2. ELSA: logistic regression predicting the likelihood of impaired executive function.

	Model 1		Model 2	
	OR	95% CI	OR	95% CI
Easy at both waves	1	-	1	-
From easy to difficult	3.45**	[2.24, 5.33]	1.95*	[1.22, 3.13]
From difficult to easy	3.78**	[1.95, 7.33]	2.45*	[1.19, 5.05]
Difficult at both waves	1.37	[0.57, 3.27]	0.75	[0.30, 1.86]
Cognitive function at T1			0.79**	[0.75, 0.84]
Female			1.04	[0.75, 1.44]
Single/separated/divorced			1	-
Married			0.72	[0.45, 1.17]
Widowed			1.16	[0.70, 1.93]
Aged 65-74			1	-
Aged 75-84			2.07**	[1.51, 2.83]
Aged 85+			3.26*	[1.49, 7.16]
Pseudo R ²	4%		17%	
Model <i>p</i>	< .001		< .001	

Note. *N* = 1964. OR = odds ratio. CI = confidence interval. **p* < .05. ***p* < .001

After controlling for other factors the model shows that being older increases the likelihood of having impaired cognitive function. Finding it difficult to access supermarkets at both T1 and T2 does not increase the likelihood of having impaired cognitive function at T3. Again, prior cognitive function is inversely associated with the risk of later impairment as a high score at T1 indicates good cognitive function. The full model containing all predictors, shown in Table 8.2, was statistically significant, $\chi^2 = 172.228$, *df* = 9, *p* < .001. Nevertheless, it is important to note that the model accounts for just 17 percent of the variance and, therefore, there are other factors that influence these findings.

To summarise, the results from analyses of both measures of cognitive function show that finding it difficult to access supermarkets increased the likelihood of having impaired cognitive function. Using memory as the cognitive function outcome measure, increased impairment was evident after having difficulty at both earlier time points. In contrast, having difficulty at either of the earlier time points predicted decreased executive function.

8.3 Shopping-Related Cognitive Activity

In order to determine what types of cognitive activity are evident in shopping practices, qualitative data will be used. Analysis of these data revealed the areas in which shopping encompasses cognitive activity and which potentially may contribute to cognitive health.

8.3.1 The role of shopping lists. Food shopping in particular requires some element of planning, which often takes the form of list making. Previous research has suggested that the main purpose of shopping lists is not forgetting items and, to a lesser extent, as a way of controlling spending (Thomas & Garland, 2004). Incidentally, there is no explicit evidence in this sample that shopping lists serve as a budgeting tool or a way to limit spending. However, there is much evidence in the qualitative data that shopping lists serve as a memory aid, for example:

Yes, we've got, especially with <husband> cooking, he has a little list in the kitchen there and er whatever we're running out of or he'll think we need more carrots or whatever, he'll put it on that list, you know, it's handy and then when I go round I add to it when I see something I fancy or I know with washing up liquid or washing up erm powder, things like that I do myself really cos he doesn't do the housework... I put it down otherwise I would forget, you know.
(Gwyneth, 70, married, Wales)

Having a list may help with remembering to pick up items while shopping but does not prevent spontaneous purchases:

On the Friday morning, for the proper shop, I always do a list, which I do usually stick to unless I do see something which is a real bargain, which I know I'll use and then I'll have it. But erm fortunately, you know, I'm sort of comfortably off, I don't have to count every penny. (Bessie, 84, widowed, Wirral)

So, although having a list helps Bessie to remember what she needs, it is not used as a prescriptive measure. However, the importance of having a list seems to differ depending on individual circumstances. For example, Alice's functional limitations mean that she needs help to go shopping and only is able to shop once a week:

Oh yes, I try and remember er you know, if I run out of something I pop in here, write it down because with only going once a week it's mm. But if I forget something it's just too bad. (Alice, 95, widowed, Wales)

Although Alice is able to ask a friend to pick up forgotten items on her behalf, she reports preferring to shop for herself, which may be indicative of her need to retain some independence. In contrast, the need to remember items is less important for those with functional limitations who still are able to drive:

Yeah, [I make lists] most of the time, I mean things like bread erm yeah, bread, yes I shall be running short of bread so I'll need bread tomorrow erm but I don't worry about it because it's a hop, skip and a jump down there. (Philip, 78, widowed, Wales)

So, even though Philip makes a list of things he needs, forgetting items is not particularly inconvenient as he is able to drive and makes frequent trips to the town centre. Where lists may serve as a more important memory aid is when used for items that are needed less often. This is pointed out by Helen, for example:

I do it as I sort of see there are things we need, it's not so much the, the food because that's partly seeing what's there but it's things like cleaning things that you might not think of when you actually get there. You know the things that come up every now and then rather than anything else. (Helen, 72, married, Wales)

Again, being independent and having the ability to drive mean that forgetting an item would cause Helen to have only minor inconvenience. In brief, comments such as those given above suggest that lists often are used as memory aids both in the planning of shopping trips and while shopping. Yet, the importance of having shopping lists may differ depending on individual circumstances.

8.3.2 Forgetting shopping lists. Although many of the interviewees make shopping lists, frequently it emerges that people forget to take their lists shopping. This is illustrated by Jill: "Well I do but I very often leave them behind ((laughs)). I try to plan, yeah," (Jill, 79, married, Wales) and Charles: "Oh yes, she always writes her list out and usually forgets it," (Charles, 81, married, Wales). Similarly:

Yeah, no, we do ma-, we do try to make a list er for simple reason is er it's stupid to go down to anywhere, wherever you're going and forget something, you do but you try not- what happens usually with <wife>, forgets the list in the first place ((laughs)). (Jack, 79, married, Wales)

No, which we should ((laughs)). But no, you just mooch around the shop and get what you think you want... sometimes I'll write it down, I sometimes write it down but then I'll sometimes leave it behind ((laughs)). (Lyn, 70, married, Wales)

Well I do, you know, I tend to when we run out of things I write things down... but sometimes you forget it don't you if you're in a rush or you forget where you've put it sometimes or erm but I suspect yeah, I do tend to write a list down when we run out but occasionally you, you don't ((laughs))... I do make a list but I didn't today because it was, it wasn't much to buy. (Ruth, 66, married, Wales)

Ruth implies that she does not need to take her list on shopping trips in order to remember what she needs and especially not when shopping for a few items. Similar to Helen's comments above, Linda implies that having a list to aid memory is more important for less usual items or shopping trips:

Well if I do, I suppose everybody says this, I usually forget it. But if I have written a list that would only be if I was having people to stay or something like that, you know, but not for myself I wouldn't... but erm I think the fact of writing it down does help but erm even if you forget the list, you know. (Linda, 83, widowed, Wirral)

Thus, it may be that the act of making a list in itself serves as a memory aid, whether or not the list is taken on shopping trips. This suggests that the cognitive processes taking place at the planning stage are helping people to solidify their needs and commit their lists to memory. However, this process is not infallible, for example, when Pat is asked whether she remembers items on her forgotten list she replies: "Most of the time, I remember most of it I would say but not necessarily all of it," (Pat, 75, widowed, Wirral). When asked if she is likely to remember because she gets the same items each week, Pat replies:

Possibly, possibly, yeah, that's possible. But then you don't always get exactly the same things every week, you know, I never forget me milk, bread or butter ((laughs)). You know, those things you don't, you know, but yeah, it's usually the likes of kitchen rolls or toilet paper or <cleaning supplies>, that kind of thing is the kind of thing you forget. (Pat, 75, widowed, Wirral)

Again, remarks such as this suggest that people are more likely to forget unusual items and to remember their usual purchases. However, for Pat, who lives close to shopping facilities and is able to drive, forgetting items is not as inconvenient as it would be for people who are not as independent.

8.3.3 Shopping and memory. In contrast, two of the participants mention that they do not make a physical shopping list and rely on memory alone to purchase what they need. For example:

No, no. I, well I've been, as I say, I've been- worked as a chef, I've been in that food business all me life so I open the fridge and blink and it's all in the brain. Hopefully ((laughs)). So normally I know what's in the fridge, what's in the freezer, what's in the cupboards and you know. (Frank, 77, married, Wales)

But I never do a list, cos I'd just forget it. I do! I always- I've done a list once and I put it in my pocket and I go into the shop, oh I knew I had the list with me and I couldn't remember where I'd put the list but I was getting things what I thought I needed, I come home and I go oh it's in my pocket and what was on that list is exactly what I got cos I remembered everything I'd put down, yeah. (Gaynor, 69, divorced, Wales)

Clearly, both Gaynor and Frank are able to rely on their memories alone although they attribute this ability to different reasons. For Frank, a lifetime of working in food-related jobs and being the cook in the household result in a familiarity with food. This allows him to quickly gauge what is needed as well as the ability to remember those needs, which supports literature on expertise and memory recall (Vicente & Wang, 1998). Similarly, Gaynor is able to look in her cupboards, assess her needs and retain that information but associates this ability with having a "good memory".

Conversely, other interviewees imply a possible decline in cognitive function and attribute their memory decline to ageing. For example:

Yeah, I write it down on a piece of paper. I have to. As I said, me memory's gone and I have to write everything down on a piece of paper, a piece of paper like that, and it builds up to about six items, I go to <supermarket>, finish up buying 10 things ((laughs)) and erm that'll be it but I probably will find out oh Christ, you've gone down in sugar, your bread's gone a funny colour, you have to go twice. (Allun, 87, widowed, Wales)

So she puts it down every day and of course by next week she'll have forgotten that ((laughs)). It could be something completely different, it's just getting old. (Ernie, 80, married, Wales)

Whereas Allun needs to write down everything in order to remember and finds his decreased cognitive function “embarrassing”, Ernie’s comments suggest an expectation of memory decline with ageing. This expectation is implied by others, albeit sometimes in a more subtle way:

No, I know what I need, in my head and er sometimes I come back and think I should've grabbed that erm but no I'm, I'm not a listy person, probably at my age I should be erm because you know you can have a complete blank. (Barbara, 79, widowed, Wales)

Although Barbara does not make lists and is able to remember most of the needed items when shopping, she attributes the occasional memory “blank” to getting older.

8.3.4 List making and identity. Above, Barbara claims not to be the type of person to make lists; similarly, the idea that there is a personality type associated with list-making is implied by Robert:

Oh no we don't make lists, Christ no ((laughing)) we're not that organised. ((Laughing)) we're real people, you know, we don't fig around with lists and things. (Robert, 67, married, Wales)

Although in these comments there is no reference to gender, there is some evidence to suggest that women may be more likely to be list makers (Thomas & Garland, 2004). A gender difference is not supported by the current research but two of the married men do make comparisons with their wives:

My wife makes a list but I don't, I never make a list. I might be given a list ((laughs)) and then I've got a list but I never write a list. She asked me to go the other week to get certain things and she wrote one then, automatically just wrote them up, not because I couldn't remember what it was but just she wrote one and said well you're going past a shop, pop in and get these. (Donald, 70, married, Wales)

Thus, Donald distances himself from the need to have a list and implies that, even though he is able to rely on his memory, it is his wife's preference that he shops with a list. In contrast, Harold suggests that using a list and sticking to it is a sign of strength:

Occasionally my wife will make a list erm but because it's a supermarket you see things that aren't on the list and she hasn't got the discipline to say it's not on the list I'm not buying it, whereas I would do. If she's away at my daughter's, well I used to, I used to write a list out and I would only buy what was on the list because I'd looked in the cupboard and seen what I required but anything that wasn't on the list didn't get bought. But my wife's not as strong as that. (Harold, 67, married, Wales)

So, rather than disassociating from list-making, through these comparisons with his wife Harold seems to suggest that departing from a list is a (feminine?) weakness and by using lists it reinforces his 'masculine' traits such as discipline and strength.

8.3.5 Cognitive activity while shopping. There are several examples of cognitive activity during shopping trips, especially supermarket shopping. Although not frequently expressed, comments on making price comparisons illustrate such cognitive activity:

It's an interest and you've got to work out what you need and how much things cost and you'll compare the prices [of] big items and everything. (Ruth, 66, married, Wales)

Moreover, there is evidence of decision making occurring during shopping trips:

Well I suppose it must do cos you've got to use your brain to work out, you know, what you're going to buy and all the things you need, you know, you've

still got to think about it, haven't yer? Yeah, I'd say er, if things are gonna be worth and if it's the right thing, you know, if you're getting the right thing.

(Maureen, 80, widowed, Wirral)

Maureen is an example of someone who does not use shopping lists, consequently, while shopping she relies on her memory and utilises other cognitive processes such as reasoning in order to work out what she needs.

Although some of the interviewees say they are able to tally costs while shopping it seems to be uncommon practice. However, it is fairly typical to have a general idea of the total cost when getting to the till: "Erm I have an idea, yeah, erm, you know, that'll be blah blah blah," (Rhona, 69, married, Wales);

Subconsciously yeah, yeah subconsciously yeah, yeah I won't say to the penny but I'll look at the trolley and think it's a big shop this week or we haven't spent much this week, yeah. (Frank, 77, married, Wales)

Oh no, going around erm no, not really, perhaps er that's another thing I've seen people writing things down but I don't care ((laughs)). But no, I will get to the till and I'll think of what I, whether it's worth paying by cash or my card and I'll have a rough idea that it's going to be under 10 pounds, which I'd probably just normally pay with cash. (Linda, 83, widowed, Wirral)

Moreover, the majority of the interviewees are comfortable financially and do not pay attention to costs: "No, no. And if you asked me how much anything costs I wouldn't know either ((laughs)), " (Helen, 72, married, Wales). Nevertheless, some of the interviewees are more aware of food costs, for example Brenda, who even uses that knowledge as a planning tool:

Well actually when I make a shopping list I try and remember the prices from before and work it out then.... Yes, oh everything's planned for in advance that I do ((laughs)). (Brenda, 86, widowed, Wirral)

Furthermore, there is evidence that some of the respondents find shopping a mentally stimulating activity and one such example is Frank. After talking about relying on his memory for food shopping and "subconsciously" knowing how much his shopping will cost, Frank adds: "It does keep you mentally active, doesn't it,

shopping,” (Frank, 77, married, Wales). Similarly, when asked if going shopping helps keep her mentally active, Bessie replies:

Oh I think it must do. I think anything that you do that gets you out helps your mental state. (Bessie, 84, widowed, Wirral)

Likewise, Gwyneth refers to shopping activity as an “exercise for your mind”:

It makes you think, doesn't it, mm definitely... I think it is good for your mind that, well that's another exercise for your mind, isn't it, with us- I find that <friend> now, she doesn't go food shopping, well I think, I think she's like, it's, it's bad for her mind, you know. (Gwyneth, 70, married, Wales)

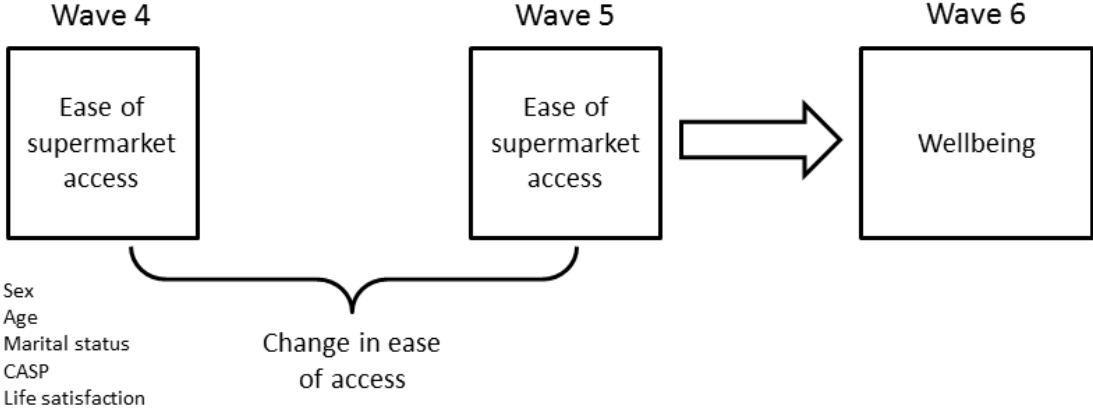
Interestingly, Gwyneth explicitly suggests that not being able to shop has had a negative impact on her friend's cognitive function. Although it is wise to be prudent about making inferences from a single comment, there is definite awareness in this and other interviews that shopping encompasses cognitive activities both in the planning stage and while shopping.

8.4 Psychological Wellbeing and Shopping

This section will show how shopping activity may contribute to psychological wellbeing by providing results from longitudinal data analyses of wellbeing measures and from qualitative data analysis.

8.4.1 Life satisfaction and ease of supermarket access. In order to explore whether shopping activity impacts on psychological wellbeing, longitudinal data from ELSA were used. As the questions used for the following analyses were asked at each wave of ELSA, the most recent waves were chosen. Specifically, as shown in Figure 8.3, Wave 4 provided T1 shopping and sociodemographic variables, Wave 5 was used as T2 and Wave 6 provided wellbeing measures at T3.

Figure 8.3. ELSA: contribution of waves to wellbeing analyses.



Note. Data collection period per wave: Wave 4: 2008-2009; Wave 5: 2010-2011; Wave 6: 2012-2013.

Linear regression was performed to assess the impact of change in ease of access over time and demographic variables on the likelihood of reporting psychological wellbeing. The change in ease of access was in four levels, as described above, and again, only those who wished to go to the supermarket were included. For this analysis, single-item life satisfaction was used as a commonly employed measure of wellbeing in later life (Gaymu & Springer, 2010). Participants were asked: Please say how much you agree or disagree with the following statement: I am satisfied with my life. The response options were strongly agree, agree, slightly agree, neither agree nor disagree, slightly disagree, disagree, strongly disagree. These responses were reverse-coded to be in ascending order; for example, 1 became strongly disagree, 7 became strongly agree.

As shown in Table 8.4, finding it difficult to access supermarkets at any time point (either T1 or T2, or both T1 and T2) led to a slight decrease in life satisfaction at T3. However, there is a larger decrease in life satisfaction after moving from easy to access at T1 to difficult to access at T2.

Table 8.3. ELSA: Linear regression of life satisfaction at T3.

	<i>B</i>	<i>SE B</i>	β
Easy at both waves	1.00		
From easy to difficult	-0.54	0.12	-0.09**
From difficult to easy	-0.44	0.14	-0.06*
Difficult at both waves	-0.42	0.15	-0.05*
Life satisfaction at T1	0.54	0.02	0.51**
Female	-0.06	0.05	-0.02
Age	-0.02	0.01	-0.08**
Married	0.06	0.06	0.02

Note. $N = 2106$. * $p < .05$. ** $p < .001$

The model shows that among those who wished to go to supermarkets, life satisfaction at T1 explains much of the variance. As would be expected, this shows that life satisfaction at T1 has a strong association with life satisfaction at the later time point. The total variance explained by the model as a whole was 29.4%, $F(7, 2098) = 124.99$, $p < .001$.

8.4.2 Ease of access as a predictor of quality of life. Again, linear regression was performed to assess the impact of change in ease of access over time and demographic variables on the likelihood of reporting psychological wellbeing. The change in ease of access was in four levels, as above. For this analysis, CASP quality of life scale was used as the measure of wellbeing, as it appears in every wave of ELSA and so enables longitudinal analysis. CASP is a well-established measure encompassing four non-hierarchical life domains (Control, Autonomy, Self-Realization and Pleasure) in a 19-item self-rated questionnaire and is described in full elsewhere (Hyde, Wiggins, Higgs, & Blane, 2003). It covers the positive and beneficial aspects of ageing rather than just on the medical and social care that have been seen to typify the ageing process (Lima et al., 2014). For the purpose of this analysis, the overall CASP-19 score was used, which is a summative score of 0-57 with a high score indicating higher quality of life.

As shown in Table 8.3, finding it difficult to go at both T1 and T2 resulted in lower quality of life at T3. Furthermore, a move from difficult to access at T1 to easy to access at T2 resulted in lower quality of life at T3. Although the same pattern is seen when moving from easy to difficult, it is not a significant finding. This suggests

that other factors have impacted on quality of life at T3, which will be discussed at the end of the chapter.

Table 8.4. ELSA: linear regression of quality of life at T3.

	<i>B</i>	<i>SE B</i>	β
Easy at both waves	1.00		
From easy to difficult	-0.43	1.58	-0.01
From difficult to easy	-5.86	1.89	-0.06*
Difficult at both waves	-4.91	1.96	-0.05*
CASP at T1	0.37	0.02	0.31**
Female	-2.07	0.70	-0.06*
Age	-0.37	0.06	-0.13**
Married	-0.55	0.74	-0.02

Note. $N = 2198$. * $p < .05$. ** $p < .001$

Again, the model shows that among those who wished to go to a supermarket, quality of life at T1 explains much of the variance. The total variance explained by the model as a whole was 15.7%, $F(7, 2190) = 58.33$, $p < .001$.

To summarise, findings from analyses of the two wellbeing measures show slightly different results. For life satisfaction, having difficulty accessing supermarkets at any time point led to a decrease in later life satisfaction. In addition, there was a larger decrease in life satisfaction when moving from easy to access to difficult. For quality of life, finding it difficult at both time points led to a decrease in wellbeing, as did a change from difficult to access to easy. The potential reasons for these slightly different findings will be considered in the discussion section.

8.4.3 Shopping-related social activity and wellbeing. As suggested by the analyses above, there is a relationship between having access to shops and wellbeing; however, it is not possible to extrapolate further on those results without utilising qualitative data. As shown in Chapter 6, shopping often is considered to be a social activity and the social interaction people gained during shopping trips often was expressed as a pleasurable experience. There was an awareness of the psychological benefits of shopping-related social activity and people choose to go

shopping for those benefits. One example of social activity is bumping into people who are known while out shopping:

Oh yeah, especially, especially when I go to <shopping centre>, when I walk down to <shopping centre> erm I quite enjoy that because I always, always meet somebody, always. (Sheila, 65, married, Wirral)

Another example is the pleasure gained from shopping with other people:

If I'm going to go shopping like mainly for food, yes, my husband and I enjoy it cos we enjoy each other's company. (Betty, 70, married, Wales)

As mentioned previously (see Chapter 6), this may be especially important for people with physical function limitations who have fewer opportunities to get out. This is the case with Alice who says of her weekly shopping trip: "It's quite nice to have a little outing," (Alice, 95, widowed, Wales). Similarly:

I quite enjoy that, you meet people and you chat and er even if it's just to say well it's cold today or ((laughs)) something like that yes, yes. (Bronwyn, 90, widowed, Wales)

Bronwyn expresses enjoyment from shopping and does not allow her functional limitations to deter her from going herself. Likewise, Allun does not let his health problems prevent him from shopping:

Yeah shopping is a problem but I get over it, it, it doesn't worry me, no, shopping doesn't worry me at all. As a matter of fact I like going out shopping, it's a bit of a change. (Allun, 87, widowed, Wales)

Both Bronwyn and Allun are able to shop independently but Doris must rely on help to do her shopping: "but shopping is, isn't erm fun anymore, love, no it isn't and it takes me so long". Yet, even though Doris finds shopping less fun than in the past, she says of bumping into people while in the supermarket:

That I love, that I enjoy because I've got my stick and that I can lean on it, you know, and enjoy- you see I enjoy talking don't !! Yes but it can be a lovely social occasion which I do enjoy (Doris, 92, widowed, Wales)

So although Doris finds shopping more difficult since losing her sight, she still expresses the pleasure she gets from social activity while shopping. Clearly, for these participants shopping activity is contributing to their wellbeing. This may be through simply getting out of the house, talking to others or by maintaining some degree of independence.

8.4.4 Leisure shopping. As suggested elsewhere (Miller, 2005), the idea of shopping as pleasure is closely associated with the idea of shopping as leisure. This often takes the form of window shopping or browsing during which there is no specific intention to purchase. For example:

Oh yes, yes, yeah I like to er travel round the antique shops and peer at things that I can't ((laughing)) you can't afford. (Philip, 78, widowed, Wales)

I quite enjoy it, yeah. Well it passes time erm I suppose really it's what, what sort of shopping you, what you're actually shopping for erm as I say, clothes yes... I could browse round shops just looking at things, not particularly to buy but just looking... being in shops, I love the smell of shops you go into, like <department store> where you go through the er beauty department and you get all this gorgeous perfume ((laughs)) that's nice, yes, I like that. (Barbara, 79, widowed, Wales)

Furthermore, some of the interviewees express pleasure from bargain hunting, particularly browsing round charity shops:

But er you'll get a bit of a kick from it too, sometimes I've picked up a book which is worth say erm about 15 pounds for about 50 pence or something like that... it's a bit of fun. (James, 80, widowed, Wirral)

I enjoy going into the charity shops and seeing, you know, er if there's any bargains in there, yeah, I love it. (Mary, 65, married, Wirral)

As is consistent with previous research (Campbell, 1997), some interviewees make a distinction between food shopping and non-food shopping enjoyment:

Not, not groceries, no, not groceries... but yeah I, I quite enjoy, you know, I enjoy finding a bargain down in <department store> and you know yeah I do

enjoy it... So I enjoy my shopping whereas erm <husband>'s shopping, our food shopping, is a necessity. (Mary, 65, married, Wirral)

Even so, there still may be pleasure in food shopping when it is a different experience, such as going to a supermarket that is not the usual one visited:

Yes, yeah. Not always the grocery shopping, the everyday one but er quite, I mean if you go into <not frequented supermarket> it's much more interesting than going to <frequented supermarket>, let's put it that way ((laughs)). (Jill, 79, married, Wales)

From remarks such as those above, it is clear that there is some enjoyment gained from certain shopping activities or types of shopping. These are typically leisure activities such as browsing and often a distinction is made between food and non-food shopping when discussing shopping enjoyment.

8.5 Discussion

8.5.1 Introduction. The aim of this chapter was to explore cognitive health and cognitive activity as they relate to shopping behaviours, and to investigate how shopping may contribute to psychological wellbeing. The three research questions were addressed using an integrated approach of presenting results from both longitudinal data analyses and qualitative data analysis. The findings regarding each research question will be outlined in turn and the limitations will be presented before a conclusion is provided.

8.5.2 Shopping and cognitive function. The first research question explored a potential association between shopping and cognitive function. The findings from longitudinal data analyses suggest that, after controlling for initial cognitive function, finding it difficult to access supermarkets increased the likelihood of having impaired cognitive function (as measured by both memory and executive function). Taking memory alone, having difficulty accessing supermarkets at both earlier time points impacted on later cognitive function. In contrast, for executive function having difficulty at only one of the earlier time points impacted on later cognitive function. Clearly, the two cognitive measures used for these analyses relate to different aspects of cognitive function; yet, both are signs of cognitive decline that usually are explained by changes in psychological or behavioural processes (Spiro & Brady,

2011). While it is not possible to conclude that these changes are due solely to a change in access to supermarkets, these findings do suggest an association between ease of access and cognitive function. Furthermore, of the interviewees who experienced a degree of difficulty accessing supermarkets and other shops, only two had noticeable signs of cognitive decline. Nevertheless, as both of these participants continued to do their own food shopping, it is likely that a small decline in cognitive function is not a barrier to shopping. As with the physical function limitations discussed in Chapter 7, the relationship between cognitive decline and difficulty accessing shopping facilities is likely to be circular. For those who experience cognitive decline shopping activities may become more difficult; yet, if people find shopping activities more difficult and no longer go, losing this cognitive activity may lead to a decline in cognitive function.

8.5.3 Cognitive activity while shopping. The second research question was concerned with the types of cognitive activity evident in shopping practices. Food shopping in particular requires some element of planning and requires the cognitive ability in order to do so (Huang et al., 2012). This planning often takes the form of list making, which is something that many of the participants do. Although the lists are not prescriptive, there is much evidence that shopping lists serve as a memory aid. Amongst people who make lists, both those who take their list shopping and those who do not, it is more common to forget unusual items and to remember their usual purchases. The implications of forgetting items differ depending on individual circumstances. These include not living close to shopping facilities, not having a car and being unable to go shopping unaided because of health or mobility problems. It would be expected that these potential barriers would have implications for maintaining shopping-related independence; however, for these participants forgetting items was seen as no more than a minor inconvenience.

Along with the cognitive activity associated with the planning of shopping trips, there was evidence of cognitive activity during shopping trips. This included the use of memory, either because of not using a shopping list or forgetting to take a previously made list. For those who make lists but do not take them, it may be that the act of making the list helps people to commit items to memory. Clearly, being able to remember what is needed without a memory aid is indicative of cognitive health. Further evidence of cognitive activity was apparent in decision making and

comparing prices while shopping. Although no one in this sample tallied prices while shopping, it was fairly typical for interviewees to have a general idea of the total cost of their food shopping before needing to pay. Finally, there was some evidence to suggest that interviewees were aware that shopping encompasses cognitive activities both in the planning stage and while shopping and, therefore, shopping was seen as a mentally stimulating activity. This is an important finding as mentally stimulating activities have been associated with a reduced risk of dementia, and they are particularly beneficial when engaging in activities that cover more than one mental, physical and social component (Karp et al., 2006) as shopping does.

8.5.4 Shopping and psychological wellbeing. The third research question was to determine how shopping activity may contribute to psychological wellbeing. Longitudinal analyses showed that finding it difficult to access supermarkets at any previous time point led to a later decrease in life satisfaction. Yet, a change in access from easy to difficult led to a larger decrease in life satisfaction. These decreases in life satisfaction might reflect the initial decline shown after a reduction in health status; however, once people have adapted to impaired health they often return to previous levels of life satisfaction (Diener, 2000). Similarly, finding it difficult to go at both earlier time points resulted in lower quality of life later on, as did a change from difficult to easy. It may be that even though functional decline is larger in the oldest of older adults, improvement of both functional ability and functional decline is common in older people (Avlund, 2004). Interestingly, a change in access from easy to difficult did not result in lower quality of life, which may be explained by other factors. For example, a move to a rural area further from shops could make it more difficult to access supermarkets yet lead to an increase in quality of life. It is important to note that while life satisfaction is a more global measure of wellbeing, quality of life is more sensitive to proximate factors and more responsive to change, which may explain the slightly different findings.

Although the above results show a slightly different pattern, both suggest that having difficulty accessing supermarkets at earlier time points impacts on later wellbeing. Of course, many factors influence wellbeing and these factors do not exist independently from each other but it is likely that the ease of access analysis is picking up some element of functional ability. Furthermore, although these data do not reveal whether people actually go shopping in spite of difficulties experienced,

qualitative data would suggest that many continue to do so. Indeed, several of the interviewees find it difficult to access supermarkets because of functional limitations, proximity to shops, no car and/or a reliance on others. Yet, as shown in this and previous chapters, these potential hindrances are not barriers to them going shopping and, therefore, maintaining their shopping-related independence. This is an important finding as actions under one's control can have profound and long-lasting effects on enjoyment of life and effective functioning (Huppert, 2005). Moreover, satisfaction with independence has been found to predict a higher level of life satisfaction (Good et al., 2011). In addition, it may be that an individual's satisfaction with the ability to cope with changes that come over time is one of the key components of successful ageing (Troutman-Jordan & Staples, 2014).

There have been few attempts to research life satisfaction relating to shopping activity. One such attempt explored the relationship between older (55+) females' clothes shopping activities and life satisfaction and concluded that clothes shopping activity did not contribute to life satisfaction (Joung & Miller, 2007). Although the authors point out that social activity is a key factor in life satisfaction, they failed to include socialising while shopping in their analysis. Yet, there is much evidence that socialising while shopping is often considered by interviewees to be a pleasurable experience. Indeed, as shown in Chapter 6, shopping often is considered to be a social activity in later life. Although pleasure and enjoyment from shopping activities are most frequently expressed for social activity while shopping, it is sometimes expressed for the activity itself. This is especially the case with activities such as browsing round clothing or charity shops and from bargain hunting, which is consistent with previous findings (Arnold & Reynolds, 2003). This idea that shopping as pleasure is closely associated with the idea of shopping as leisure has been suggested elsewhere (Miller, 2005). Again, window shopping or browsing, during which there is no specific intention to purchase is indicative of shopping motives being a function of many variables, some of which are unrelated to the buying of products (Tauber, 1972).

As is consistent with previous research (Campbell, 1997), some interviewees make a distinction between food shopping and non-food shopping enjoyment. Furthermore, it is important to note that analyses presented in this chapter refer to these different types of shopping. The longitudinal data are concerned with access to

supermarkets (reflecting general food shopping) and, for the most part, interviewees express pleasure from leisure shopping such as browsing or clothes shopping.

However, perhaps the most compelling evidence for the role shopping plays on wellbeing comes from shopping as a social activity. As shown in Chapter 6, shopping often is considered to be a social activity and the social interaction people gained during shopping trips often was expressed as a pleasurable experience. Thus, there was an awareness of the psychological benefits of shopping-related social activity and people choose to go shopping for those benefits. Although social interaction seems to contribute to wellbeing for most of the participants, social engagement while shopping is of particular importance to those who live alone. For this group, shopping provides an excuse to get out of the house and have social contact, which otherwise might be limited. Moreover, for those with functional limitations, continuing to get out of the house to shop is important to maintain a degree of independence. Clearly then, for those from single person households and/or participants with functional limitations, shopping activity is contributing to their wellbeing as a way to get out of the house, as an avenue for social engagement and as a way to maintain food-related independence.

There has been some research to suggest that older females who are more engaged in social interactions while shopping feel more well-connected with others, have more positive self-esteem and lower levels of depression than those less engaged in social shopping activities (Kang & Ahn, 2014). However, evidence presented in this thesis would suggest that this association between shopping-related social activity and wellbeing may be extended to include men.

8.5.5 Limitations. There are some limitations to be addressed. Again, it is important to note that in the ELSA analyses the shopping questions are limited to self-reported ease of access to shops and not actual shopping activity. For example, someone could report that it is easy to access supermarkets but does not actually go to supermarkets. Furthermore, it is not possible to determine what “ease of access” really means to the respondents. As mentioned above, it may be that difficulties accessing shopping locations are due to living in an area in which shopping facilities are not available rather than that people are experiencing difficulty for health reasons. Yet, the results presented in this chapter suggest that a small decline in

cognitive function is not an insurmountable barrier to shopping activity and being able to maintain shopping-related independence. Thus, even with its limitations, ELSA provides representative longitudinal data with comprehensive health measures, which enables exploration of an aspect of shopping that would not be possible otherwise.

Furthermore, there is a limitation of the qualitative data that must be considered. Although the interviewees had varying functional abilities (e.g. mobility problems), the sample was relatively healthy. All of the participants were able to do their own shopping and, thus, were able to maintain their independence. So, even though it is proposed that the relationship between health and shopping is circular, it is not possible to draw comparisons with people who do not go shopping in order to determine whether they are less healthy. Nevertheless, the qualitative data provides valuable insights into how and why people shop, without which the level of depth of exploration into the role of shopping in later life could not be attained.

8.5.6 Conclusion. This chapter has presented evidence that shopping encompasses activities that contribute to cognitive health and psychological wellbeing. Again, this chapter highlights the multidimensionality of shopping activities and that the relationship between shopping and health is bidirectional; thus, if you are healthy you are more likely to go shopping and if you go shopping you are more likely to be healthy. Furthermore, although finding it difficult to shop has implications for cognitive health and wellbeing, shopping activity may provide protective factors that alleviate or ameliorate health declines. Shopping (particularly for food) provides a regular reason to employ cognitive processes such as memory and reasoning. Equally important, shopping activity directly impacts on wellbeing, which is apparent especially when providing an avenue for social engagement.

Chapter 9

Discussion

9.1 Introduction

A House of Lords enquiry released recently concluded that Britain is "woefully under-prepared" to cope with the increase of older people in this country (The Guardian, 2013). In addition, the recently released 2014 Global AgeWatch Index concluded that older people are expected to make up one-fifth of the world's population by 2050 and that governments must prepare to ensure that this growing demographic plays a full role in society (The Guardian, 2014). The UK ranked 11th overall but in the health segment, which is one of four components used to rank nations on overall wellbeing, it stood 27th. Results such as these show the necessity to promote health in later life and to think creatively about ageing in the UK, beyond the traditional approaches of pensions and hospital beds, in order to meet the challenge of an ageing society and to realise its opportunities. In an ageing population, declining health not only affects the independence and quality of life of older adults but presents challenges to the national economy and the health care system. The National Institutes of Health have identified a need for research into the key areas that have promise for improving cognitive ageing: cognitive activity; physical activity and social engagement (Hendrie et al., 2006). Not only do these areas have implications for successful ageing, all can be studied through shopping activities.

Relatively few studies have examined the role that shopping plays in later life, particularly in the UK. However, as shown in Chapter 2, there was some existing evidence to suggest that shopping provides more opportunities than simply those related to acquiring food. Consequently, the driving force behind the PhD was to address the two over-arching research questions: What is the impact of shopping activity on healthy ageing; and what sociodemographic factors impact on shopping activity? By using a mixed methods approach, specifically a cross phase concurrent design, it was possible to obtain different but complementary data. This allowed some cross-validation (within and between findings) as well as the ability to enhance findings from one data source through further exploration with another data source.

First, the findings will be presented, broadly separated into the domains of the two-part research question. Next, the limitations and implications of the research will be discussed before providing suggestions for future research directions.

9.2 Does Age Matter?

In order to establish the viability of shopping practices as a site for exploring health in later life, comparisons were made between younger and older respondents using a variety of nationally-representative survey datasets. By exploring whether people shopped, how often and for how long, it was possible to establish the similarities and differences across various life stages. It was found that rates of shopping were the same in later life as in mid-life with around two thirds of people shopping over a typical two-day time period but that older men were more likely to have shopped than men in other age groups. This is consistent with more recent UK time use data in which shopping activity was combined with use of other services. However, the researchers found that around a third of people shopped (or used services) on an average day but that older people did so more often than younger people (Lader et al., 2006).

Furthermore, the time spent shopping was similar across age groups, with similar numbers of people in each age group shopping for short periods but older people were most likely to have shopped for longer. This is fairly consistent with recent findings from time use data in Canada. The researchers found that shopping participation rates amongst older people were similar to those of the rest of the population, but that older people (and teens) had longer trip durations for shopping activities (Farber et al., 2011).

Older people were more likely to shop, and for longer, on weekdays than weekends. Although not conclusive, findings were suggestive of a pattern that older people may be more likely to shop on weekdays than weekends for both food (i.e. essential) and window shopping (i.e. leisure). The reverse pattern has been shown for the UK population as a whole as, when shopping has been included as a domestic task, people spent more time on such activities at the weekend than during the week (Lader et al., 2006). However, findings such as these are more likely to reflect the differences in available time to shop for those who are still in the labour market compared with those who are not (e.g. retirees).

On the whole, compared with younger age groups, older people were more likely to report liking food shopping but less likely to like non-food shopping. When exploring grocery shopping habits it was found that, although about 50 percent of people (in all age groups) do a weekly food shop, older people were more likely to shop more frequently than weekly. Older people were as likely (around two thirds) to be responsible for all or most of their food shopping as those aged 25-64. Within couples, around 50 percent of those aged 65 and older share food shopping responsibility. Taken together, these findings show that people in later life are shopping, that they spend more time doing so than younger adults and even that they enjoy food shopping. This not only suggests that older people are increasingly engaged in consumption practices (Hyde et al., 2009), but that, more importantly, shopping is a viable area in which to study healthy ageing.

9.3 Shopping and Health

Findings presented in this thesis support a strong relationship between shopping activity and several health factors. Time use data show that having good health predicts shopping activity but that the relationship is bidirectional as reported shopping activity predicts good health. Using longitudinal data to investigate ease of access to supermarkets, it was found that having difficulty at previous time points impacted on a number of health factors at a later time point, albeit in different ways. Finding it difficult to access supermarkets at any previous time point resulted in a higher likelihood of having poor (self-rated) health and poor gait speed (another useful proxy for physical health). Furthermore, difficulty in ease of access at both previous time points resulted in impaired cognitive function (measured by memory); whereas one period of difficulty resulted in reduced executive function. Difficulty in ease of access at any time point led to decrease in life satisfaction (and even more so with a move from easy to difficult); however, either finding it difficult at both time points or a move from finding it difficult to finding it easy resulted in lower quality of life.

Taken together, these results show that having a period of impairment can have a lasting effect in later life. For the purpose of analysis, these health factors were considered separately but it is important to note that they are not necessarily mutually exclusive and it is a combination of functioning in these areas that

constitutes healthy ageing. However, finding supermarket shopping difficult can impact on physical, cognitive and psychological health and, therefore, barriers to shopping have implications for healthy ageing. The qualitative data provided the opportunity to unpack this association further to determine how people overcome these potential barriers to shopping.

Crucially, it was found that even those with considerable physical function impairments continued to do their own shopping. Problems carrying shopping were solved by buying little and often or by using wheeled shopping trolleys (to help with the weight as well as for support). For the people who relied on instrumental support from others to take them out shopping, the ability to maintain independence by doing so was especially important. Only one impaired interviewee regularly shopped online for food (although others did so less regularly) but this may be a growing outlet as more people in later life take up computer use. That people find ways to overcome potential barriers and maintain shopping-related independence is indicative of the importance of the activity. By doing so they are still able to shop for themselves, which furthers previous research findings that greater independence in food-related activities such as food shopping is significantly associated with fewer health problems in older adults (Thompson et al., 2011).

At the time of writing there were no known studies in which shopping activity specifically had been considered for its potential benefits on cognitive health. Evidence of cognitive activity was apparent in the cognitive processes required for decision making and making price comparisons while shopping. Some of the interviewees were aware that shopping encompasses cognitive activities both in the planning stage and while shopping and, therefore, shopping was seen as a mentally stimulating activity. This is an important finding as mentally stimulating activities have been associated with a reduced risk of dementia, and they are particularly beneficial when engaging in activities that cover more than one mental, physical and social component (Karp et al., 2006) as shopping does.

Moreover, findings lend support to the model of selective optimisation and compensation (Baltes & Baltes, 1990). There is evidence from the use of shopping lists as memory aids that the cognitive processes during the planning stage help commit needs to memory even if the list is not used. Age-related declines in memory

are compensated for with the use of lists or by shopping more frequently to minimise the inconvenience of forgetting items. By shopping in a routinely way, following the same supermarket path and purchasing usual items, people are engaging in behaviours that allow them to maintain a high level of functioning and to remain independent. This process of adaptation may be enabling people to adjust their expectations to allow the subjective experience of satisfaction and personal control (Baltes & Baltes, 1990).

Of course, this also has implications for wellbeing in later life. There was a lot of support for shopping activity providing a valuable outlet for social engagement. Survey data allowed exploration of social shopping activity on a large-scale and showed that married people shop with other household members but that those who are not married are more likely to shop with other known people. The qualitative data echoed these findings and showed that food shopping is actively made into an opportunity for social engagement especially for those who are not married. In addition, there was an interesting finding regarding gender differences when shopping with others. It was more common for women (married or otherwise) to shop with other people (spouses, family members and female friends) and for married men to only shop with their wives. However, two of the men (one married, one divorced) also shop with male friends, which might be considered unusual behaviour for men by many of the interviewees. Although it is not possible to conclude that this points to a (gendered) shift in attitudes to shopping activity but, again, it may be that future cohorts moving into later life have different attitudes (and practices) shaped by growing up in a consumer society.

Perhaps surprisingly, supermarkets were seen by many as sociable places in which to bump into other known people and these unplanned social encounters were a pleasurable experience even for those who presented with a non-shopper identity. This generally supports findings from research both in the US (Huang et al., 2012) and in the UK (Angell et al., 2012), in which a significant driver of grocery store choice is the ability to socialise and interact with other customers and staff. The loss of sites, such as post offices, which facilitated social interaction particularly was felt in rural areas with limited shops and services.

While, for some, shopping activity in and of itself was seen as pleasurable as a leisure activity (e.g. browsing, bargain hunting), the most compelling evidence for shopping activity impacting on wellbeing was for its social benefits. People are not only aware of the benefits of social activity while shopping, people actively choose to go shopping for those benefits. It was especially common for people who live alone to use shopping as a reason or excuse to get out of the house and to be around other people. In this way, going shopping was actively social even without directly involving social interaction through talking to other people (although in reality a shopping trip would almost always involve talking to others).

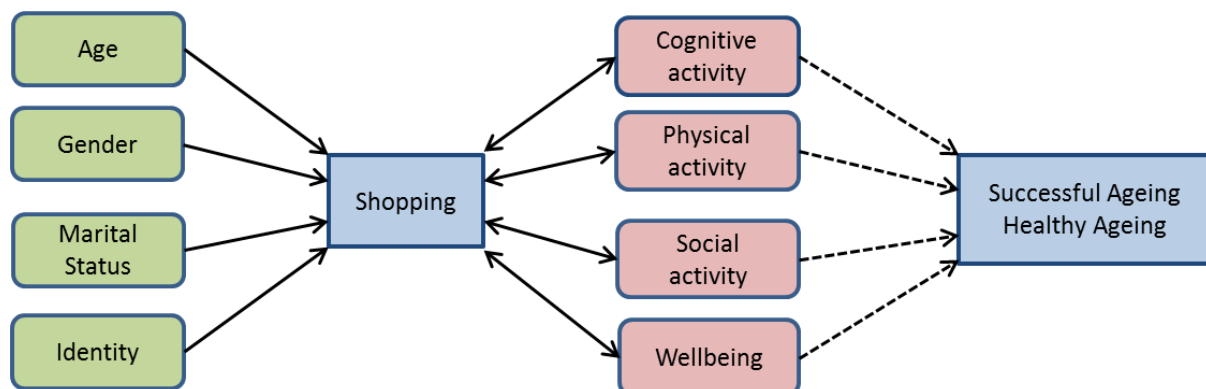
Again, people with functional limitations may actively choose to make the effort to go shopping in order to get out of the house, for the social benefits of talking to (or being around) others and to maintain their independence. Many of the interviewees with functional limitations also live alone and, for these people especially, going shopping was an important avenue for social engagement that provides psychological benefits.

From findings presented here it is clear that the value and meaning people place on shopping activity in later life varies depending on individual circumstances. For those with functional limitations shopping is an important way to maintain independence. There are differences in value apparent depending on marital status (with a gender interaction) and to some degree personality and a non-shopper identity. But it is suggested that people's attitudes to shopping and whether or not they believe shopping activity leads to health benefits is perhaps less important than people continuing to go shopping and getting those health benefits. In terms of the relationship with successful ageing, here it is important to make the distinction between the typical views of researchers on what constitutes healthy ageing and those of lay people. Findings suggest a strong relationship between barriers to shopping and overall health in later life (or successful ageing) yet impairment in one health domain may not lead an individual to consider themselves not to be ageing successfully (Strawbridge et al., 2002). In order to consider themselves to be ageing successfully, a re-evaluation of their health situation takes place in the context of living with impairments, as proposed by Baltes and Baltes (1990). As such, it is proposed that people find compensatory techniques in order to overcome the potential barriers caused by impairments and in doing so they are able to maintain

independence and to engage in health-promoting activities by continuing to go shopping. That people are going shopping despite the potential barriers from physical limitations strongly supports the claim for considering shopping activity as an area for promoting successful ageing.

Returning to the model that has provided the structure for this thesis (see Figure 9.1), it has been argued that the findings presented provide support for a strong relationship between shopping activity and several factors that are associated with healthy and successful ageing. As each of these domains (cognitive activity, physical activity, social activity and wellbeing), can contribute to healthy or successful ageing, this thesis claimed that they can (and should) be explored through shopping activity. Although these domains for the most part, were considered in isolation for conceptual and analytical clarity, it is important to stress that each domain can impact the others.

Figure 9.1. Proposed model of the mediating role shopping plays in healthy and successful ageing



It is already known that cognitive activity in later life is an important factor that is protective of cognitive health and reduces risk of incident dementia (Karp et al., 2006), yet the current study is the first to consider cognitive activities in terms of shopping. Findings have shown how cognitive processes are employed in order to carry out shopping trips. Memory problems are compensated for by changing shopping practices such as shopping more frequently, using lists, and by following routines and familiar paths. Elsewhere physical activity has been shown to be protective of cognitive health (Prohaska et al., 2009), has been linked to a reduction

in morbidity associated with a range of conditions such as diabetes and cardiovascular diseases (Almeida et al., 2014) and has been associated with improved healthy ageing (Hamer et al., 2014). Shopping provides a reason to be physically active, however, no study to date has looked at how shopping might provide opportunities for physical activity and how such activity could benefit healthy and successful ageing. The health benefits of maintaining social engagement in later life have been well documented. Social engagement has been linked to better physical (Mendes de Leon et al., 2003) and mental health outcomes (Kawachi & Berkman, 2001), cognitive functioning (Seeman & Crimmins, 2001) and lower mortality (Seeman et al., 2001). In line with results from previous research (Moschis, 2003; Myers & Lumbers, 2008; Stewart et al., 2014), social activity is evident through shopping with others or interaction with other shoppers and shop employees. Shopping activity impacts on psychological wellbeing by providing opportunities for social engagement, by contributing to the maintenance of independence, and by providing an avenue for alleviating loneliness or boredom. As this thesis has shown, shopping provides a range of direct and indirect benefits for healthy and successful ageing. The findings generally support those of the scant literature available, however, the unique contribution of this thesis is that it explores shopping practices as a potential site for health-promoting activities.

9.4 Gender, marital status and identity

As shown in the model (Figure 9.1) and discussed above, the factors that contribute to healthy and successful ageing were looked at in isolation in this thesis; so too were the demographic factors that impact on shopping activity. However, it is important to realise – as was shown in the thesis where possible – that these factors too are highly interconnected and their impact on shopping activity, as well as healthy and successful ageing, are very important. These factors have an independent effect on healthy and successful ageing, which is why they were routinely controlled for in the regression analyses. This is not to deny the importance of these factors but rather to say that these relationships are already established.

9.4.1 Gender. Both shopping practices and attitudes to shopping were explored in terms of gender and, perhaps surprisingly, gender differences in relation to shopping were not as marked as many people (both respondents and researchers)

think or expect them to be. For example, there were no gender differences in whether people shopped or not and although overall women were more likely to be responsible for food shopping, responsibility often was shared within couples. Large-scale survey data showed that overall 15 percent of men do most of the grocery shopping, a finding that was supported by qualitative data. There were no gender differences for liking food shopping and dislike of food shopping (for both men and women) was a result of seeing it as a necessary activity that is a chore. Although there was some expectation that women are more likely than men to like non-food shopping, which was supported by survey data, men were more enthusiastic when talking about 'masculine' shops such as DIY stores. Consequently, as has been suggested before (Edwards, 2009; Miller, 2005), people make a distinction between food and non-food shopping. Although it was not possible to unpack this association, it seems likely that a semantic distinction takes place when talking about 'shopping' and that this may not be gendered. 'Doing' the supermarket shopping may be seen as mundane (Edwards, 2009) and considered to be work in direct contrast to the freedom to browse and choose (Miller, 2005) when 'going' shopping. It has been argued that, with ageing, men and women in many ways become less differential in their masculine and feminine predilections (Moody, 2000) and perhaps, in terms of shopping activity (at least at a superficial level), this thesis goes some way to support that.

9.4.2 Marital status. In terms of shopping practices, there were no marital status differences in the amount of time people spent shopping but those who lived alone were more likely to shop more frequently. In contrast to previous findings that have shown that women who live alone shop more frequently than men (Turrini et al., 2010) both men and women who were not married shopped more frequently than married people. Conducting food shopping weekly was most common but doing so out of habit and being routinely (personality) emerged more than marital status as contributing factors. Although overall women were more responsible for food shopping and more likely to do most of the food shopping, it was often a shared responsibility amongst couples. Married men had the least responsibility (of any marital status group) in both survey and qualitative data. However, in practice, many of the married men regularly went food shopping with their wives and some of the married men had assumed all food shopping responsibility. These men had taken

over the food shopping responsibility because of changes in labour market status (e.g. the husband retiring while the wife remained in work) and, thus, did so for practical reasons rather than as a reflection of a general shift in traditional gender roles.

Indeed, there were several examples amongst the married men of a persistence of traditional gender norms. Although in the survey data there no gender or marital status differences for liking food shopping, some of the married men clearly disassociated from food shopping activity. Examples of men 'doing' gender were seen when people claimed that they never go shopping or when they distanced themselves from shopping activities that they do (particularly food shopping). These findings are consistent with previous research that has suggested that some men prove their masculinity through declaring that they do not go shopping or find no pleasure in it (Fox, 2004; Shaw, 2010). For some married men at least, browsing or window shopping may be seen as frivolous and perhaps as the way in which women shop, which has been suggested before (Shaw, 2010). This is in contrast to the 'masculine' way of shopping, which is efficiently and with purpose. This is not to say that this opinion is limited to married men, just that it is a distinction more likely to be made by married men. It may be that the married men were able to disassociate as they have wives who they can rely on to take care of the household shopping, which is not a luxury shared by those who live alone. It is important to note that going food shopping was only a threat to the masculinity of (some of) the married men. Perhaps having this (negative) view of shopping activity is less important while people remain married. Do these views change when men become widowed (or divorced) and their change in marital status requires re-evaluation of (gendered) roles? The findings presented here suggest that may be so; although some of the non-married men also saw shopping as a chore, they were much less likely to disassociate from it.

9.4.3 Identity. These findings clearly were linked to the ideas around identity, or more specifically, a non-shopper identity. In time use data, liking shopping impacted on how long people spent shopping but not on whether people went shopping, which probably reflects the need to go (food) shopping whether people like it or not. In the qualitative data, some of the women clearly presented as primarily functional shoppers. These women shopped with speed and efficiency and disassociated from leisure shopping or from the notion that shopping activity was

anything more than a means to an end. Although there was evidence of some enjoyment from shopping-related activities (especially social interaction), having a purpose to shop was the driving force to engage with shopping activity. Having a non-shopper identity can be defined as the tendency to disassociate from 'feminine' shopping traits (e.g. browsing, leisure shopping) and to identify with those that are considered 'masculine' (e.g. being efficient, purposive). In this way, the emergence of a non-shopper identity (which is not gender specific) may be further evidence of gender convergence in later life.

9.5 Sociodemographic Summary

As shopping activity had not been investigated in this way before, there was scant prior knowledge from which to draw. By exploring the age differences in shopping activity it was possible not only to show how older people shop and in which ways patterns may differ from younger age groups, but to point to possible differences in attitudes and practices that might emerge with future generations as they enter later life. Changes in shopping practices over relatively short periods of time have been shown with US time use data. Although on a typical day in 2006 grocery shopping was found to be a fairly infrequent activity with around 26 percent reporting spending any time grocery shopping, there has been an upward trend in shopping activity from the late 90s. This reflected a significant increase in the likelihood of grocery shopping for both sexes and an increase in the amount of time spent shopping, particularly for men (Zick & Stevens, 2009).

Whether these trends reflect changes in the economic landscape rather than cohort differences is hard to pinpoint. However, it could be that there is a general shift (across western nations) in the attitudes to shopping activity. As newer ageing cohorts will have grown up with a consumer culture it may be that there are fewer negative associations (e.g. frivolity, gendered responsibility) attached to shopping as older people are increasingly more engaged with a consumer society. Findings presented here show that (in 2000) compared to men in other age groups the youngest men (aged 16-24) were far more likely to enjoy non-food shopping. It is not possible to know whether this is a consumer culture effect or a life stage effect, reflecting a relatively unhindered period in early adulthood during which people have a disposable income without the responsibilities (both in terms of time and

economically) of having children. Again, it is important to point out that shopping activity is not limited to the purchasing of goods; however, having grown up as an involved consumer and being comfortable around shopping environments may mean that this site is even more feasible for promoting healthy ageing for future generations.

9.6 Limitations

There are several limitations to this research that require some discussion. Each component will be outlined in turn but first there are two general points to consider. A considerable amount of data and findings were drawn from secondary sources. As previously mentioned, the lack of shopping questions in these datasets as well as the way in which questions were asked have limited the conclusions that can be made. However, there is much evidence to suggest that research with older populations leads to higher response rates (Koloski, Jones, Eslick, & Talley, 2013; C. Lee et al., 2005) and more representative samples (Rockwood, Stolee, Robertson, & Shillington, 1989). As a result of using datasets with nationally-representative samples it has been possible to conduct a previously uncharted and more comprehensive exploration of shopping practices in later life.

9.6.1 ELSA. In the ELSA analyses, the shopping questions were limited to self-reported ease of access to certain shops and did not allow for inferences to be made about actual shopping activity. Someone could report that it is easy to access supermarkets but does not actually go to supermarkets. It was not possible to determine what “ease of access” really meant to the respondents so difficulties accessing shopping locations could be due to living in an area with limited shopping facilities rather than that people were experiencing difficulty for health reasons. Furthermore, not every question was asked at each wave of ELSA, thus, the availability of variables determined the time periods used for health analyses and differed across analyses. However, its size, longitudinal nature and high response rates allow ELSA to provide representative data with comprehensive health measures that enabled exploration of an aspect of shopping that would not have been possible otherwise.

9.6.2 Food and You. The purpose of the Food and You survey was to ascertain attitudes to and practices towards eating and food safety. It was limited to

asking about food shopping and the food shopping questions were asked only of a random third of its participants. However, the use of this nationally-representative survey allowed exploration of shopping habits in later life that were not available through other sources.

9.6.3 Understanding Society. The shopping questions in Understanding Society were in the domestic labour module in which grocery shopping was framed as a household chore in a question that referred to it as “work”. As this module was only asked of couples, there was no account of other family formations, such as older people who lived with offspring, and it did not account for widowed people of which there is a higher proportion in later life. Although shopping exploration was limited, use of this data made it possible to examine the changing nature of gender roles on a national level and to identify that life stage impacts on food shopping responsibility.

9.6.4 TUS. A limitation to the use of TUS was that it was conducted in 2000, thus a considerable amount of time has passed during which retirement age has been reached by a new cohort that has grown up as consumers. As a result, shopping practices and, indeed shopping motivations, may be different for these people as attitudes have changed over time. It is important to point out the changes in later life health status that have taken place in the time since that study was conducted. Overall, general health has improved and more people are reaching old age and in better health. At the time of TUS the older population was relatively less healthy and, due to a bigger survivor effect, the relationship between shopping and health perhaps was not as strong. The subsequent change in sociodemographic composition of the older population means that the relationship is probably stronger today. Now it is a more heterogeneous population that reaches later life and (as health inequalities have widened) there are more people who have reached older age in poorer health. Thus, the relationship between shopping and health is likely to be stronger now, especially for those in poorer health for whom the benefits of shopping are likely to be greater and more important.

9.6.5 SFQ. There were limitations to the use of data from SFQ because of its design and its delivery (predominantly online). As it was originally conceived to provide comparisons with younger people, those in later life were under-represented,

which resulted in limited numbers of older people to extrapolate from. The habits and views of the self-selected sample may differ from those of the wider population. In addition, the wording of questions most likely resulted in under-estimation of time spent on shopping activities, particularly time spent walking for shopping. Nevertheless, as SFQ specifically asked about shopping, responses were framed by shopping activity, which allowed a more global perspective and that may have more accurately reflected the behaviours of respondents. Despite the methodological limitations of SFQ, results (for shopping patterns, etc.) were similar to those of the nationally-representative datasets and, therefore, still can be considered as providing useful information that furthers knowledge.

9.6.6. Qualitative data. There are some limitations of the qualitative data that must be considered. Although the interviewees had varying functional abilities (e.g. mobility problems), the sample was relatively healthy. All of the participants were able to do their own shopping and, thus, were able to maintain their independence. So, even though it is proposed that the relationship between health and shopping is circular, it is not possible to draw comparisons with people who do not go shopping to determine whether they are less healthy than those who do.

The shopping component of the interviews began by asking participants about supermarket shopping. As a result, the interviews were framed by food shopping or shopping out of necessity. That 'shopping' referred to food shopping from the outset most likely impacted on responses, especially for those with a non-shopper identity. Thus, what the meaning of the word 'shopping' (and therefore, shopping activity) was to individuals may have differed and perhaps was an important distinction to make. Although efforts were made later in the interviews to re-frame shopping activity to include non-food and non-purchasing behaviour, the semantic distinctions could have been explored further.

Moreover, the emerging identity theme could have been explored more fully. As gender roles and attitudes were not specifically asked about in the interviews, they were not explored further (in relation to family history or context) to determine whether they reflected cohort or generational attitudes. As mentioned earlier, attitudes to shopping may be affected by ageing in a consumer society in contrast to living through post-war austerity. Yet, perhaps this weakness also is a strength; as

the interview questions were not framed in relation to gender norms or expectations, themes emerged organically and enabled the introduction of a (non-gendered) non-shopper identity.

It is worth considering the role of the interviewer as a younger female and that different responses may have been elicited by an interviewer with different characteristics. Although there is no consensus on whether interviewer matching is an optimal approach, there is some evidence to suggest that the direction and content of interviews are influenced by the social relationship between the interviewer and the interviewee (including age and gender) (Manderson, Bennett, & Andajani-Sutjahjo, 2006). Men may perform masculinity when being interviewed by women (Pini, 2005), but it is important to note that enactment of masculinity also occurs with same-sex interviewers (Schwalbe & Wolkomir, 2001) and that interviewer gender is neither inherently problematic nor beneficial (Broom, Hand, & Tovey, 2009). In spite of its limitations, the qualitative data provided valuable insights into how and why people shop, without which the level of depth of exploration into the role of shopping in later life could not be attained.

9.6.7 Mixed methods approach. Finally, the challenge of using a mixed methods approach requires consideration. There is no consensus on how to conduct a mixed methods study or on how findings from both qualitative and quantitative components are best integrated. As a consequence, other researchers using the same approach may get different results and arrive at different conclusions. Yet, in order to tackle an under-researched area with limited resources, it was both prudent and necessary to adopt a creative approach to data collection and interrogation. In doing so, it has been possible to establish a more complete picture of the role of shopping in later life, which has proven to be more than the sum of its parts.

9.7 Implications

The findings from this study will prove useful to a range of actors concerned with the health and wellbeing of people in later life. First and foremost, the information will be helpful to older people themselves. As more and more of us are expected to live longer, individuals are keen to learn how to minimise the risk of becoming physically and mentally unwell. Understanding how shopping behaviours can contribute to maintaining or even improving physical, cognitive and psychological health might

encourage older people to engage in shopping behaviours or at least to reconsider the benefits they may get from such activities. Again, it is important to stress that the relationship between shopping activity and health is circular. People can get health benefits from shopping but if they are frail they are less likely to go and if they are less likely to go they are not getting the health benefits and are more likely to become frail. This has implications for well-meaning relatives taking over shopping responsibility from those in poorer health or with functional limitations by making people dependent.

In addition, the results from this study should be of interest to organisations that represent older people. Organisations such as Age UK at both a local and national level must be made aware in order to inform their members of the potential health benefits of shopping and lobby for more age-friendly shopping environments to ensure that older people are not excluded from these practices.

Furthermore, policy makers need to know that shopping behaviours could provide health benefits to those in later life and may provide a domain in which to help reduce the burden of illness that many fear an ageing population will create. At a local level, the importance of having a transportation network that enables people to travel to shopping locations. Maintaining good transport links is important in both urban and rural areas to allow people who do not (or cannot) drive to access shopping facilities. There are also implications for urban planners to ensure that neighbourhoods are walkable and age-friendly. This includes having shopping locations to walk to and to be able to walk around (sufficient pedestrian crossings, pavements) to encourage physical activity as well as areas to sit down and toilet facilities. Thus, planners and policy makers should plan to support and promote shopping by older people rather than to provide a service to replace it.

The findings have strong implications for the changing structural nature of shopping. The decline of the high street is bringing about more closures of small independent shops, post offices and now bank branches. The move to out of town shopping centres and supermarkets makes it more difficult for people to go shopping, especially if they have health or mobility problems. Although this is not a consumer research PhD it is unavoidable that findings have implications for businesses. Because the acquisition of food is a necessity, perhaps the onus is

placed most firmly on purveyors of food. Supermarkets, in particular, could do more to facilitate an easy shopping experience both structurally (consistent store layouts to aid memory, location of premises, facilities such as toilets and seating areas) and by having staff who understand the importance of social interaction and facilitate social engagement.

Impersonal, mechanised shopping systems (such as self-service checkouts) are not what people want or need when social interaction is so important for the increasing numbers of older people who live alone. The ability to shop online is a way to maintain shopping independence (perhaps especially when living in a rural area without a car and with functional limitations) and, as shown in Figure 9.2, online shopping is actively encouraged by supermarkets.

Figure 9.2. Photo of disabled parking space sign at Asda.



This could be seen as a positive move, enabling people with health limitations to acquire goods when they have problems getting out. Indeed, this may become even more of an 'issue' with later cohorts of older people who use the internet more and are thus comfortable with ordering online. Yet, results show that, rather than being marginalised, these people are choosing to engage in shopping activity and are

doing so even when instrumental support is available to them. When shopping activity provides so many physical and psychological health benefits is it really helping to limit the opportunities to gain these health benefits? By facilitating shopping activity in later life everyone wins: businesses by getting customers, society by enabling a healthier and more engaged older population, and individuals by gaining or maintaining a valuable site for health promotion.

9.8 Future Directions

The focus of this PhD was to break new ground by establishing shopping (an everyday activity) as a viable area of research that has implications for ageing healthily and successfully. As an under-researched area, there are many opportunities for further exploration into how and why people shop to further unpack associations between shopping activity and health. To do so would require more research with people who are shopping in spite of frailty and increased dependency or reduced mobility. Do those who maintain shopping activities have a slower rate of decline than those who stop shopping when they become frail? Furthermore, it would be interesting to explore in more detail the timing and duration of shopping activities (not just using the crude amount of time shopping), exploring patterns throughout the day and being able to differentiate between short bursts and more prolonged shopping durations. Different approaches to data collection (such as accompanying participants on shopping trips or non-participant observation) could further explore how people are shopping and interacting with others. Moreover, it would be interesting to ascertain if UK shopping patterns are replicated elsewhere by the use of cross-national comparisons. The US in particular may have a different physical structure (out of town malls, car ownership) and different cultures of consumption.

9.9 Conclusion

Findings presented in this thesis have highlighted the multidimensionality of shopping activities in later life. The relationship between shopping and health is bidirectional; thus, if you are healthy you are more likely to go shopping and if you go shopping you are more likely to be healthy. However, shopping activity provides an outlet for health-promoting activities and may provide protective factors that alleviate or ameliorate health declines. As shopping provides a regular excuse or reason to be physically active, shopping-related physical activity may be helping to slow physical

health declines. Shopping activity provides a regular reason to engage in mentally-stimulating activities and to employ cognitive processes such as memory and reasoning. Shopping activity provides the psychological benefits of social engagement. As an avenue for social activity, and as a way to maintain independence, shopping directly impacts on wellbeing in later life. Seen in this new light, shopping in later life is much more than the acquisition of food or other goods. Not only are older people going shopping, they are gaining health benefits from shopping activities that impact on their ability to age successfully.

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Interviewee Demographic Table

	Gender	Age	Marital Status	Household size	Mobility problems	Car
Wirral						
Doreen	Female	78	Widowed	1	Yes	No
Maureen	Female	80	Widowed	1	No	No
Bessie	Female	84	Widowed	1	No	Yes
Brenda	Female	86	Widowed	1	No	No
Anna	Female	66	Married	2	No	Yes
Marjorie	Female	87	Widowed	2	Yes	Yes
Pat	Female	75	Widowed	1	No	Yes
James	Male	80	Widowed	1	Yes	Yes
Linda	Female	83	Widowed	1	No	Yes
Fred	Male	82	Widowed	1	Yes	Yes
Albert	Male	68	Married	2	No	Yes
Edith	Female	66	Widowed	1	No	No
Dorothy	Female	71	Married	2	No	Yes
Carol	Female	65	Divorced	3	No	Yes
Sheila	Female	65	Married	2	No	Yes
Jane	Female	67	Widowed	1	No	No
Gary	Male	65	Divorced	1	No	Yes
Norma	Female	77	Widowed	1	No	No
Mary	Female	65	Married	2	No	Yes
George	Male	66	Married	2	No	Yes
Wales						
Allun	Male	87	Widowed	1	Yes	Yes
Ken	Male	74	Divorced	1	No	Yes
Bryn	Male	71	Married	2	No	Yes
Jill	Female	79	Married	2	No	Yes
Barbara	Female	79	Widowed	1	No	No
Bronwyn	Female	90	Widowed	1	Yes	No
Jack	Male	79	Married	2	No	Yes
Lyn	Female	70	Married	2	No	Yes
Philip	Male	78	Widowed	1	Yes	Yes
Rhona	Female	69	Married	2	No	Yes
Helen	Female	72	Married	2	No	Yes
Robert	Male	67	Married	2	No	Yes
Charles	Male	81	Married	2	No	Yes
Harold	Male	67	Married	2	No	Yes
Betty	Female	70	Married	2	No	Yes
Ruth	Female	66	Married	2	No	Yes
Donald	Male	70	Married	2	No	Yes
Doris	Female	92	Widowed	1	Yes	No
Huw	Male	80	Married	2	No	Yes
Thomas	Male	89	Widowed	1	Yes	No
Ernie	Male	80	Married	2	No	Yes
Alice	Female	95	Widowed	1	Yes	No
Gaynor	Female	69	Divorced	1	No	No
Ethel	Female	87	Married	2	Yes	No
Gwyneth	Female	70	Married	2	No	Yes
Joseph	Male	75	Married	2	Yes	Yes
Gloria	Female	76	Married	2	No	Yes
Frank	Male	77	Married	2	No	Yes

The Role of Shopping in Later Life – Interview Schedule

Thank you for agreeing to talk to me about your experiences. The interview will probably last around an hour and will be digitally recorded. Everything we talk about remains confidential. First I'll ask you a few factual questions and then we'll talk about your shopping habits.

Section A

How old are you?

Are you married?

Do you live with anyone else?

If so, who?

Do you have any mobility problems?

Anything that affects your ability to walk or get around?

Do you have any conditions that affect what you eat?

Section B

How often do you visit supermarkets?

What affects where you go/how often you go?

How often do you visit shops/shops other than supermarkets?

What affects where you go/how often you go?

Do you go alone or with others?

Who do you shop with?

Does anyone help you with your shopping?

Do you help anyone else with their shopping?

How do you get there? (walk, bus, car, etc.)

Do you have a car?

What factors affect which mode of transport you use?

How much time do you spend walking to/from shops?

Around shops?

How much does walking contribute to your physical activity?

Have you changed your shopping habits over the last few years?

How?

Why?

Do you consider yourself to be independent?

Why/why not?

Do you shop online?

Section C

Do you use shopping as a social activity?

Do you ever go to shopping centres to pass the time/get out of the house?

Do you meet up with other people/bump into people you know?

Where?

How often?

How much of your social activity involves shopping?

Do you chat to shop employees?

What language do you most often use in your local shop(s)?

Section D

Do you enjoy shopping?

What do you like/dislike about it?

Do you enjoy bargain hunting?

Do you shop for fun?

Section E

What sorts of foods do you typically eat?

Do you tend to buy the same food items each week?

How do you decide what foods to buy?

How do you decide what you're going to eat?

Do you plan meals in advance?

Do you have certain meals on certain days?

Tell me why you think it is important to eat.

Food for fuel

Physical health

Memory/thinking

Mood

Companionable

Section F

Do you budget for shopping?

Do you decide in advance how much to spend?

Do you use cash or cards to pay for your shopping?

Do you add up cost in your head as you shop?

Do you usually know how much the total will be when you get to the till?

Do you use lists?

If so, have you always used lists or has that changed over the last few years?

If not, how do you remember what you need?

What factors influence what you buy?

Do you think shopping helps keep you mentally active?

In what ways?

Section G

How healthy do you consider yourself to be?

(Compared to other people in your age group) do you think you're ageing well?

What do you think keeps you healthy?



Institute of Medical & Social Care
Research,
Bangor University
45 College Road, Bangor, Gwynedd,
Wales, LL57 2DG

Maintaining function and well-being in later life: A longitudinal cohort study (CFAS Wales)

Dear

Thank you for your valuable contribution to this research so far. When you were last interviewed, you agreed that we could contact you again. We are now approaching a small proportion of those who have taken part so far. This is to take part in a more detailed interview regarding **one** of a number of topics, including various life experiences, social life and friendships, lifestyles, activities and interests. This interview is less structured and more conversational, and will take approximately 1 hour. The enclosed information sheet provides more information.

The interviewer for this study will be calling in the next week or so to ask if you would be able to help. The research will be most valuable if as many as possible of those of you who are approached are willing to take part. The project has full NHS ethics approval and R&D approval from Betsi Cadwaladr University Health Board. All the interviewers are fully trained, and have Criminal Records Bureau clearance.

When the research interviewer calls she will produce identification and explain the study in more detail. If she calls at an inconvenient time she will be happy to call again later. Your cooperation is, of course, voluntary and your decision will not affect your medical care. I have enclosed an information sheet explaining the study in further detail.

If you have any questions, please telephone the research team on (01248) 383050 to discuss your queries. We hope you will take up the opportunity to support this research.

Yours Sincerely

Professor Bob Woods, Lead Investigator



Cyngor Cyllido Addysg
Uwch Cymru
Higher Education Funding
Council for Wales

Information Sheet

A Qualitative Study of the Role of Shopping in Later Life.

You are being invited to participate in a research study. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and feel free to ask us if you would like more information or if there is anything that you do not understand. Please also feel free to discuss this with your friends, relatives and GP if you wish. We would like to stress that you do not have to accept this invitation and should only agree to take part if you want to.

Thank you for reading this.

This study will examine the role of shopping in later life to see how it impacts on psychological wellbeing, quality of life and physical health. This study aims to investigate shopping habits and the benefits of shopping experiences of those aged 65 and older in relationship to a range of psychological, social and physical health variables. The approach we take is 'we are the novices and you are the expert'. Your experiences are of great importance to you, as is the advice and recommendations you can give to other people in the same situation and to local and central government.

You do not have to take part. Participation is entirely voluntary. You can decide to withdraw at any time, or pause during the interview, and you can withdraw after the interview if you wish. We would like to be able to use quotations from your interview but we will change any identifying features. However, you can also decide to take part but ask us not to use direct quotations if you wish.

You can be interviewed in a place of your choice, at a club, at the university, or if you prefer in the comfort of your own home. We will then come and visit you. At that time we will again explain the nature of the study and ask you to give informed consent. You will have the opportunity to ask about anything you are unclear of. The interview will consist of some general factual questions about your age, marital

status and living situation. We will then ask you to talk about your experiences. The researcher is a postgraduate student from the University of Liverpool. They will say clearly who they are. The interview is likely to take around half an hour. If you would like a transcript of the interview we will be happy to send you one. You will also be sent a copy of the report if you wish. We will audio record the interview, these will be then transcribed. Any identifying information will then be changed. The audio material and transcripts will be stored securely. Your consent form will be stored separately from these other materials. The transcripts will be kept securely for fifteen years unless you request them to be destroyed earlier.

It is intended that the data from the interviews will be used to write articles, reports and be presented at conferences. It is also likely that the research will be of interest to those who make policy and those who work in health and welfare services. You can request any of the materials produced from the study. Participants are welcome to contact the researchers after the interview if they have anything further that they wish to talk about.

There is no intended benefit for you in taking part in this study. However, you will be helping other people in similar situations.

If you are unhappy, or if there is a problem, please feel free to let us know by contacting [Dr Kate M Bennett and 0151 794 1410] and we will try to help. If you remain unhappy or have a complaint which you feel you cannot come to us with then you should contact the Research Governance Officer on 0151 794 8290 (ethics@liv.ac.uk). When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researcher(s) involved, and the details of the complaint you wish to make.

Participants taking part in a University of Liverpool ethically approved study will have cover.

If you have any further questions please contact:

Dr Kate M Bennett (Principal investigator)

0151 794 1410

kmb@liv.ac.uk

School of Psychology

University of Liverpool

Eleanor Rathbone Building

Bedford Street South

Liverpool L69 7ZA

August 2011 RC & ED



Institute of Medical & Social Care
Research,
Bangor University
45 College Road, Bangor, Gwynedd,
Wales, LL57 2DG

Maintaining function and well-being in later life (CFAS Wales)

PARTICIPANT INFORMATION SHEET

We would like to invite you to take part in a further aspect of this research study. Before you decide whether to take part is it important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully.

The purpose of the study

Ageing is now recognized as one of the major challenges facing the world's populations. It presents challenges to national and local policy makers and service providers in planning and providing for the needs of the older population.

This five year study is based on the original MRC Cognitive Function and Ageing Study (CFAS) which looked at ageing and health in six centres in the UK; Newcastle, Nottingham, Liverpool, North West Wales, Cambridgeshire and Oxford. The study began in 1991 with 18,000 participants, and it still continues today.

Since the start of the original study there has been an increase in life expectancy and improved screening, diagnosis and treatment of many chronic disorders. The aim of this study is to find out how health and well-being change as people grow older. Some people experience difficulties as they get older while others remain fit and active. We are interested in the full range of experiences so that we can get a true picture of ageing in the population.

Why have I been chosen?

When you were last interviewed, you agreed that we could contact you again. We are now approaching a small proportion of those who have taken part so far. This is to take part in a more detailed interview regarding **one** of a number of topics, including various life experiences, social life and friendships, lifestyles, activities and interests. If you agree to participate, we will ask again for your written consent for this aspect of the study.

Do I have to take part?

No, there is no obligation to take part and you can withdraw at any stage, without giving any reason. The study is for medical research only and will not affect your medical care or legal rights. We will ask for your consent separately for each aspect of the study, in case there are some parts you would prefer not to participate in.

What will happen if I decide to take part?

If you should decide to take part, a research interviewer will visit you at your home. If the time is not convenient they will return at a more convenient time for you. They will go through this information sheet with you and answer any questions you may have about the study. You will then be asked to sign a consent form to say you have read the information sheet, have had the opportunity to ask questions, and would like to take part in the study. Following this you will be interviewed, which will take approximately 1 hour. This interview will be less structured than the first one you did, and you will have the opportunity to tell us about your life experiences in your own words. This interview would be recorded.

Confidentiality

All the information collected by the study is completely confidential; confidentiality would only ever be broken if this became a legal requirement because a person was considered at risk of harm. All information is stored without personal details on secure systems in compliance with the Data Protection Act 1998. Occasionally, as mentioned above, we may ask to tape record an interview; audio tapes are anonymised before the interview is analysed; they may also be used for training and quality control purposes and will be destroyed when no longer required.

Anonymised data collected by the study may be analysed by researchers from other centres, approved either by the CFAS Wales team or by the UK Data Archive, where anonymised data will be held after the study has been completed.

This study has been considered by the North Wales Research Ethics Committee (West).

If the addressee is unable to respond, we would be grateful if a relative or carer could discuss with us whether an interview can take place or whether the relative/carers would be willing to be interviewed instead.

If you have any concerns or complaints about anything to do with the study please contact us on 01248 383050 and ask to speak to the Study Coordinator who if unable to help you will direct you to the appropriate person. Indemnity arrangements for the study are provided by Bangor University and the NHS. If you would like any further information or have any questions please contact us on 01248 383050.

Professor Bob Woods
Local Principal Investigator

Dr Gill Windle
Study Coordinator CFAS-Wales

<http://cfaswales.bangor.ac.uk/>



CONSENT FORM

Title of Research Project: A Qualitative Study of the Role of Shopping in Late Life.

Researcher(s): Elizabeth Evans

**Please
initial box**

- | | |
|--|--------------------------|
| 1. I confirm that I have read and have understood the information sheet dated 2011 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. I understand that my interview will be audio-recorded and later transcribed. | <input type="checkbox"/> |
| 2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected. | <input type="checkbox"/> |
| 3. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide and I can also request the destruction of that information if I wish. | <input type="checkbox"/> |
| 4. I agree to take part in the above study. | <input type="checkbox"/> |
| 5. I am willing for quotations from my interview to be used in presentations and publications by the Researcher on the understanding that all identifying features will be removed and I cannot be identified | <input type="checkbox"/> |

Participant Name	Date	Signature
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Name of Person taking consent	Date	Signature
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Researcher	Date	Signature
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The contact details of lead Researchers (Principal Investigators) are:

Elizabeth Evans
E.A.Evans@liv.ac.uk

Kate Bennett
kmb@liv.ac.uk

School of Psychology, University of Liverpool, Eleanor Rathbone Building, Bedford Street South, Liverpool L69 7ZA

September 2011



Institute of Medical & Social Care
Research,
Bangor University
45 College Road, Bangor,
Gwynedd, Wales, LL57 2DG

Maintaining function and well-being in later life CONSENT FORM

Respondent identifier: _____

Please Initial

I confirm that I have read and understood the information sheet (<u>Version 1 Qualitative 19/06/2012</u>) for the above study and have had the opportunity to ask questions.	<input type="checkbox"/>
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected	<input type="checkbox"/>
I agree to take part in the above study.	<input type="checkbox"/>
I understand that this interview may be recorded for later analysis or training and quality control purposes. I agree to this interview being audio recorded.	<input type="checkbox"/>
I understand that confidentiality will only be broken if this becomes a legal requirement because of risk of harm.	<input type="checkbox"/>

All the information collected by the study is completely confidential and is stored anonymously, without personal details. Audio tapes are anonymised and used for analysis and training and quality control purposes only and will be destroyed when no longer required.

Name of Respondent.....

Signature of Respondent..... Date.....

Name of Interviewer.....

Signature of Interviewer..... Date.....

Version 1 qualitative 19/06/2012

Shopping Frequency Questionnaire

Male **Female**

Single Married/cohabiting Separated/divorced Widowed

Age _____ **How many people live in your household?** _____

What is your working status?

Employed full time Employed part time Not working Retired Other (e.g. student)

What is your highest education level?

Degree or equivalent A level/ diploma/ apprenticeship GCSE/ O level Other School

Do you drive? Yes No

Is there a car in your household? Yes No

Do you have internet access? Yes No

Do you live in a rural area? Yes No

How long (in minutes) would it take to get to the nearest shop for groceries?

Walking: _____ Driving: _____

What is your level of responsibility for household food shopping?

Not responsible Less than half About half Most or all

Who else is responsible for food shopping in your household?

How satisfied are you with your level of responsibility for food shopping?

Completely satisfied

 Mostly satisfied

 Neither satisfied nor dissatisfied

 Mostly dissatisfied

 Completely dissatisfied

Can you go shopping when you need to?

 Yes

 Usually

 No

How often do you do a main shop for food?

Daily

 2-3 times per week

 Weekly

 2-3 times per month

 Monthly

 Less often

 Never

Who do you do your main food shopping with?

Alone

 Spouse/partner

 Children

 Other relative(s)

 Friend(s)

 Neighbour(s)

If you shop with children, what age groups are they?

 None

 Under 16

 16 or over

Where do you (or someone else) do your main food shopping?

Supermarket <input type="checkbox"/>	Supermarket chain local shops (e.g. Tesco Express) <input type="checkbox"/>
Discounters (e.g. Aldi) <input type="checkbox"/>	Small grocery stores or corner shops <input type="checkbox"/>
Local specialist shops (e.g. butcher, green grocer) <input type="checkbox"/>	Internet <input type="checkbox"/>
Street markets <input type="checkbox"/>	Farmers' markets <input type="checkbox"/>

Other – please specify _____

What transport do you use for your main food shop?

Bus

 Train

 Car

 Taxi

 Walk

 Other

What is your usual journey time in minutes? _____

How long (in minutes) do you usually spend on main food shopping? _____

How much of that time (in minutes) is spent walking? _____

Top up Food Shopping

How often do you go top-up food shopping?

Daily	2-3 times per week	Weekly	2-3 times per month	Monthly	Less often	Never
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Who do you do your top-up shopping with?

Alone	Spouse/partner	Children	Other relative(s)	Friend(s)	Neighbour(s)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Where do you do your top-up food shopping?

Supermarket	<input type="checkbox"/>	Supermarket chain local shops (e.g. Tesco Express)	<input type="checkbox"/>
Discounters (e.g. Aldi)	<input type="checkbox"/>	Small grocery stores or corner shops	<input type="checkbox"/>
Local specialist shops (e.g. butcher, green grocer)	<input type="checkbox"/>	Internet	<input type="checkbox"/>
Street markets	<input type="checkbox"/>	Farmers' markets	<input type="checkbox"/>
Other – please specify _____			

What transport do you use for your top-up food shop?

Bus	Train	Car	Taxi	Walk	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is your usual journey time in minutes? _____

How long (in minutes) do you usually spend top-up food shopping? _____

How much of that time (in minutes) is spent walking? _____

Non-food shopping

How often do you go shopping for non-food items (e.g. clothes, household, electrical)?

Daily	2-3 times per week	Weekly	2-3 times per month	Monthly	Less often	Never
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Who do you do your non-food shopping with?

Alone	Spouse/partner	Children	Other relative(s)	Friend(s)	Neighbour(s)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What transport do you use for your non-food shopping?

Bus	Train	Car	Taxi	Walk	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is your usual journey time in minutes? _____

How long (in minutes) do you usually spend non-food shopping? _____

How much of that time (in minutes) is spent walking? _____

Which of the following activities do you do/ have you done...

Generally while shopping**Most recent shopping trip**

Window shopping (outside shops)	<input type="checkbox"/>	Window shopping (outside shops)	<input type="checkbox"/>
Browsing (inside shops)	<input type="checkbox"/>	Browsing (inside shops)	<input type="checkbox"/>
Visited cafe/restaurant	<input type="checkbox"/>	Visited cafe/restaurant	<input type="checkbox"/>
Sat down in shop/shopping centre	<input type="checkbox"/>	Sat down in shop/shopping centre	<input type="checkbox"/>
Watched other people passing by	<input type="checkbox"/>	Watched other people passing by	<input type="checkbox"/>
Met up with family/friends	<input type="checkbox"/>	Met up with family/friends	<input type="checkbox"/>
Recognised someone	<input type="checkbox"/>	Recognised someone	<input type="checkbox"/>
Talked to someone you know	<input type="checkbox"/>	Talked to someone you know	<input type="checkbox"/>
Talked to shop employee	<input type="checkbox"/>	Talked to shop employee	<input type="checkbox"/>

Other – please specify _____

Friendship

Do you have friends in your community/neighbourhood? Yes No

How often do you have a chat or do something with one of your friends?

Never	Daily	2-3 times a week	At least weekly	At least monthly	Less often
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many of your friends do you see or hear from at least once a month?

None	One	Two	Three or four	Five to eight	Nine or more
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many friends do you feel at ease with so that you can talk about private matters?

None	One	Two	Three or four	Five to eight	Nine or more
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many friends do you feel close to such that you could call on them for help?

None	One	Two	Three or four	Five to eight	Nine or more
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How often do you see any of your neighbours to have a chat or do something with?

Never	Daily	2-3 times a week	At least weekly	At least monthly	Less often
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Eating habits

How often do you eat fresh fruit?

Never	Seldom	Once a week	2-4 times a week	5-6 times a week	Once or more daily	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many servings of any fruit (fresh, frozen, tinned or dried) do you have in a day?

How often do you eat green leafy vegetables?

Never	Seldom	Once a week	2-4 times a week	5-6 times a week	Once or more daily	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How often do you eat other vegetables?

Never	Seldom	Once a week	2-4 times a week	5-6 times a week	Once or more daily	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many servings of any vegetables do you have in a day? _____

How often do you eat fatty fish (e.g. salmon, mackerel, herring)?

Never	Seldom	Once a week	2-4 times a week	5-6 times a week	Once or more daily	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How often do you eat other fish (e.g. cod, tuna, haddock)?

Never	Seldom	Once a week	2-4 times a week	5-6 times a week	Once or more daily	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many servings of any meat, fish, eggs or beans do you have in a day?

How often do you eat wholemeal/brown bread?

Never	Seldom	Once a week	2-4 times a week	5-6 times a week	Once or more daily	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many servings of bread, rice, pasta or potatoes do you have in a day?

How many servings of milk or dairy foods do you have in a day?

How many servings cakes, biscuits, sweets and sugary drinks do you have in a day?

Wellbeing**In most ways my life is close to my ideal:**

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The conditions in my life are excellent:

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am satisfied with my life:

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

So far I have got the important things I want in life:

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If I could live my life over I would change almost nothing:

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Health factors

For someone of my age, my health in general is:

Excellent
Good
Fair
Poor
Don't know

Do you take part in sports or activities that are mildly energetic (light gardening, bowls, light housework, home repairs)?

Yes No

How often do you take part in mildly energetic activities?

More than once a week
Once a week
One to three times a month
Hardly ever or never

Do you take part in sports or activities that are moderately energetic (e.g. walking at a moderate pace, dancing, moderate gardening, stretching exercises, heavy housework)?

Yes No

How often do you take part in moderately energetic activities?

More than once a week
Once a week
One to three times a month
Hardly ever or never

Do you take part in sports or activities that are vigorous (e.g. running, swimming, cycling, gym workout, heavy gardening)?

Yes No

How often do you take part in vigorous activities?

More than once a week
Once a week
One to three times a month
Hardly ever or never

Comments: _____

Thank you for your participation!

CFAS-Wales – Variable Used in Analysis

CFAS Wales Main questionnaire part 2.

I would now like to ask you some questions about day to day activities, which some people find difficult.

I would like to know if you are able, or if you have any difficulty with the following activities.

Q538 Are you able to shop and carry heavy bags? (IF YES: Do you have difficulty?)

- 0. (No), needs help
- 1. (Yes), some difficulty
- 2. (Yes), no difficulty
- 7. Don't know
- 8. No answer
- 9. Not asked

ELSA – Variables Used in Analyses

Interview Questionnaire: Health Module (all waves)

HEHELF

Now I would like to ask you some questions about your health. Would you say your health is...

INTERVIEWER: Read out...

- 1 excellent,
- 2 very good,
- 3 good,
- 4 fair,
- 5 or, poor?

These responses were collapsed to create an outcome measure of good health (excellent, very good, good; coded 0) or not good health (fair, poor; coded 1).

HEADLB@*

SHOW CARD C13

Here are a few more everyday activities. Please tell me if [^you have / ^name] has] any difficulty with these because of a physical, mental, emotional or memory problem. Again exclude any difficulties you expect to last less than three months.

Because of a health or memory problem, [^do you / does he / does she] have difficulty doing any of the activities on this card?

- 01 Dressing, including putting on shoes and socks
- 02 Walking across a room
- 03 Bathing or showering
- 04 Eating, such as cutting up [^your / his / her] food
- 05 Getting in or out of bed
- 06 Using the toilet, including getting up or down
- 07 Using a map to figure out how to get around in a strange place
- 08 Recognising when you are in physical danger
- 09 Preparing a hot meal
- 10 Shopping for groceries
- 11 Making telephone calls
- 12 Communication (speech, hearing or eyesight)
- 13 Taking medications
- 14 Doing work around the house or garden
- 15 Managing money, such as paying bills and keeping track of expenses
- 96 None of these

[Multiple responses to HEADLB are recoded in variables: headldr headlwa headlba headlea headlbe headlwc headlma headlpr headlsh headlph headlme headlho headlmo headlb14 headlb15 headl96]

[code maximum 13 out of 14 possible responses]

The response options were either mentioned (1) or not mentioned (0).

Interview Questionnaire: Timed Walk (Measurement) Module (all waves)

This is our walking course. I want you to walk to the other end of the course at your usual walking pace, just as if you were walking down the street to go to the shops. Walk all the way past the other end of the tape before you stop.

INTERVIEWER: Demonstrate the walk for the respondent.

When I want you to start, I will say: 'Ready, begin!'

INTERVIEWER: Ask the respondent to stand with both feet together at the start of the walking course. When the respondent is properly positioned at the start of the walking course, say: 'Ready, begin!' Press the start / stop button to start the stopwatch as the respondent's foot hits the floor across the starting line. If possible walk behind and to the side of the respondent. Stop timing when the respondent's foot hits the floor after the end of the walking course.

Enter 1 to continue.

Range: 1..1

INTERVIEWER: Record results of first trial.

Enter time at next question.

- 1 Completed successfully
- 2 Attempted but unable to complete
- 3 Stopped by the interviewer because of safety reasons
- 4 Respondent refused

INTERVIEWER: Record time in seconds to two decimal places.

Now I want you to repeat the walk. Remember to walk at your usual pace, and go all the way past the other end of the course.

1 Press <1> and <Enter> to continue.

INTERVIEWER :Record result of second trial.

Enter time at next question.

- 1 Completed successfully
- 2 Attempted but unable to complete
- 3 Stopped by the interviewer because of safety reasons
- 4 Respondent refused

INTERVIEWER: Record time in seconds to two decimal places.

Walking speed was measured over a 2.44 metre (8 foot) course. Poor gait speed at was calculated as less than or equal to 0.4 metres per second (coded as 1) and good gait speed was greater than 0.4 metres per second (coded as 0).

Interview Questionnaire: Cognitive Function Module (waves 1-5)**Memory (delayed recall)**

I will now read a set of 10 words. I would like you to recall as many as you can.

We have purposely made the list long so it will be difficult for anyone to recall all the words.

Most people recall just a few.

Please listen carefully to the set of words as they cannot be repeated. When I have finished, I will ask you to recall aloud as many of the words as you can, in any order. Is this clear?

INTERVIEWER: If no, explain further.

Read out word list below at a slow steady rate approximately one word every 2 seconds.

[^list of words]

After word list has been read out press <1> and <Enter>.

Range: 1..1

Now please tell me the words you can recall.

[^list of words]

INTERVIEWER: Write the words in the booklet provided. Allow as much time as the respondent

wishes, up to 2 minutes. Enter the number of words the respondent correctly recalls.

Range: 0..10

When used as a dependent variable, this was dichotomised into those with impaired cognitive function (scored as 1) and those without impairment (scored as 0). In order to do this, scores on the index were standardised and a score of less than -1 SD from the mean was used to define impairment.

Executive function (verbal fluency)

Now I would like you to name as many different animals as you can think of. You have one minute to do this. The computer voice will tell you when to stop.

Ready, go!

INTERVIEWER: Press <1> and <Enter> as you say 'go!'.

INTERVIEWER: Only if the participant asks for clarification, explain that animals include birds, insects, fish etc.

Range: 1..1

INTERVIEWER: Write animals mentioned in booklet provided.

Enter the number of different animals mentioned.

See help <F9> for rules about what animals to include.

Help screen F9: Rules for scoring animal naming task:

Do not count repetitions and do not count redundancies (e.g. white cow, brown cow).

Do not count named animals (e.g. Spot, Bambi, or Yogi Bear).

Different breeds (e.g. dog, terrier, poodle) and different gender or generation-specific names (e.g. bull, cow, steer, heifer, calf) each count as correct.

If the respondent gives the name of an animal which you have not heard of (e.g. kudu, echidna), give them the benefit of the doubt and count them as correct

Range: 0..100

When used as a dependent variable, this was dichotomised into those with impaired cognitive function (scored as 1) and those without impairment (scored as 0). In order to do this, scores on the index were standardised and a score of less than -1 SD from the mean was used to define impairment.

Paper Self-Completion Questionnaire (waves 2, 4, 5, 6)**SCEDCS**

(How easy or difficult would it be for you to get to each of the following places, using your usual form of transport?)

Corner Shop

- 1 Very easy
- 2 Quite easy
- 3 Quite difficult
- 4 Very difficult
- 5 Unable to go
- 6 Do not wish to go

SCEDSU

(How easy or difficult would it be for you to get to each of the following places, using your usual form of transport?)

Medium or large supermarket

- 1 Very easy
- 2 Quite easy
- 3 Quite difficult
- 4 Very difficult
- 5 Unable to go
- 6 Do not wish to go

SCEDSC

(How easy or difficult would it be for you to get to each of the following places, using your usual form of transport?)

Shopping centre

- 1 Very easy
- 2 Quite easy
- 3 Quite difficult
- 4 Very difficult
- 5 Unable to go
- 6 Do not wish to go

For descriptive analyses, the response options were collapsed into easy (very easy, quite easy; coded as 1) or difficult (quite difficult, very difficult, unable to go; coded as 2).

For change over time

Easy to access at T1 and T2 (coded as 1); move from easy at T1 to difficult at T2 (coded as 2); move from difficult at T1 to easy at T2 (coded as 3); difficult to access at both T1 and T2 (coded as 4).

Paper Self-Completion Questionnaire (all waves)**SCLIFEC**

(Please say how much you agree or disagree with the following statements.)

I am satisfied with my life

1 Strongly agree

2 Agree

3 Slightly agree

4 Neither agree nor disagree

5 Slightly disagree

6 Disagree

7 Strongly disagree

These responses were reverse-coded to be in ascending order; for example, 1 became strongly disagree, 7 became strongly agree.

CASP-19

The CASP score is derived from the 19 variables shown below, which all have the same response options as follows:

1 Often

2 Sometimes

3 Not often

4 Never

SCQOLA

My age prevents me from doing the things I would like to

SCQOLB

I feel that what happens to me is out of my control

SCQOLC

I feel free to plan for the future

SCQOLD

I feel left out of things

SCQOLE

I can do the things that I want to do

SCQOLF

Family responsibilities prevent me from doing what I want to do

SCQOLG

I feel that I can please myself what I do

SCQOLH

My health stops me from doing things I want to do

SCQOLI

Shortage of money stops me from doing things I want to do

SCQOLJ

I look forward to each day

SCQOLK

I feel that my life has meaning

SCQOLL

I enjoy the things that I do

SCQOLM

I enjoy being in the company of others

SCQOLN

On balance, I look back on my life with a sense of happiness

SCQOLO

I feel full of energy these days

SCQOLP

I choose to do things that I have never done before

SCQOLQ

I feel satisfied with the way my life has turned out

SCQOLR

I feel that life is full of opportunities

SCQOLS

I feel that the future looks good for me

To establish the overall CASP score, the response options were reverse coded (so that often = 3; sometimes = 2; not often = 1; never = 0) to give a summative score of 0-57. For analyses the overall CASP-19 score was used with a high score indicating higher quality of life.

Food and You – Variables Used in Analyses

PART 3 SHOPPING

(Shopping section asked of 1/3 of sample)

And now some questions on shopping...

3.1 Thinking about food/grocery shopping, which of these best describes the level of responsibility you have for the shopping in your household?

SHOW SCREEN, SINGLE CODE

-1 = Not applicable

1 = Responsible for all or most of the food/grocery shopping

2 = Responsible for about half of the food/grocery shopping

3 = Responsible for less than half of the food/grocery shopping

4 = Not responsible for any of the food/grocery shopping

3.7 How often do you (or someone else) do a main shop for your household food shopping?

SINGLE CODE, SHOW SCREEN

1 = Every day

2 = 2-3 times per week

3 = About once a week

4 = 2-3 times a month

5 = Once a month

6 = Less often

7 = Never

8 = Don't know

For the purpose of analysis, the top four categories (4-7) were collapsed into 2-3 times a month or less (coded as 4).

TUS - Variables Used in Analyses

Diary (Adults)

Diary instructions

Please use the columns in this diary to show us what you were doing, where you were and whether you were with anybody for each 10 minute period in the diary day.

If you took longer than ten minutes please use an arrow to show how long you took to do that activity.

If you did more than one thing within a 10 minute period, write in the one that took most time. If you were doing more than one thing at the same time, record the second activity in this column.

Please show if you were with anybody by putting a cross or crosses in the boxes. Use a line to show how long you were alone or with somebody. Please also put a cross in the boxes when you either stopped being alone or with certain groups of people.

Main and secondary activity codes

36 SHOPPING AND SERVICES

360 Unspecified shopping and services

361 Shopping

3610 Unspecified shopping

3611 Shopping mainly for food

3612 Shopping mainly for clothing

3613 Shopping mainly related to accommodation

3614 Shopping or browsing at car boot sales or antique fairs

3615 Window shopping or other shopping as leisure

3619 Other specified shopping

362 Commercial and administrative services

363 Personal services

369 Other specified shopping and services

3721 Shopping for and ordering unspecified goods and services via the internet

3722 Shopping for and ordering food via the internet

3723 Shopping for and ordering clothing via the internet

3724 Shopping for and ordering goods and services related to accommodation via the internet

3725 Shopping for and ordering mass media via the internet

3726 Shopping for and ordering entertainment via the internet

Time spent shopping included all instances of shopping recorded in the two 24 hour self-completion diaries, each of which was divided into 144 ten minute time slots.

Each recorded instance of shopping corresponds to a 10 minute slot or any part thereof. For each respondent all instances of 10 minutes shopping were summed to create a total time spent shopping. Thus, in the analyses presented here time spent shopping corresponds to total time per person over the two days and not individual shopping trips.

With whom time is spent (for respondents aged 14 and over):

Wit0_001 .. Wit0_144 = Alone or with people not known to the respondent

Wit1_001 .. Wit1_144 = Children up to 9, living in the household

Wit2_001 .. Wit2_144 = Children aged 10 – 14 living in the household

Wit3_001 .. Wit3_144 = Other household members

Wit4_001 .. Wit4_144 = Other persons, known to the respondent

The with whom codes were used only when occurring at the same time as shopping activity.

Social activity codes:

511 Socialising with household members

519 Other specified social life

For analyses, these social activity codes were used only when occurring at the same time as shopping activity.

Individual Questionnaire (Adults)

Q28 I am now going to ask you about some household activities. Please can you tell me how much you do or don't like doing them?

q28d Shopping for food

1 = Like a lot

2 = Like a little

3 = Neither like or dislike

4 = Dislike a little

5 = Dislike a lot

6 = Do not do activity

8 = Don't know

q28e Shopping (non-food)

1 = Like a lot

2 = Like a little

3 = Neither like or dislike

4 = Dislike a little

5 = Dislike a lot

6 = Do not do activity

8 = Don't know

For analyses these were collapsed into like (1/2 = 1) and not like (3/5 = 0); (6/8 = missing).

Q34a How is your general health?

- 1 = Very good
- 2 = Good
- 3 = Fair
- 4 = Bad
- 5 = Very bad
- 6 = Don't know
- 7 = Refused

These were collapsed into good health (very good or good = 1) or not good health (fair, bad or very bad = 0).

Understanding Society – Variable Used in Analyses

Individual Questionnaire: Domestic Division of Labour Module (wave 2)

Hubuys. Who does the grocery shopping (couples)

I am going to read out some household jobs. Could you please say who mostly does this work here? Is it mostly yourself, or mostly your spouse/partner, or is the work shared equally?

First, grocery shopping.

1 = Mostly self

2 = Mostly spouse/partner

3 = Shared

4 = Paid help only

97 = Other

For the purpose of analysis, the original coding was used; however, respondents who reported that they did not do their own grocery shopping (i.e. responded 'paid help' or 'other') were not retained.