



# Befriending Networks

## **A Summary of Recent Research Evidence about Loneliness and Social Isolation, their Health Effects and the Potential Role of Befriending**

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Abstract:

*Changing family and social structures and increased individualisation may mean that loneliness and social isolation are increasing in the UK. Loneliness is characterised by negative feelings relating to the quality of an individual's social relationships while social isolation relates to the numbers and frequencies of social contacts of an individual. While both concepts' definitions are contested and can be difficult to measure, several reports attest to the fact that a significant minority of individuals is experiencing loneliness and/or social isolation in the UK at a given time. A large body of studies demonstrate how loneliness and social isolation can lead to a number of physical and mental health problems. High levels of loneliness are associated with depressive symptoms, deliberate self-harm and cognitive decline. Social isolation and loneliness are both associated with increased risk of premature mortality, elevated blood pressure, heart problems, declining physical functioning, physical disability, unhealthy behaviours and worse overall self-reported health. These problems pose a serious public health risk both for individuals and for society in terms of healthcare costs and loss of economic activity. Befriending is a service provided by volunteers who offer companionship on a regular basis for a range of socially isolated or lonely individuals. Unique benefits for befriendees include regular social contact from someone who is not being paid to spend time with them, the opportunity for a mutual and reciprocal friendship-like relationship and support in reengaging with their local community. Research on its effects is scarce but suggests befriending could have a positive effect on individual's health, and has the potential to be a cost-effective intervention. Befriending can also benefit the volunteer befrienders who are similarly able to reengage with their community, and may derive health benefits from regular volunteering. Befriending has the potential to be an important aspect of the overall approach to helping the most isolated and lonely individuals in our society. More research is needed to substantiate these findings.*

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## **INTRODUCTION**

The importance of social relations is often agreed upon but is not fully understood. While there are no concrete figures for changes in prevalence of loneliness and social isolation over time, a number of social changes have occurred which suggests that social connectedness may be decreasing. For example, family and friendship structures are changing and more people live alone than ever before<sup>i</sup>. Meanwhile, the availability of informal social support is falling due to changes including higher levels of female employment and declining birth rates<sup>ii</sup>. Loneliness and social isolation may therefore be increasing and more support will be needed for those experiencing them. Befriending is one social intervention which could help in this respect. Despite its focus on providing companionship for isolated individuals, there is a lack of research into the effects of befriending and whether it offers unique benefits which should be invested in as a means to alleviate loneliness and social isolation. This review aims to draw together available research on befriending, how it could help to prevent or ameliorate loneliness and social isolation and their health effects, and finally to offer recommendations for areas of future research.

The review will begin with a chapter justifying the methodological decisions. The first section will then define the concepts of loneliness and social isolation and how they can be measured. Next, the prevalence of loneliness and social isolation in the UK will be explored with regard to different demographic groups. The second section of the review will explore recent literature on the health effects of loneliness and social isolation, and how these can indirectly impact on the community and its resources. The final section will explore the ways in which befriending can mitigate the health effects of loneliness and social isolation. Befriending will first be defined and then explored as an intervention to loneliness and social isolation using the available literature. The section will also discuss the benefits of volunteering for the befriender and finally will outline the lack of research into befriending and the methodological challenges it poses as a subject of investigation. The review will ultimately demonstrate that loneliness and social isolation pose a severe health risk to the UK and that befriending is one solution which has the potential to ameliorate or prevent these effects through several unique benefits of the intervention.

## METHODOLOGY

Studies were selected for inclusion in this review through searching academic journal databases. Search terms included words relating to loneliness and social isolation including: *loneliness, lonely, alone, social isolation, social exclusion* and *isolation*. These were also cross-searched with terms relating to health effects including: *health effects, mental health, physical health, dementia, Alzheimer's disease, unhealthy behaviours, mortality, blood pressure, heart disease, depression, anxiety, immune system, cognition* and *disability* (all of which were known to have been found to be associated with either loneliness and/or social isolation). Both these categories of search terms were further cross-searched with terms relating to befriending including: *befriending, befriend, befriender, mentoring, social intervention, volunteer* and *volunteering*. This final category of terms was also used alone to find studies specifically assessing the value of befriending schemes. The terms *children* and *adolescents* were cross-searched with the above terms due to the lack of data on these age groups found through other means. The databases used were PubMed, the UK Data Archive and the University of Edinburgh's "Searcher" e-journals search tool. The Office for National Statistics and National Centre for Social Research's resource archives were also searched for survey data relating to the extent of loneliness and social isolation in the UK. The search terms used were deliberately broad to allow for the conceptual confusion which can surround the terms *loneliness, social isolation* and *befriending*. Studies were therefore included in the relevant sections only if they corresponded to the definitions of each term given below.

Studies were included based on all age groups of participants. Studies specifically focusing on the UK were preferred but research which included the UK as one of multiple countries was also included (but will be noted when used). Studies looking at the health effects of loneliness and social isolation, and befriending schemes, in other countries were included though these are also specifically noted when used. Studies relating to health effects include both cross-sectional and longitudinal studies. For the former, causality can be difficult to establish as effects are studied at only one time point as opposed to at multiple points for longitudinal studies. It should also be noted that quantitative research studies are vulnerable to model misspecification in which causality is falsely attributed to one variable if another potential causal variable has been overlooked. In studies in which causality has attempted to be established, the range of variables investigated will therefore be described. Each study's methodology will be explained as it is cited, and each study is referenced through footnotes for further information.

## **SECTION 1:**

### **LONELINESS AND SOCIAL ISOLATION IN THE UK**

#### **Defining Loneliness and Social Isolation**

How loneliness and social isolation are defined will affect both their measurement and the interventions which will be considered appropriate to mitigate their effects. While each concept has been used interchangeably in some of the literature it is increasingly being recognised that loneliness and social isolation are distinct concepts<sup>iii</sup>. While individuals may experience both simultaneously, they are also capable of feeling lonely among strong social support and networks and can be socially isolated while not feeling lonely. Both terms are theoretically contested despite the fact that they are often taken-for-granted terms in everyday language.

#### **Definition of Loneliness:**

Loneliness is not the same as being alone. While people can *choose* to be alone for a variety of reasons, loneliness is characterised by a negative feeling which occurs as a result of the gap between desired and actual quality of relationships or social contacts<sup>iv</sup>. Loneliness can be short-lived or long-term and chronic. De Jong Gierveld and Van Tilburg (2006) explain that a number of factors can help explain why some individuals feel lonely while others do not, including individual personality traits, the presence or absence of an intimate partner, and the type and quality of family relationships<sup>v</sup>. Loneliness is often divided into two elements in the literature according to the theories of Weiss (1973): *emotional loneliness*, which is caused by a lack of close and intimate social relations, and *social loneliness*, which is caused by a lack of wider social contacts<sup>vi</sup>.

#### **Definition of Social Isolation:**

Social isolation is generally agreed in the literature to be more objective than loneliness and relates to the extent to which an individual is isolated from social contacts including friends, family members, neighbours or the wider community.<sup>vii</sup> However, social isolation is a contested concept; while some authors focus only on the externally observed elements of social contacts, Zavaleta, Samuel and Mills (2014) define loneliness as *subjective social isolation*, arguing that the definition of social isolation should include both external and self-defined elements<sup>viii</sup>. However, for the purposes of this report

social isolation will be defined and measured in terms of *objective* (externally defined rather than self-defined) social connectedness.

### **Measuring Loneliness and Social Isolation**

#### **Measures of Loneliness:**

According to the definition as outlined above, loneliness is usually measured according to subjective responses. A common measure of loneliness is a *single item*, for example, “How much of the time in the past week have you felt lonely?” with responses including “every day”, “most days”, “some days”, “never”. Alternatively the question could be phrased “Are you lonely?” with “yes” or “no” response options. The benefit of this type of measure is its simplicity in terms of ease of use for researchers and ease of response for research participants. Despite this, Victor, Scambler and Bond (2009) argue that such measures conceptualise loneliness as a one-dimensional concept which is simplistic given its complexity<sup>ix</sup>; loneliness may mean different things to various individuals, and across cultural contexts. Furthermore, a social stigma exists relating to feeling lonely and asking a participant *directly* about loneliness may therefore result in a different response than if questions were asked indirectly. Statistical limitations with using a simplistic measure also include lower levels of validity and reliability than for multi-item measures. A measure is considered reliable if it is consistent and repeatable across different times and contexts of research and valid if it accurately measures what it is designed to measure<sup>x</sup>.

More complex measures of loneliness have been developed which assess loneliness using multiple items. One example is the *UCLA Loneliness Scale* which consists of twenty questions relating to feelings of loneliness including: “How often do you feel left out?” and “How often do you feel you lack companionship?”, and offers the response options “never”, “rarely”, “sometimes” and “always”<sup>xi</sup>. The UCLA Loneliness Scale has been tested on different populations and refined to make it accessible and reliable for a range of demographic groups, and across different methods of application including telephone interviewing<sup>xii</sup>. Another common multi-item measure of loneliness is the *de Jong Gierveld Loneliness Scale* which has now been simplified to six items for ease of use. It comprises statements with which respondents can agree or disagree with to varying degrees including: “There are plenty of people I can rely on when I have problems” and “I often feel rejected”<sup>xiii</sup>. The statements are based on Weiss’s dichotomy of social and emotional loneliness and aim to measure various dimensions of the concept of loneliness in contrast to the UCLA Loneliness Scale which focuses on one dimension. The scale has been found to be reliable among a broad range of adults<sup>xiv</sup>.

### **Measures of Social Isolation:**

Due to its contested definition, there is no agreed method of measuring social isolation. However, researchers often measure social isolation according to different levels of social contact: friends, family, social networks and the wider community. For example, a simple measure would be to determine the frequency of contacts with friends or family over the previous week. A more complex measure would consist of items designed to assess various elements of social isolation, including frequency of social contacts, extent of social networks, involvement in clubs or organisations, and participation in social activities. Victor, Scambler and Bond (2009) argue that such measures can demonstrate cultural biases about how an individual *should* socialise<sup>xv</sup>. For example, cultural participation is often defined according to paid activities such as cinema or pub trips, which they argue reflects the UK's "consumerist society". Such measures are also difficult to test or judge due to the contested nature of social isolation; for example, how should a relationship be measured? Should each relationship's quality be measured as well as its quantity?

Several scale measures have been introduced to measure elements of social isolation. The *Lubben Social Network Scale*, for example, is designed to measure the extent of an individual's social network through questions relating to frequency of contact with friends and family, as well as the quality of these relationships<sup>xvi</sup>. Questions include 'How many relatives/friends do you see or hear from at least once a month?' and 'How many relatives/friends do you feel close to such that you could call on them for help?'<sup>xvii</sup> It should be noted that some of these measures assess *subjective* judgements of an individual's social contacts which, it could be argued, relate more to loneliness than social isolation according to the definitions used for this review. Most of the studies used in this report assess social isolation according to their own measures, and these will be described when reporting the findings.

### **Prevalence of Loneliness and Social Isolation in the UK**

#### **Prevalence of Loneliness in the UK:**

Rates of loneliness vary within and between different groups of the population. However, several survey reports have measured overall rates of loneliness for adults in the UK using single-items. The 2005 Omnibus Survey of households in Great Britain found that 5% of adults reported feeling lonely "often" and 31% felt lonely "sometimes"<sup>xviii</sup>. Using data from the European Social Survey for 2006, Victor and Yang (2012) reported that 6% of adults in the UK were lonely "all or most of the time" while 21% felt

lonely “sometimes”<sup>xxix</sup>. The Office for National Statistics (ONS) similarly found that in 2011 5% of adults reported feeling “completely lonely” in their daily lives<sup>xx</sup>. The prevalence of loneliness among those aged under 16 years is harder to estimate due to the paucity of studies on children’s loneliness. However, data from ChildLine can help demonstrate its relevance for this age group: in 2010, 9,924 children were counselled about loneliness as their “main or additional problem” by ChildLine, representing 6% of all children counselled in that year<sup>xxi</sup>. ChildLine reports that, while some reports of loneliness were transient and considered “just part of growing up”, other children were described as “desperately lonely”<sup>xxii</sup>.

Rather than being an inherently static state, loneliness can change for an individual over time and according to various circumstances. Victor, Scambler and Bond (2009) used 2001 data from the UK’s Office for National Statistics Omnibus survey of households to explore different forms of loneliness for 999 adults aged over 65 years. While the majority of participants reported that they had experienced no change in their loneliness over the previous decade, 22% felt that their loneliness had deteriorated and 9% felt their loneliness had improved over time<sup>xxiii</sup>. Indirect evidence about the extent of loneliness in the UK can be derived from findings of a nationally representative survey of 2,256 participants commissioned by the Mental Health Foundation in 2010. Nearly a quarter (24%) of the sample “worried about feeling lonely” and 37% had a close friend or family member who they felt was “very lonely”<sup>xxiv</sup>.

### **Prevalence of Loneliness: Demographic Variations:**

Loneliness varies across different demographic groups. However, it should be noted that loneliness is a complex experience: factors associated with loneliness overlap, and loneliness may be caused by a combination of these factors as well as by other factors entirely. The following are therefore demographic factors found to be *associated* with loneliness.

**Age:** Using UK data from the 2006 European Social Survey, Victor and Yang (2012) found a “u-shaped” distribution of loneliness among adults, with higher prevalence among younger adults (aged 15-25 years) and older adults (aged 55 years and above) but lower prevalence among other adults<sup>xxv</sup>. While there is a lack of recent research into loneliness rates among children, loneliness among older adults has been well documented. Older adults are considered to be uniquely at risk of loneliness due to a number of potential life course effects such as loss of physical mobility, reduced income and bereavement<sup>xxvi</sup>.

This is increasingly discussed as a policy concern due to the ageing population in the UK: between 1971 and 2009 the proportion of the UK population aged 75 and over increased by three percentage points to 7.8%<sup>xxvii</sup>. The association between age and loneliness is evidenced in several studies. Data from the 2009-2010 English Longitudinal Study of Ageing (ELSA), for example, found that nearly one in ten (9%) respondents aged over 50 years felt lonely “often”, which is higher than has been found for the wider population<sup>xxviii</sup> (as outlined above). This was found to further increase as the respondent aged; the combined proportion of those feeling lonely “some of the time” or “often” was 46% for those over 80 years old compared to 34% for those over 52 years old, for example<sup>xxix</sup>. Despite these prevailing perspectives, Victor *et al.* (2005) found an opposing trend. Using a sample derived from the ONS’ Omnibus Survey using participants aged 65 years and over, those aged 85 year or above were actually at *lowest* risk of reporting loneliness once other factors were controlled for (such as widowhood)<sup>xxx</sup>. This suggests that loneliness may not be inherent to ageing but may be dependent on other life circumstances which contribute to dissatisfaction with one’s social relationships.

**Gender and Marital Status:** A number of sources attest to the fact that women are more likely to report loneliness than men<sup>xxxi</sup>. Using data from the European Social Survey, for example, Victor and Yang (2012) found that 9% of women felt lonely “most or all of the time” compared with 6% of men<sup>xxxii</sup>. One reason for the discrepancy in self-reported loneliness between genders is women’s longer life expectancy: more women experience bereavement, which confounds the relationship between gender and loneliness. This is supported by data from the 2009-2010 ELSA in which those who had been widowed were found to report higher rates of loneliness<sup>xxxiii</sup>. This was also true for those who were separated or divorced, which demonstrates that marital status is associated with loneliness. While most adults in the UK are married or in a civil partnership, approximately 12% are divorced, widowed, separated or have lost their civil partner<sup>xxxiv</sup>. This section of the population is more at risk of loneliness. Beal (2006) conducted a review of 34 medical and sociological articles about older women and loneliness published between 1995-2005 and concluded that, although a greater proportion of women reported loneliness than men, widowhood, illness and immigration made women particularly vulnerable to loneliness rather than gender itself<sup>xxxv</sup>.

**Living Alone:** Reported levels of loneliness are higher among those in single-person households. In a survey of adults aged over 65 years old, Victor *et al.* (2003) found that 17% of those living alone felt they were “often” or “always” lonely compared to 2% of those living with others (using a single-item loneliness measure)<sup>xxxvi</sup>. The numbers of people living alone are rising in the UK (having increased from 7 million in 2001 to 7.5 million in 2010) and solo living tends to be higher among older adults<sup>xxxvii</sup>. The rates of loneliness among those living alone may therefore also be affected by age or bereavement of a spouse.

### **Prevalence of Social Isolation in the UK:**

The way in which social isolation is measured affects its reported prevalence. Victor *et al.* (2003) measure isolation in relation to frequency of face-to-face contact with friends, family or neighbours. Based on a sample of adults in the UK aged 65 years and over they found those without weekly contact comprised 17% of their participants and those with less than monthly direct contact comprised 11%<sup>xxxviii</sup>. Banks, Haynes and Hill (2009) described 6.5% of their UK respondents as “severely isolated” in terms of reporting no monthly contact with friends or family, or any involvement in social groups or organisations<sup>xxxix</sup>. They used a sample of adults aged over 50 years and data from the 2001-2002 International Social Survey Programme which compared eighteen countries (thirteen European countries and Japan, Australia, the U.S., New Zealand and Canada) and found the UK to have the highest rates of social isolation<sup>xl</sup>. Using PRO-AGE trial study data for 2,598 adults aged over 65 years in London, Lubben *et al.* (2006) found that 15% of their sample was *at risk* of social isolation according to the Lubben Social Network Scale<sup>xli</sup>. Victor, Scambler and Bond (2009) surveyed adults in 2000-2001 aged 65 and over using a nationally representative sample of 999 participants. They defined social isolation as ‘less than one contact per day (i.e. seven direct or phone contacts or less per week)’ and found a social isolation prevalence rate of 13%<sup>xlii</sup>. They also found that 6% of their participants had only 0-4 contacts per week representing more severe social isolation<sup>xliii</sup>.

Social isolation can also be measured in terms of wider community engagement. Using data from the 2009-2010 *Social Trends Survey*, the ONS reported that 71% of adults over 16 years old in England had not volunteered informally at least once a month, while 46% had not volunteered in the last year<sup>xliv</sup>. Data from the ONS for 2010-2011 revealed that over 50% of adults in England were not involved in a group, club or organisation which had met in the twelve months prior to the survey<sup>xlv</sup>.

These figures do not necessarily correspond with rates of social isolation; rather, they reflect the numbers of people who are not socially engaged with their community in these specific forms, which may make them more at risk of social isolation in relation to their community. Barnes *et al.* (2006) measured social exclusion in 9,901 adults aged over 50 years in England and included the dimensions of *cultural exclusion* (frequency of cinema, gallery/museum, restaurant and theatre outings) and *civic exclusion* (political, environmental, religious and charity group involvements) which are related to community-level social isolation<sup>xlvi</sup>. Using 2002-2003 survey data they found that 11% of their sample was culturally excluded and 12% were civically excluded. There is a marked lack of recent data on frequency of social contact among children and younger adults.

### **Prevalence of Social Isolation: Demographic Variations:**

Similar to loneliness, social isolation varies across different demographic groups. It should again be noted, however, that the following factors associated with social isolation may be linked in complex ways and do not necessarily cause one another.

**Age:** Data from the English Longitudinal Study of Ageing (ELSA) suggests that individuals over the age of 80 are more likely to be socially isolated in terms of being detached from cultural activities (such as going to the cinema or the theatre) compared to individuals aged 50-79 years old<sup>xlvii</sup>. Data from the 2001-2002 International Social Survey Programme reveals a similar pattern: 30% of those over the age of 80 were defined as socially isolated compared to 23% of those aged 65-79 years (in terms of frequency of contact with friends and family)<sup>xlviii</sup>. Similarly, Iliffe *et al.* (2007) describe social isolation as increasing with older age. Using the Lubben Social Network Scale for participants over 65 years in the UK, they found that 12% of the age group 65-74 years were socially isolated compared to 32% of those in the 85 years and over age group<sup>xlix</sup>. In their survey of 9,901 adults aged over 50, Barnes *et al.* (2006) found that 14% of participants aged over 80 years were culturally excluded, which represented the highest proportion of any age group.

**Income:** Social isolation has been found to be associated with socioeconomic status. Banks, Haynes and Hill (2009) used data from the International 2001-2002 Social Survey Programme and found that (for all countries studied, including the UK) working and lower middle class participants were more than 2.5

times more likely to be socially isolated while controlling for other variables including gender and age<sup>i</sup>. The authors defined social isolation in terms of contact with friends and family, and participation in social groups or organisations. Jivraj, Nazroo and Barnes (2012) found that poorer and lower-educated adults were more likely to be socially isolated in terms of civic participation and cultural engagement than adults who were wealthier and better educated<sup>ii</sup>. Their study included data from ELSA relating to over 10,000 participants aged over 50 years.

**Marital and Household Status:** Using 2001-2002 survey data for multiple countries including the UK, Banks, Haynes and Hill (2009) found that married participants were less likely to be socially isolated in terms of contact with friends and family than other people surveyed<sup>iii</sup>. Similarly, Banks, Nazroo and Steptoe (2012), using ELSA data from 10,274 adults aged over 50 years, found that social isolation was more common among separated, divorced and widowed participants, as well as those who had never been married<sup>iiii</sup>. It is important to note that these data exclude younger people who have never been married.

### **Summary of Loneliness and Social Isolation in the UK**

Overall rates of loneliness among adults in the UK vary between different surveys. Approximately 5%-6% of adults could be described as being severely lonely in the UK using the available data, while approximately 21%-31% feel lonely occasionally. These figures suggest that a significant minority of the population is experiencing loneliness at any given time. Loneliness also occurs among children, although it is difficult to give precise figures. Loneliness is not always experienced as a constant state but can improve or deteriorate over time. Loneliness also affects individuals through worrying about feeling lonely and through the effect of having close friends or family members who are lonely. Loneliness is more often experienced by women, older adults, those who are widowed, divorced or separated and those who live alone.

Rates of social isolation are difficult to quantify and depend upon the definition that is used. Defining social isolation as lack of frequency of contact with family, friends and neighbours suggests that 6%-17% of older adults are socially isolated to some degree. Over 50% of adults in England are not engaged in a group, club or organisation. About one in nine older adults (11-12%) could be described as excluded in terms of cultural and civic participation using the above data. There is a significant lack of

recent data for children's and younger adult's social isolation. Among adults aged approximately 50 years and over social isolation is more often experienced by those aged over 80 years, those of lower socioeconomic status, and those who are separated, divorced or have never been married.

## **SECTION 2:**

### **HEALTH EFFECTS OF LONELINESS AND SOCIAL ISOLATION**

The association between various health conditions and loneliness/social isolation has been explored in a large body of studies, a number of which will be outlined in this section. While it is important to acknowledge that physical and mental health are interlinked, for the purposes of this review they will be presented in separate sections. These sections have further been subcategorised into specific health conditions although again, it is recognised that individual health conditions can impact on one another. Findings are presented together for loneliness and social isolation as a number of the studies explore the effects of both. However, it will clearly be noted which concepts are being discussed. Each study will be described individually and the section will conclude with a section on the wider societal and economic impact of loneliness, and finally a summary of the evidence.

#### **Physical Health Effects**

##### **Mortality:**

Both loneliness and social isolation have been found to be associated with increased risk of mortality among adults.

Perissinotto, Cenzer and Covinsky (2012) used data from a nationally representative, longitudinal cohort study of 1,604 adults in the U.S. aged over 60 years to assess the health effects of **loneliness**<sup>liv</sup>. Loneliness was measured by a three-item questionnaire derived from the UCLA Loneliness Scale. Health of the respondents was assessed at baseline in 2002 and subsequently every two years until 2008, and covered a range of conditions including hypertension, cancer, smoking behaviour, depression and sensory impairments. The authors found that **loneliness was associated with increased risk of death** over the six year follow-up period; nearly a quarter (22.8%) of the participants classified as “lonely” died between 2002 and 2008 compared to 14.2% of “not lonely” participants<sup>lv</sup>. This association remained statistically significant after controlling for socioeconomic status, age and health factors such as depression, cardiac disease, diabetes and cancer.

Berkman *et al.* (2004) measured the effects of **social isolation** on mortality in a French longitudinal study of over 17,000 employees of Electricity of France - Gas of France (EDF-GDF)<sup>lvi</sup>. A large

public company was chosen as the demographic characteristics are “close” to representative for the French population but results would not be the result of extreme economic deprivation or disability due to employment instability. The authors used data for men aged 40-50 years and women aged 35-50 years collected through annual mail questionnaires between 1991 and 1999. Social isolation was measured using a social integration index which measured marital status or cohabitation, contacts with close friends and family, and affiliation with voluntary organisations<sup>lvii</sup>. The authors found that **social isolation was significantly associated with mortality risk for men** in the study; 7% of men with low social integration died in the eight year follow-up period compared with 1.4% of men who had high social integration<sup>lviii</sup>. Similar trends were also found for women in the study but the results were not statistically significant; this was likely due to the smaller sample of women (there were 29 deaths in total among the sample of women in the follow up period compared to 270 deaths among men). Cancer mortality for men remained statistically associated with social isolation after controlling for other predictors of cancer including tobacco and alcohol use, and body mass index scores. The authors emphasise the fact that this study excludes individuals who are likely to be the most socially isolated in society (those more likely not to be in employment), which means these estimates may be conservative.

Pantell *et al.* (2013) measured the effects of **social isolation** on health among a nationally representative U.S. sample of 16,849 adults aged over 25 years using longitudinal data from the 1988-1994 Third National Health and Nutrition Examination Survey and the National Death Index<sup>lix</sup>. Social isolation was measured according to four factors: marital status, frequency of social contact, participation in religious activities, and participation in other clubs or organisations. Health factors which were measured included smoking, obesity, elevated blood pressure and high cholesterol. **Higher social isolation was found to predict mortality rates.** Male participants with high social isolation scores died at 1.62 times the rate of those with lower social isolation while female participants with high social isolation scores died at 1.75 times the rate of less isolated women<sup>lx</sup>. This was found to be similar to the effect on mortality for smoking and higher than the mortality rate for those with high blood pressure.

Holt-Lunstad, Smith and Layton (2012) conducted a meta-analytic review of 148 studies measuring the impact of social relationships on mortality risk for adults<sup>lxi</sup>. The studies use data from 308,849 participants in total. The authors selected studies published between 1990 and 2007 which explored non-suicidal and non-accident mortality and measured the quantity and/or quality of social relationships. The authors distinguish between *functional* aspects of social relationships which relate to **loneliness** as defined in this review (including self-reported loneliness and perception of social support)

and *structural* aspects of social relationships which relate to **social isolation** as defined in this review (including social isolation, social network, living alone and marital status). The average age of participants across all studies was 64 years. Just over half (51%) of participants were North American, 37% European, 11% Asian and 1% Australian<sup>lxii</sup>. Holt-Lunstad, Smith and Layton found that “**individuals’ experiences within social relationships significantly predict mortality**” to the extent that there is a 50% increase in survival odds as a direct result of the social relationships of an individual<sup>lxiii</sup>. They also found that studies which used multidimensional measures of social relationships reported a 91% increase in survival odds as a result of these relationships. The authors hypothesise that measures which use multiple components of social relationships predict mortality more effectively because they allow for different aspects of social relationships to be measured, which can affect health in different ways<sup>lxiv</sup>. The authors explain that the association between social relationships and mortality can be generalised as results were found to remain while controlling for various other potential causal factors, including cause of death, initial health status and demographic factors (e.g. age and sex). They describe how the meta-analysis also “provides evidence to support the directional influence of social relationships on mortality” as initial health status did not moderate the association<sup>lxv</sup>. Despite this, causality remains difficult to establish. Overall, the authors recommend social relationship-based interventions as a “major opportunity” to improve both well being and mortality.

### **Blood Pressure and Heart Problems:**

Both social isolation and loneliness have been found to be associated with blood pressure and heart problems.

Caspi *et al.* (2006) used data from a longitudinal, birth cohort study in New Zealand to investigate the relationship between **social isolation** as a child and subsequent health problems<sup>lxvi</sup>. 1,037 participants were assessed at different intervals from birth to 26 years old at which point they were tested for cardiovascular multifactorial risk status (including being overweight, and having high blood pressure and cholesterol levels). Social isolation was measured at different ages; childhood isolation was assessed at ages 5, 7, 9 and 11 years through statements given by the child’s parents and teachers about the children including “tends to do things on his/her own” and “not much liked by other children”. Adolescent and adult social isolation were measured at 15 and 26 years respectively through self-completion questionnaires measuring the extent of social networks<sup>lxvii</sup>. The authors found that **social**

**isolation at different childhood and adolescent ages predicted poorer adult health.** One standard deviation change in childhood social isolation increased the risk of having adverse levels of half (or more) of the poor health indicators by 1.37 times. This effect remained while controlling for the potential effects of stressful life events, health damaging behaviours (including lack of exercise and alcohol/cigarette misuse), and other factors known to be associated with poor adult health (low childhood IQ, childhood obesity and low childhood socioeconomic status)<sup>lxviii</sup>. Caspi *et al.* argue that the study is suggestive of a causal relationship of social isolation on cardiovascular risk status due to the fact that isolation preceded health outcomes and the association remained while controlling for other potential risk factors<sup>lxix</sup>.

Rodríguez-Artalejo *et al.* (2006) found an **association between social isolation and heart failure.** They measured the **social networks** of 371 participants in Spain aged over 65 years who had been admitted for heart failure-related emergencies in four hospitals and subsequently measured the time until first emergency hospital rehospitalisation, as well as patient mortality<sup>lxx</sup>. Social isolation was measured using a four-item questionnaire at baseline which established whether the individual was married, lived with other people, had direct or telephone contact with family members daily or almost daily, and were at home alone for less than two hours per day. Social networks were defined as “high” where all four items were present, “moderate” for three items present and “low” for two or fewer present<sup>lxxi</sup>. Rodríguez-Artalejo *et al.* found that **participants with low or moderate social networks had higher emergency hospital readmission rates than those with high social networks.** This association was dose-responsive: the smaller the social network, the higher the rate of hospital readmission<sup>lxxii</sup>. However, no statistically significant relationship was found between social network and mortality in patients with heart failure. This may be due to the measurement of only one aspect of social isolation (rather than a more multidimensional measure which would include other elements in addition to social networks).

Hawkley *et al.* (2010) used longitudinal data for 229 participants aged 50-68 years as part of the Chicago Health, Aging, and Social Relations Study to examine the relationship between **loneliness** and blood pressure<sup>lxxiii</sup>. The data were collected at baseline in 2002 and then annually until 2006. Participants’ blood pressure was measured and loneliness was ascertained using the UCLA Loneliness Scale. **Loneliness was found to be a significant risk factor for elevated blood pressure.** Lonelier participants were found to have a 2.3mm (millimetres of mercury) greater increase in systolic (maximum) blood pressure over the four subsequent years, as well as being more likely to have elevated

blood pressure at baseline measurement<sup>lxxiv</sup>. This association was found to be cumulative and remained significant while controlling for social network size, poor health behaviours and demographic factors including age and gender. Significantly, high blood pressure can lead to hypertension and heart problems and increase the risk of premature mortality.

### **Physical Functioning and Disability:**

Studies indicate that there is an association between loneliness and physical functioning or level of physical disability.

Perissinotto, Cenzer and Covinsky's (2012) study using longitudinal data for 1,604 adults in the U.S.A. aged over 60 years (methodology outlined in the "mortality" section above) found **loneliness to be associated with measures of functional decline**<sup>lxxv</sup>. Four functional decline measures were used: difficulty performing activities of daily living including bathing, dressing and eating; difficulty of upper extremity tasks including extending arms above the shoulders and pushing/pulling large objects; decline in walking or jogging various distances; and increased difficulty in stair climbing<sup>lxxvi</sup>. Loneliness was measured using the three-item UCLA Loneliness Scale. The authors found **loneliness** at baseline to be associated with *all* the above measures of functional decline after adjusting for socioeconomic status, demographic variables, depression and other baseline functional and health measures<sup>lxxvii</sup>. For example, a quarter (24.8%) of the lonely participants had increased difficulty in performing activities of daily living after the six year follow-up period compared to 12.5% of the non lonely participants. Two fifths (40.8%) of lonely participants had increased difficulty climbing stairs after the follow-up period compared to 27.9% of the non lonely participants<sup>lxxviii</sup>.

McLaughlin *et al.* (2012) used data from the Men, Women and Ageing longitudinal cohort study in Australia to investigate the effect of social support on subsequent disability among older adults<sup>lxxix</sup>. The 2,693 participants were aged 73-78 years and survey data were collected at baseline in 1999 and at follow-up in 2008. Social support was measured according to two subscales: social interactions (measured through questions ascertaining the *size of social network*) and subjective social support (measured through questions assessing *satisfaction with social relationships*). These correspond with measures of **social isolation** and **loneliness**, respectively, as defined in this review. The authors researched the effect of these measures on subsequent disability, which was defined as difficulty in performing activities of daily living (including eating, bathing and walking inside the house) and

instrumental activities of daily living (including using the telephone, managing money and doing light housework)<sup>lxxx</sup>. The authors found that social network size *was not* associated with subsequent disability among the participants, after adjusting for health conditions at baseline measurement. However, **lack of satisfaction with social relationships (loneliness) at baseline was associated with more difficulty in performing both activities of daily living and instrumental activities of daily living** at follow up. For example, lack of satisfaction with social relationships meant that participants who were women were 1.53 times more likely to have difficulties performing activities of daily living and 1.52 times more likely for participants who were men<sup>lxxxi</sup>. While this study suggests that social isolation does not predict subsequent physical disability among older adults it should be noted that only one element of social isolation – social network size – was measured. Different results might have been found if a multi-item measure had been used.

### **Unhealthy Behaviours:**

Both loneliness and social isolation have been found to be associated with unhealthy or damaging health behaviours among adults using cross-sectional studies.

Lauder, Mummery, Jones and Caperchione (2006) used data for 1,278 randomly sampled participants in Australia aged 18 years and over to compare the health behaviours of lonely and non-lonely populations<sup>lxxxii</sup>. The study used cross-sectional, self-reported data collected through computer-assisted telephone interviews in 2003. **Loneliness** was measured through the 11-item de Jong Gierveld Scale. Health behaviours including smoking, weight gain, and physical activity were also measured<sup>lxxxiii</sup>. **The authors found an association between loneliness and health behaviours.** After controlling for other variables including gender, employment, age and annual income, a higher proportion of people (61.8%) was overweight (defined by body mass index) than the non-lonely group (53.8%)<sup>lxxxiv</sup>. After controlling for demographic variables and for obesity, a higher proportion of the lonely group was smokers (28.8%) compared to the non-lonely group (18.6%)<sup>lxxxv</sup>. Lonely people were also more likely to be classed as sedentary, although this association did not remain statistically significant after controlling for age and unemployment. The authors hypothesise that these associations may be caused by “lonely people lack[ing] the normative support to adopt and adhere to health lifestyle choices” and argue that the combination of increased weight and smoking among lonely people represents a serious health risk<sup>lxxxvi</sup>.

Nieminen *et al.* (2013) measured **social isolation** and health behaviours among 8,028 participants from the nationally representative 2000-2001 Finnish Health Survey which was administered using computer-assisted personal interviews, self-administered questionnaires and clinical health examinations. Five self-reported health behaviours were measured: smoking, alcohol consumption, leisure-time physical activity, consumption of vegetables and sleep duration<sup>lxxxvii</sup>. Social isolation was measured in relation to social support, social participation and networks, and trust and reciprocity. However, for the purposes of this review and our definition of social isolation, *only* the element of social participation and networks will be considered. Social participation and social networks were associated with all types of measured health behaviours and the association remained statistically significant after controlling for demographic factors and the other measured dimensions of social isolation<sup>lxxxviii</sup>. This association had a gradient effect: the higher the level of participation and social networks, the greater the odds of engaging in healthier behaviours.

Berkman *et al.*'s (2004) study of the French GAZEL cohort (methodology outlined in the section on mortality above) also measured health behaviours in relation to **social isolation**. They found **higher social isolation to be associated with unhealthy behaviours**: 29.9% of men in the highest social isolation group were smokers compared to 22.5% of the least socially isolated group; 14% of men in the most isolated group were heavy drinkers compared to 11.2% of men in the least isolated group<sup>lxxxix</sup>.

## **Mental Health Effects**

### **Depression and Depressive Symptoms:**

Several longitudinal studies have found loneliness to be associated with depressive symptoms and clinical depression for adults.

Cacioppo *et al.* (2006) used two longitudinal, studies of middle-aged and older adults to examine the association between loneliness and depression<sup>xc</sup>. The first study was the 2002 wave of the U.S. Health and Retirement Study which is a nationally representative telephone survey of 2,193 participants aged 54 years and above. **Loneliness** was measured using a three-item scale consisting of questions such as "How often do you feel that you lack companionship?"<sup>xc</sup> The second study used data from 212 participants of the Chicago Health, Aging, and Social Relations Study who were aged 50-67 years. Loneliness was measured annually from 2002-2004 using the UCLA Loneliness Scale<sup>xcii</sup>. Results from both studies revealed that **loneliness was significantly associated with depressive symptoms after**

**controlling for psychosocial risk factors of perceived stress, marital status and other demographic factors including age and gender**<sup>xciii</sup>. Loneliness at baseline measurement was also found to *predict* depressive symptoms while controlling for depressive symptoms and other demographic factors at baseline measurement.

Cacioppo, Hawkley and Thisted (2010) used nationally representative data from the Chicago Health, Aging, and Social Relations Study (methodology in paragraph above) to explore the *longitudinal* relationship between **loneliness** and depressive symptoms<sup>xciv</sup>. Their sample comprised 229 participants and data were collected annually from 2002-2006. The authors found that, after controlling for demographic variables (including age, gender, years of education and marital status) **loneliness at baseline measurement predicted depressive symptoms in subsequent years “above and beyond” what could be explained by baseline depressive symptoms**<sup>xcv</sup>. This predictive capability was not evident in reverse: depressive symptoms at baseline did not predict changes in loneliness in subsequent years which suggests that depression does not cause loneliness.

Teo, Choi and Valenstein (2013) used a U.S. national longitudinal cohort study of adults aged 25-75 years to explore the relationship between **loneliness, social isolation** and depression<sup>xcvi</sup>. Data from 4,642 participants was collected at baseline in 1995-1996 and subsequently at 2004-2006. Loneliness was measured using a four-item scale of questions relating to participants’ family, friends and spouse or partner, including “How much does your spouse or partner really care about you?”<sup>xcvii</sup> Social isolation was measured by whether the participant lived with a spouse or partner and through questions establishing their frequency of contact with family, friends and neighbours<sup>xcviii</sup> **Loneliness was found to predict depression 10 years after baseline measurement, after controlling for potential confounding variables including baseline depression, social isolation and demographic factors**<sup>xcix</sup>. However, social isolation *did not* predict future depression.

#### **Deliberate Self-Harm:**

Loneliness was found to be associated with deliberate self harm among adolescents in a study by Rönka *et al.* (2013)<sup>c</sup>. Data from 7,014 participants aged 15-16 year olds from the Northern Finland Birth Cohort 1986 was used. Responses were collected through a postal questionnaire administered in 2001-2002. The authors define deliberate self harm as “an act with a non-fatal outcome in which an individual

initiates a behaviour (such as self-cutting, burning, ingesting excess medicine/drugs, ingesting a non-ingestible substance/object, jumping from a height) with an intent to harm his or herself"<sup>ci</sup>. Significantly, Rönka *et al.* discuss how deliberate self harm, if unnoticed or untreated, can lead to suicide, which is one of the leading causes of death among adolescents in the Western world. **Loneliness** was assessed through a single item: "I feel lonely". After controlling for self-reported health and satisfaction with life, **participants who described themselves as "very" or "often" lonely were 4.1 times more likely to report deliberate self harm if they were girls and 3.2 more likely if they were boys than non-lonely participants**. The authors found no association between the number of close friends and the occurrence of deliberate self harm.

### **Cognitive Function, Dementia and Alzheimer's Disease:**

Both loneliness and social isolation have been found to be associated with increased risk of Alzheimer's disease, dementia and declining cognitive functions among older adults.

Glymour *et al.* (2008) used data for 291 participants in the U.S. aged over 45 years as part of the Families in Recovery from Stroke Trial (FIRST) (a randomised trial of participants who had suffered a stroke) in order to measure the association between cognitive function and social relationships six months after stroke<sup>cii</sup>. Social ties were measured through objective **social isolation** measures (including contact with friends and family, attendance at clubs and organisations and whether they lived alone) and social support by **loneliness** measures through a questionnaire assessing quality of social and emotional support. Questions included: "In the last month, how often did someone tell you that they cared about you?"<sup>ciii</sup> Cognitive function was measured through neuropsychological tests at interviews approximately 17-20 days following the stroke and subsequently six months later. The authors found that **baseline emotional support predicted improvements in cognition summary scores independent of factors including age, gender, level of education and socioeconomic status**. The association was such that "one standard deviation increase in emotional social support was associated with 0.14 standard deviation higher cognition scores"<sup>civ</sup>. However, social ties *did not* significantly predict greater improvements after six months.

Holwerda *et al.* (2012) measured the association between social isolation, loneliness and incident dementia and found that loneliness, but not social isolation, was associated with an increased risk of dementia among older adults<sup>cv</sup>. The authors used data from a longitudinal Amsterdam cohort

study of 2,173 older adults aged 65-75 years who did not have dementia at baseline and assessed incidence of dementia three years later. **Social isolation** was measured by whether the participants lived alone, were married or had contacts who could offer social support. **Loneliness** was self-reported through a single item: “Do you feel lonely or do you feel very lonely?” **Participants who reported loneliness were 1.64 times more likely to develop dementia than non-lonely participants** after controlling for risk factors including socio-demographic factors, medical conditions, depressive symptoms and cognitive functioning status. About one in eight (13.4%) of lonely participants had developed dementia over the follow up period compared to 5.7% of non-lonely participants<sup>cvi</sup>. After controlling for other risk factors social isolation *was not* associated with higher risk of developing dementia.

Wilson *et al.* (2007) used data from the Chicago Rush Memory and Aging Project to evaluate the impact of **loneliness** and **social isolation** on the development of Alzheimer’s disease<sup>cvi</sup>. A total of 857 participants were recruited from senior citizen facilities with a mean age of 80 years and data were collected at baseline in 2000 and annually until 2006. Loneliness was measured using the de Jong Gierveld Scale while social isolation was measured through a survey assessing social network size and frequency of contact with family and friends. **The authors found that lonely participants were approximately 2.1 times more likely to develop Alzheimer’s disease by 2006 than non-lonely participants<sup>cvi</sup>**. This association remained after controlling for other factors including social isolation measures, age, income and gender. While more frequent participation in social activities was associated with a decreased risk of Alzheimer’s disease, social network size was not.

### **Overall Health Effects**

Two studies were also identified which measured overall health effects of social isolation and loneliness. One study measures both mental and physical health impacts of social isolation while the second measures a range of physical health effects of social isolation and loneliness.

Hawton *et al.* (2011) used data from the 2007-2008 Devon Ageing and Quality of Life Study to assess the association of **social isolation** with older adults’ health status and health-related quality of life<sup>cix</sup>. A total of 398 participations aged over 50 years, defined as “at risk” of social isolation by community mentoring service providers or through surveys sent to general practices, was recruited. **Social isolation** was defined as frequency of contact with friends and family and was self-reported

through the single item: “How many times a year do you get together with friends and relatives, e.g. going out together or visiting each other’s homes?”<sup>cx</sup> Participants were defined as “severely socially isolated” if they had less than monthly social contact, “socially isolated” if they had less than weekly contact or “at risk” if neither category was applicable. Health status was measured using the SF-12 survey which produces a summary score for both mental and physical health: scores range between 0 and 100; higher scores represent better health status. Participants also completed the EQ-5D which measures health according to the five dimensions of mobility, self-care, usual activities, pain/discomfort and anxiety/depression. Values ranged from 0 to 1 and higher scores represent better health status. **The overall health scores of participants categorised as severely socially isolated were statistically significantly worse than those in the socially isolated or at risk groups**<sup>cxii</sup>. The mean scores for the mental health component of the SF-12 survey were 47.9 and 47.1 for the “at risk” and “socially isolated” groups, respectively, and significantly lower (40.0) for the “severely socially isolated” group. Similarly the mean scores for the physical health component of the SF-12 survey were 39.1 and 40.0 for the “at risk” and “socially isolated” groups respectively and 35.7 for the “severely socially isolated” group. A similar pattern was also evident for mean EQ-5D scores: 0.65 and 0.69 for the “at risk” and “socially isolated” groups respectively and 0.50 for the “severely socially isolated” group<sup>cxii</sup>. This relationship remained after controlling for depression, physical co-morbidity, age, gender, living alone and employment status.

Tomaka, Thomson and Palacios (2006) measured a range of physical health outcomes among older adults and found that **loneliness and social isolation were statistically significantly associated with a range of physical health problems, including arthritis, emphysema, diabetes, hypertension and stroke**<sup>cxiii</sup>. The study used data from 755 randomly selected participants aged over 60 years in New Mexico, USA. The authors measured the association between **loneliness** and **social isolation** (which was termed “social support” in the study but which corresponds with the definition of social isolation in this review) on several disease outcomes including diabetes, hypertension, heart disease, tuberculosis, kidney disease, liver disease, cancer, arthritis, emphysema, asthma, and stroke. Loneliness was self-reported through the four-item UCLA Loneliness Scale and social isolation was measured using questions assessing frequency of contact with friends and family, or frequency of contact with social or community groups<sup>cxiv</sup>. Self-reported loneliness was positively and significantly correlated with arthritis and emphysema while social support (lack of social isolation) from family members was significantly negatively correlated with arthritis and stroke. Social support (lack of social isolation) from community and social groups was negatively correlated with diabetes, hypertension, arthritis, and emphysema<sup>cxv</sup>.

## Indirect Cost to Society

Beyond the individual burden of the health effects discussed above, there are also wider societal implications of loneliness and social isolation. Several authors of the studies above warn of the financial burden associated with the health effects of loneliness and/or social isolation. For example, in relation to their finding of a relationship between loneliness and blood pressure (outlined above), Hawkey *et al.* (2010) argue that the “economic cost of hypertension and the price it exacts in quality and quantity of life suggest that loneliness has significant clinical and public health implications”<sup>cxvi</sup>. Smoking, weight gain, and limited physical mobility and functioning of lonely adults increase the risk of health problems and result in increased demands on health and caring services. Similarly depression, declining cognitive function and deliberate self-harm have wider societal implications; while cognitive decline creates burdens on the health and caring services, deliberate self-harm can lead to higher risk of suicide, which Schinka *et al.* (2011) described as “an important health crisis around the world”<sup>cxvii</sup>. Cacioppo *et al.* (2006) describe how elevated depressive symptoms can also result in further health problems, including cardiovascular disease and functional impairments, as well as “poorer performance in the labour market ... and higher health care resource use”<sup>cxviii</sup>. Indeed, in the Department of Health’s (2009) *New Horizons* report the authors describe the social and financial costs of mental health problems as “immense”<sup>cxix</sup>. Individuals with mental health problems require social support from families and communities in addition to medical treatment, and there is a resulting loss of economic activity among individuals who are unable to work due to their health. Mental health problems can also lead to physical health problems and vice versa.

Beyond the pressure of these health conditions on health services, however, evidence also suggests that loneliness can *independently* create additional burdens on health services. Ellaway, Wood and Macintyre (1999) found an association between loneliness and frequency of GP consultations which was independent of individuals’ health status<sup>cxx</sup>. Data were collected through survey interviews with 691 participants aged either 40 or 60 years old in two communities in Glasgow. **Loneliness** was measured through the single item: “At the present moment do you ever feel lonely?”<sup>cxxi</sup> They found that the association between self-reported loneliness and number of GP consultations remained significant after controlling for age, socioeconomic status, area of residence and health status. On average, **participants who felt lonely “most of the time” or “often” visited their GP almost twice as often over one year as participants who felt lonely “rarely” or “never”**: 7.8 times compared to 4.2 times<sup>cxxii</sup>. Ellaway, Wood and Macintyre describe this finding as having “clear resource implications for general practices” and also

highlight the fact that this association was found for middle-aged adults despite prevailing opinions that loneliness is a problem only for older adults<sup>cxixiii</sup>. There is therefore a need for interventions which prevent or mitigate the feelings of loneliness and social isolation in order to ease the burden on healthcare and the wider economy, as well as to ease individual suffering. Perissinotto, Cezner and Covinsky (2012) argue that “[r]educing the risk of adverse health is dependent on much more than medical care”; they advocate the use of “social engagement” policies which could prevent and alleviate loneliness and social isolation<sup>cxixiv</sup>.

### **Summary of the Health Effects of Loneliness and Social Isolation**

Overall, the studies outlined above demonstrate clear links between loneliness and/or social isolation and several physical and mental health problems. The mental health conditions outlined above – depression, deliberate self-harm and cognitive decline – appear to be associated only with loneliness and *not* social isolation in the studies that have been reviewed. Loneliness was associated with *all* health conditions outlined above whereas measures of social isolation were found to be associated with mortality risk, cardiovascular risk factors, unhealthy behaviours and overall summary health scores.

There is strong evidence to suggest that both loneliness and social isolation affect mortality risk among adults. The four studies outlined all used multi-item measures of loneliness and/or social isolation, which (as Holt-Lunstad, Smith and Layton argue) improve their predictive capabilities. Similarly, the three longitudinal studies outlined above relating to blood pressure and heart problems demonstrate the link between both loneliness and social isolation and risks of cardiovascular problems through the use of multi-measures. Two longitudinal studies show the effect loneliness on physical functioning. Both studies found that older adults had increased difficulty performing basic activities including bathing, eating and stair climbing if they were lonelier at baseline measurement. Three studies outlined above reveal associations between unhealthy behaviours and both loneliness and social isolation.

Loneliness was found to predict depressive symptoms after controlling for a number of other factors in three longitudinal studies using multi-item measures. Teo, Choi and Valenstein (2013) explain how depression further increases an individual’s risk, and worsens the outcomes, of coronary artery disease, stroke and cancer<sup>cxixv</sup>, which again demonstrates how health conditions are not independent but overlap and potentially accumulate. Rönka *et al.* (2013) used data from a large sample of adolescents to

demonstrate the cross-sectional association between feelings of loneliness and deliberate self-harm. This reveals the damaging effects of loneliness for a range of age groups of individuals. Three longitudinal studies outlined above evidence the link between loneliness and cognition, including poor cognition scores post-stroke, increased risk of developing dementia and increased risk of developing Alzheimer's disease. Two studies found that overall health scores and a range of physical health problems were associated with lower frequency of contact with friends and family, and social isolation and loneliness respectively.

One methodological limitation of the studies included in this review relates to the definition and measurement of both loneliness and social isolation. Social isolation is a more contested concept and the measures used were inconsistent. A majority of the studies which measured only social networks as an indicator of social isolation, for example, failed to uncover an association with health conditions (the exceptions being cardiovascular risk factors and unhealthy behaviours). Furthermore, a number of the studies used different (but cognate) terms for both loneliness and social isolation, including (lack of) social support and (lack of) social integration. Future studies should clearly define the terms used and adopt multidimensional or multi-item scales. The existing focus on older adults reflects the fact that certain conditions, such as Alzheimer's and cardiovascular disease, are more likely to affect this age group. Nevertheless, more research is needed on young and middle-aged adults. Two studies included in this review attest to the impact of loneliness and social isolation on the health of younger age groups.

Finally, the economic burden on health services and the wider society was identified. One study described the association between feelings of loneliness and higher GP consultations. The range of health problems found to be associated, or caused by, loneliness and social isolation inevitably impact on more than the affected individuals. There is a clear need for interventions which seek to remedy deficits in social connectedness. The potential contribution of befriending will be explored in the next section of this review.

### **SECTION 3:**

#### **BEFRIENDING AND ITS POTENTIAL TO ALLEVIATE LONELINESS AND SOCIAL ISOLATION**

This section of the review will outline the definition of befriending before discussing the specific benefits and limitations of befriending with reference to the available literature, and in terms of reducing loneliness and social isolation. This will include a section outlining benefits for various client groups and types of befriending provision, and benefits specifically for the volunteer befrienders. The section will conclude with a discussion of the difficulties in researching befriending and with a summary of the befriending literature.

#### **Defining Befriending**

Befriending is defined by Charlesworth *et al.* (2008) as “a form of social support where a supportive other is introduced to, or matched with, an individual who would otherwise be socially isolated”<sup>cxxvi</sup>. Befriending is not the same as a friendship despite sharing many of its features; significantly, befriending is organised through a befriending service which usually comprises of paid staff who will recruit and train volunteer befrienders, and coordinate and support the befriending matches<sup>cxxvii</sup>. Befriending services often (but not always) provide befriending support for a *specific* group of potentially socially isolated or lonely individuals including: children or adolescents from vulnerable backgrounds, older adults, individuals with sensory impairments, individuals with long-term or complex health conditions, mothers with young children, survivors of abuse, or carers. Befriending is usually offered on a one-to-one, face-to-face basis between befriender and befriender but is also increasingly offered on a group basis, by telephone, or through letter- or email-writing. Befrienders usually visit or contact their befriender at regular, planned intervals for a minimum specified time (for example, once an hour for a minimum of one year) or until either the befriender or befriender decides to end the relationship. The term befriending is often used synonymously with mentoring. However, McGowan, Saintas and Gill (2009) explain how befriending differs from mentoring in terms of the goals and nature of the relationship: mentoring tends to have specific outcome goals of the mentoring relationship, such as improving an individual’s employability, whereas befriending aims to provide companionship but offers no other instrumental function<sup>cxxviii</sup>.

## The Benefits and Limitations of Befriending

### **Significance of the Volunteers not being Paid:**

*“The nurse is for the children, something professional. With [the befriender] I consider her a friend”  
(mother with young children)<sup>cxxix</sup>*

A number of studies investigating the benefit of befriending outline the importance of the volunteers *choosing* to visit the befriendees rather than being paid to do so. Andrews *et al.* (2003) researched the effects of a face-to-face befriending service for older adults in Buckinghamshire through 13 semi-structured interviews with befriendees in 2001<sup>cxxx</sup>. All of the interviewees lived alone and their befriender was often “one of only a few people who came solely for the purpose of conversation and companionship” as opposed to coming to clean or provide healthcare assistance<sup>cxxxi</sup>. Andrews *et al.* therefore describe the voluntary nature of befriending as significant in terms of providing meaningful *companionship* as opposed to social contact. Similarly, Cattan, Kime and Bagnall (2011) explored the value of a befriending service specifically for older adults; they conducted 40 in-depth interviews in 2007-2008 with befriendees and volunteers of a telephone befriending service offered throughout England and Scotland<sup>cxxxii</sup>. Again, they found that befriendees appreciated the fact that the befriending relationship was not offered from financial obligation but was a deliberate choice on the part of the befriender. The authors describe how the respondents felt that their befrienders spent “quality time with them unlike other services, for example paid carers, who were said to be in and out”<sup>cxxxiii</sup>. They also found that the befriendees liked the fact that the befriending relationship focused on everyday living whereas paid workers dealt with problems associated with their health due to old age: “Participants were clear that they did not want to be problematised”<sup>cxxxiv</sup>.

Taggart, Short and Barclay (2000) researched a befriending service in Australia which offers support specifically for mothers with young children who are identified as being isolated or vulnerable. They conducted 25 semi-structured interviews with befriendees and befrienders and found that the befriender respondents valued the volunteers as distinct from paid professionals<sup>cxxxv</sup>. Taggart, Short and Barclay explain how professionals were described by the participants as less accessible than the volunteers, and were seen as offering expert advice rather than the friendship which they valued with their befrienders. They also explain how this aspect of befriending was significant for this particular client group; some participants are described as having “a very real fear of authoritative bodies” as they were worried that they would be judged unfit to look after their children<sup>cxxxvi</sup>. Conversely, the

befrienders were often mothers themselves and were felt by the participants to be able to offer non-judgemental support.

### **Friendship and Reciprocity:**

*“We got on so well that I cried when she left. She was just so helpful and we had a lot in common”  
(mother with young children)<sup>cxxxvii</sup>*

While befriending relationships are not the same as friendships, a number of the studies’ participants describe their befriender as a “friend” and report valuing their mutual and reciprocal relationships with them. The older adult participants in both Cattan, Kime and Bagnall’s (2011) and Lester *et al.*’s (2012) studies (both outlined above) described their befriending relationships as friendships. Cattan, Kime and Bagnall (2011) describe how the service represented more than “simply an opportunity to have a chat” for the participants but the chance to have a “meaningful” friendship<sup>cxxxviii</sup>. Similarly, Andrews *et al.* (2003), in their study of a befriending service for older adults (outlined above), discusses how the befriendees frequently described their relationships with their befrienders as “close” and all of them as at least more intimate than those with service providers or casual acquaintances who visited them<sup>cxxxix</sup>. The study also found that the reciprocity was a crucial element of the befriending relationship with the participants and explained how they and their befriender *both* benefited from the relationships, which was felt to be important to them.

Mitchell and Pistrang (2011) conducted 16 interviews with befriendees and befrienders aged 33-57 years who were involved with five befriending schemes in London for adults with mental health problems<sup>cxl</sup>. They describe how both befriendees and befrienders “spoke of a sense of mutuality and reciprocity”, and that the befriending relationship was often described as developing into a friendship over time<sup>cxli</sup>. However, the unique nature of the befriending relationship created specific benefits of the friendship. Mitchell and Pistrang discuss how some of the befriendees experienced the relationship as uniquely “safe” and “healthy” in contrast to other relationships in their past. The fact that the befriending service was monitored and supported was therefore important to the participants.

### **Engagement in the Local Community and Social Activities:**

*“Yesterday I gave [my befriender] a whole list of ideas as long as my arm of things we want to get up to, various museums, parks, places we want to go to together”  
(adult with mental health problems)<sup>cxlii</sup>*

A number of studies attest to the fact that befriending helped the befriendeds reengage with their local community and participate in more social activities, often as a result of increased self-confidence. Bradshaw and Haddock (1998) conducted a study of the impact of befriending on adults with long-term mental illness, including schizophrenia, depression and paranoid psychosis<sup>cxliii</sup>. Nine semi-structured interviews were conducted with participants aged 18-35 years. As a result of the befriending service, four participants described participating in more social activities, six participants said their confidence had increased when going out socially, and five participants said their interest and energy in going out had increased<sup>cxliiv</sup>. All nine of the participants were unemployed and befriending had increased the participants’ willingness to go out alone and to participate in new social activities in their communities. Cattan, Kime and Bagnall (2011) (study outlined above) found similar experiences among their older adult participants who took part in a telephone befriending service: befriendeds were described as “more inclined to be physically and socially active” as a result of the befriending scheme<sup>cxliv</sup>. They further discuss how some befriendeds had decided to become volunteer benders themselves and consequently felt less of a “burden” through having the opportunity to contribute to society<sup>cxlvi</sup>. Participants in Mitchell and Pistrang’s (2011) study (outlined above) similarly reengaged with their local community through participating in social activities with their befriender. As adults with long-term mental health conditions, these interactions were described as particularly important in terms of learning how to manage social situations and gain new social skills<sup>cxlvii</sup>.

Macdonald and Greggans (2010) conducted research into a befriending service in Lothian for children and young people aged 8-18 years with cystic fibrosis and found that this younger client group also reported benefits in terms of increased social activity<sup>cxlviii</sup>. They conducted interviews with 17 participants including the befriendeds, volunteer benders and the parents of the befriendeds. The authors found that the befriendeds appreciated the opportunity to participate in new social activities which they would not do with their parents. Such activities were particularly important for the children who had to spend long periods of time in hospital for their condition; they are described as enjoying the distraction of social activities with their benders<sup>cxlix</sup>. These perceptions were also reflected by the

befrienders, who are said to have viewed their roles as “widening young peoples’ horizons ... [and providing] new experiences for the young people, which they might not otherwise have”<sup>cl</sup>.

### **Impact on Loneliness, Social Isolation and Health:**

*“Before I ever had a befriender I was absolutely lonely, I was wrapped up in my own self,  
felt lonely, depressed”  
(adult with mental health problems)<sup>cli</sup>*

Participants in a number of studies described befriending as having transformed their wellbeing, and mention improvements explicitly in terms of reduced loneliness or social isolation. Cattán, Kime and Bagnall (2011) describe how their older participants reported feeling “less lonely as well as less anxious since joining the telephone befriending service”<sup>clii</sup>. The befriendees described themselves as having found a sense of belonging as a result of their befriending relationships. One participant commented: “I’m on my own all the time. It’s nice to know you’ve got somebody connected with you”<sup>cliii</sup>. These improvements in social contact also affected the participants’ self-reported health: several participants reported that they “no longer suffered as badly with depression” and a number also described their physical health as having improved as a result of their befriending relationships<sup>cliv</sup>. Similarly, the participants in Bullock and Osborne’s (1999) study of an intergenerational befriending service in the United States reported that befriending had reduced their loneliness<sup>clv</sup>. One older adult befriendees was reported as saying: “My visit with the volunteer breaks up the loneliness – otherwise it is just me and the cat”<sup>clvi</sup>. Other befriendees reported specific improvements in their health: one participant described how their mental attitude had improved as a result of the befriending service while another reported that their doctor had said their health “seemed to be getting better”<sup>clvii</sup>.

Coe and Barlow (2013) conducted quantitative analysis of the befriending intervention for mothers with perinatal mental health problems in addition to the results of the interviews outlined above. They measured anxiety and depression at baseline in 2010 and post-intervention in 2012 for 42 befriendees using the hospital depression anxiety scale (HADS), which produces a score between 0 and 21 for both anxiety and depression. They found that each significantly decreased post-intervention: mean anxiety for the participants was 11.8 at baseline in 2010 and 8.4 after the befriending intervention. Similarly, the mean depression score was 10.1 in 2010 and 6.1 in 2012<sup>clviii</sup>. The data therefore suggests that befriending can help to improve befriendees’ mental health.

Harris, Brown and Robinson (1999) used quantitative analysis to measure the impact of a befriending service on women's mental health<sup>clix</sup>. They conducted a randomised trial using 86 women in inner London aged over 25 years who had chronic depression (defined as clinical depression experienced for more than one year) where half the participants received befriending support and half did not. Participants were not excluded if they were already taking additional treatments. However, women who had recently started treatment with psychiatrists or psychotherapists *were* excluded from the trial on the grounds that the effects would be impossible to distinguish from that of the befriending intervention<sup>clix</sup>. Volunteer befrienders met with participants in the intervention group once a week for a minimum of one hour. Remission (defined as lasting at least two months) occurred in 65% (28 out of 43 participants) of the befriended group and 39% (17 out of 45 participants) of the control group<sup>clxi</sup>. Furthermore, a higher proportion (72%) of participants in the befriended group who received befriending for the entire subsequent time experienced remission than those who met their volunteer a limited number of times or not at all (56%). While this is suggestive that befriending could mitigate depressive symptoms for those with chronic depression, it should also be noted that only about half of the women contacted to participate wanted to meet a volunteer befriender, meaning this group may be hard to reach with befriending as an intervention<sup>clxii</sup>.

Mead *et al.* (2010) conducted a systematic review into the clinical effectiveness of befriending as a social intervention, particularly focusing on clients who were experiencing depressive symptoms or emotional distress<sup>clxiii</sup>. 24 studies were included in the review, all of which used individual randomization and covered a range of client groups. 16 studies provided face-to-face befriending with some telephone contact, and eight studies used only telephone befriending<sup>clxiv</sup>. Mead *et al.* found that befriending had a "modest but significant effect" on depressive symptoms in the short term using data from nine studies which provided appropriate data for analysis<sup>clxv</sup>. Using five studies which provided appropriate data, befriending was found to be either less effective, or similar to, more active treatments including cognitive behavioural therapy<sup>clxvi</sup>. Despite these modest results Mead *et al.* (2010) suggest that provision of "emotional support through befriending in the National Health Service" would be advantageous both for individuals and for the wider health economy as a "less medicalised" treatment which could help to prevent mental health issues<sup>clxvii</sup>.

### **Benefits for Specific Client Groups:**

Befriending services can offer befriending for particular groups of people. Several of the studies outlined the reasons why befriending was important for specific groups of isolated individuals.

#### *Older Adults:*

In their studies on befriending services for older adults, both Andrews *et al.* (2003) and Lester *et al.* (2012) outline specific benefits for this client group. Andrews *et al.* describe how the participants in their study were usually confined to home as a result of their older age and health or mobility problems, which resulted in social isolation and a lack of structure and interest to their lives<sup>clxviii</sup>. These physical restrictions are described as limiting the participants from accessing “‘external’ community-based support services” and the longer they were isolated, the harder it became to reengage socially<sup>clxix</sup>. For this reason, the fact that befriending could offer support directly in the participants’ homes was important to the participants; while befriending can help befriendees reengage with the community, the more physically restricted individuals felt that social interaction at home was more practical and a unique benefit of befriending. Other participants in Andrews *et al.*’s study praised befriending as offering “individualised and stimulating” conversations which they felt were not available in group activities for older adults in their community, which they felt would provide only “chit chat”<sup>clxx</sup>. Similarly, several participants in Lester *et al.*’s study reported deliberately avoiding group activities designed for older adults as they felt they had “little in common with ‘old people’”; the participants’ befrienders were all younger than them and could offer preferred social interaction<sup>clxxi</sup>.

#### *Individuals with Long-Term Mental Health Issues:*

Bradshaw and Haddock (1998) and Mitchell and Pistrang (2011) both explain how individuals with long-term mental health issues can be particularly prone to loneliness and social isolation. Bradshaw and Haddock explain how living within a community setting can be difficult if participants are unable to work due to their health conditions and lack the confidence or inclination to participate in social activities. The befriending scheme they investigated was particularly beneficial in mitigating these problems and instilled the befriendees with more self-confidence and energy to reengage with their community<sup>clxxii</sup>. One participant in Mitchell and Pistrang’s study explains: “when you’re in hospital you’re there with

other mentally ill people, they become your friends, you get discharged, you mix with mentally ill people all the time ... And the way that chain got broken was partly through [the befriending service]<sup>clxxiii</sup>. While this individual was able to make friends in hospital, they were isolated from social activities and individuals in their local community; conversely, befriending allowed them to engage with self-reported “healthy” friendships in their local area.

#### *Minority Ethnic Groups:*

McVittie, Goodall and Barr (2009) explain how minority ethnic teenagers can find it particularly difficult to integrate into their wider communities and to form social networks due to cultural differences or institutional exclusion. They argue that in Scotland specifically (which is the location of the befriending service they evaluate), minority ethnic adolescents “describe their experiences of inter-group relationships as being unhappy or mixed, and relatively few relationships are reported as being positive<sup>clxxiv</sup>”. The authors report that the befriending relationships were able to transcend some of the difficulties which can occur in relationships between minority and majority ethnic groups; the befrienders report enjoying learning more about minority ethnic cultures and being accepted by their befriendees’ families.

Cant and Taket (2005) conducted research into the Irish Pensioners’ Project in London, which is a voluntary organisation which provides support and social activities for older Irish adults including telephone befriending<sup>clxxv</sup>. The authors argue that Irish individuals are usually not considered to be ethnic minorities but there is a need for increased social support among this group. For example, they explain how the suicide rates for Irish people is higher than for any other minority ethnic group in England and Wales<sup>clxxvi</sup>. Cant and Taket conducted interviews with the service’s users and found that users valued befriending as it was culturally specific in terms of understanding unique problems or concerns that the befriendees were experiencing<sup>clxxvii</sup>.

#### *Carers:*

Cant and Taket (2005), Charlesworth *et al.* (2008) and Smith and Greenwood (2013) describe how carers are prone to loneliness and social isolation. Charlesworth *et al.* explains how carers typically report “less social interaction and fewer friendships” due to the time and emotional effort spent on their caring

responsibilities<sup>clxxviii</sup>. Similarly, in their study of befriending for Irish older adults, Cant and Tacket explain how the “needs of carers emerged as far greater than anticipated” due to their relative social isolation. For this reason, befriending was found to be important in allowing the carer a break for short periods and the opportunity to relax<sup>clxxix</sup>. Both Smith and Greenwood’s and Charlesworth *et al.*’s studies focus specifically on carers of people with dementia due to unique difficulties that this group can face. Smith and Greenwood explain how carers of individuals with dementia “are reported to be under more mental and physical strain than carers of other older people” which consequently makes them more likely to be socially isolated and lonely<sup>clxxx</sup>. Charlesworth *et al.* similarly assert that caring for an individual with increasing cognitive difficulties places an individual at particular risk of social isolation due to the level of commitment and time required<sup>clxxxi</sup>. Both sets of authors suggest that befriending could help alleviate the loneliness carers of people with dementia face, but cite the need for more research on the benefits for this client group.

#### *Mothers with Young Children:*

Coe and Barlow (2013) conducted a study into a befriending service specifically for women with perinatal depression (depression immediately before or after birth) which reveals how befriending relationships can be important for mothers with young children<sup>clxxxii</sup>. The authors explain how the prevalence of postnatal depression in the UK is approximately 13% and can result in a range of health problems for their babies, including low birth weight, but that “current needs in terms of women experiencing perinatal anxiety and depression exceeds statutory sector capacity”<sup>clxxxiii</sup>. The befriending service the authors appraise is the Perinatal Support Project which was established in 2010 and offers befriending for mothers affected by, or at risk of, perinatal depression in four areas of England: Hackney, West Mansfield, Swaffham and Oxford. The women either refer themselves or are referred by GPs or health visitors, and must either be pregnant or have a child under one year old<sup>clxxxiv</sup>. The authors found that befriending was particularly valued as a service which filled a gap for this specific client group. Interviews with individuals who had referred women to the service, for example, revealed that they were “unanimous that [the befriending service] filled a gap left by other services... midwives, health visitors, family workers and social works, embraced the project wholeheartedly”<sup>clxxxv</sup>. Taggart, Short and Barclay’s (2000) study of a befriending service for mothers with young children also attests to the benefits of befriending for this client group. They explain how women who are already socially isolated had this exacerbated by the pressures of being mothers. They report that the befrienders “became a

lifeline for many isolated mothers” who otherwise would struggle to find the time or opportunity to socialize<sup>clxxxvi</sup>.

#### *Individuals with Long-Term Health Conditions:*

Macdonald and Greggans’ (2010) study of a befriending service for children with cystic fibrosis is suggestive of how befriending can help individuals with long-term and complex health conditions, specifically children. The authors explain how the treatment for their conditions were time-consuming for the children, which could contribute to, and exacerbate, social isolation given regular visits to hospitals and resulting absences from school<sup>clxxxvii</sup>. Befriending was valued as an opportunity to get away from the hospital and to experience new social activities and friendships that they might not otherwise have access to. The children’s conditions were also recognised to impact on their parents: “Mature young people were aware of the stress CF [cystic fibrosis] can incur for parents with regard to the long-term view of prognosis”<sup>clxxxviii</sup>. In this respect, befriending was also beneficial in alleviating some of the pressure and stress felt by the parents of the befriendees.

#### **Types of Befriending:**

Several studies investigated telephone befriending services and provide evidence which suggests unique benefits and limitations of this form of befriending. Cattam, Kime and Bagnall (2011) describe how telephone contact was important for participants in their study who lacked confidence as it helped to improve their communication skills through an anonymous format<sup>clxxxix</sup>. Participants in Lester *et al.*’s study reported the benefit of autonomy through telephone befriending, as they were able to be “more in control” of the relationship through, for example, deciding when to end the conversation<sup>cx</sup>. A further benefit of telephone befriending is suggested by Cant and Taket (2005) who explain how their older Irish participants found telephone befriending “particularly valuable” when the face-to-face centre was closed in order to prevent lonely feelings in the evenings and at weekends. One participant explained: “There’s always someone to talk to at the weekends – I get lonely then – and they know what I mean”<sup>cxci</sup>. Lester *et al.* described how, for the participants in their study, telephone befriending contacts were often shorter and resulted in a relationship which had a “greater emphasis on the notion of checking-up rather than developing a meaningful friendship”<sup>cxcii</sup>. This is not necessarily a disadvantage, as certain clients may derive benefits from being checked up on or may prefer less intimate contact, but

it suggests that more reciprocal friendships could be harder to achieve through this form of befriending. Cattan, Kime and Bagnall support this assertion through reporting that while their participants were “very happy” with their telephone befriending, they did want to eventually meet their befrienders and potentially widen their social networks through face-to-face contact<sup>CXCiii</sup>.

No studies were found which evaluated group or distance (letter and email) befriending schemes, which suggests more research is needed on these forms of befriending.

### **Benefits for Volunteers:**

*“I just found it really rewarding. I wanted to give something back to the community really  
and I feel that I have done that”  
(befriender of mothers with young children)<sup>CXCiv</sup>*

Studies which explored the perceptions of the volunteer befrienders found that they also benefited from befriending relationships. McVittie, Goodall and Barr (2009) conducted 10 semi-structured interviews with befrienders aged 20-36 years old who volunteered for a befriending scheme in Glasgow for minority ethnic children<sup>CXCV</sup>. Similar to the findings above which suggest that befriending relationships can be reciprocal and mutual, the participants reported multiple benefits from the relationship including an increased knowledge and awareness of different cultures and cultural diversity. One participant commented: “I think that there are enormous advantages. I’ve learned so much... I’ve learned a lot about the Pakistani Muslim culture”<sup>CXCvi</sup>. Befrienders in other studies similarly reported the benefits of increased social and cultural awareness. Participants in Mitchell and Pistrang’s (2011) study of a befriending service for adults with mental health problems (outlined above) described their experience as an “eye opener” to their befriendees’ struggle with mental health and the associated social stigma<sup>CXCvii</sup>. These experiences made them reflect on their own situations. Similarly, participants in Taggart, Short and Barclay’s (2000) study of befriending for mothers with young children (outlined above) described increased social awareness. The befrienders reported “that visits had broadened their personal outlook on the community, that they had become aware of other family circumstances, cultures and situations”<sup>CXCviii</sup>. Findings from an intergenerational befriending service in the U.S. reveals similar benefits for the volunteer specifically as a result of the intergenerational aspect of the relationship<sup>CXCix</sup>. Bullock, Janis and Osborne (1999) conducted 22 interviews with befriendees aged over 50 years and befrienders aged 35 years and under, and found that the younger volunteers described

numerous benefits from befriending their older befriendees. One participant commented: “I am a more compassionate, empathetic person toward the needs of the elderly”<sup>cc</sup>. Other participants described befriending as helping them to put their own lives into perspective, as making them better listeners and improving their relationships with their own families.

A number of studies have also revealed associations between good health and volunteering. Parkinson, Warburton, Sibbritt and Byles (2010) conducted a longitudinal study specifically exploring the relationship between volunteering and the health of older women in Australia<sup>cci</sup>. Data from 7,088 participants aged 70-75 years was used from the Australian Longitudinal Study on Women’s Health for which survey data was collected at baseline in 1996 and subsequently at 1999, 2002 and 2005. The respondents were asked “Do you do any volunteer work for any community or social organisations?” and self-reported medical variables included the participants’ weight, alcohol use, mobility, sight, their ability to perform activities of daily living (including bathing, dressing and eating) and whether they had any conditions which required medicine<sup>ccii</sup>. Volunteering was found to be associated with improved quality of life and better health than for participants who did not volunteer. Health factors which were associated with volunteering in 2005 included: having an acceptable BMI score, higher levels of physical activity, low-risk alcohol use, having had fewer healthcare professional visits and not having conditions which needed medicine<sup>cciii</sup>. Participants who consistently volunteered across each time point had significantly better health indicators than participants who had stopped volunteering at any of the data collection points; the participants who did not consistently volunteer across each year started with similar levels of mental health as regular volunteers but decreased significantly over 1999 and 2002 to similar levels of participants who had never volunteered by 2005<sup>cciv</sup>. Health indicators also improved for volunteers who had begun volunteering after baseline. These findings are suggestive of a causal relationship between volunteering and health status.

Piliavin and Siegl (2007) explored the health effects of volunteering using data for 4,000 participants from the Wisconsin Longitudinal Study<sup>ccv</sup>. Telephone and mail survey data was collected at baseline in 1964 (at which point the average age of the participants was 24 years old) and subsequently in 1975, 1992 and 2004 (at which point the average age of the participants was 64 years old). Volunteering was self-reported and defined as involvement in charities, youth groups, neighbourhood organisations, or other welfare or community groups. Health was measured using a psychological wellbeing scale and a single item: “How would you rate your health at the present time?” Social integration was defined through measures including level of social support, marital status, visits with

friends<sup>ccvi</sup>. The authors found a “highly significant positive effect” of volunteering at each year on both psychological wellbeing and self-reported health. They also found that volunteering for more than one organisation multiplied these effects<sup>ccvii</sup>. Significantly, the authors reported that those individuals who were least socially integrated benefited most from the impact of volunteering in terms of psychological wellbeing improvements<sup>ccviii</sup>.

Li and Ferraro (2006) explored the relationship between volunteering and health at different stages of adulthood using data from the Americans’ Changing Lives (ACL) study<sup>ccix</sup>. They used data for 683 participants aged 40-59 years and for 889 participants aged over 60 years and assessed both health and volunteering status in 1986, 1989 and 1994. Volunteering was measured both by type of volunteering (i.e. no volunteering, volunteering with a political group, volunteering with a religious group, etc.) and by hours spent volunteering over the past year<sup>ccx</sup>. Health factors included self-reported depressive symptoms, functional limitations and chronic conditions. For the older age group the authors “observed significant beneficial effects of volunteering on both depressive symptoms and functional limitations” which was not evident in reverse: health problems at baseline did not predict a decline in volunteering<sup>ccxi</sup>. The positive effects were evident across all three time periods, which suggests that long-term volunteering was beneficial for this group. However, different effects were reported for the middle-aged group, in which depressive symptoms were observed to result in a *decrease* in volunteering by 1994<sup>ccxii</sup>. The authors therefore conclude that health conditions may discourage middle-aged participants from volunteering in contrast to older adults, who experienced improvements in their health as a result of volunteering and did not stop volunteering as a result of health problems at baseline. Li and Ferraro hypothesize that the middle-aged participants did not experience health benefits at the same level as the older participants as they “occupy more extensive social roles than older adults” and therefore volunteer work may not contribute to their social integration to the same degree as for older adults with fewer social contacts.

### **Cost-effectiveness:**

There is scarce evidence relating to the cost-effectiveness of befriending and the available studies arrive at different findings. Mead *et al.*'s (2010) systematic review (outlined above) of 24 studies on befriending found only three studies which explored its cost-effectiveness. Of these, one suggested that

befriending could be cost-effective in terms of quality of life for befriended individuals. The remaining two studies found did not report significant benefits<sup>ccxiii</sup>.

Charlesworth *et al.* (2008) conducted research between 2002 and 2004 into the cost-effectiveness of befriending using data for 236 adult carers of individuals with dementia in Norfolk and Suffolk<sup>ccxiv</sup>. Carers were randomly assigned either to the normal care control group or to the intervention group, which gave them access to a befriender facilitator. Follow up assessments were subsequently conducted at 6, 15 and 24 months. Interviews were conducted with the participants and wellbeing was assessed through the Hospital Anxiety and Depression Scale (HADS) and loneliness was assessed through a two-item measure of emotional loneliness. Costs were calculated through resource use of the befriending services, medicine costs, and in terms of time spent looking after the individuals with dementia by carers, friends and family<sup>ccxv</sup>. The mean cost of befriending per carer was £1,138 for 15 months. However this was skewed by substantial travel costs for individuals in rural areas, which compelled some befriendedees to choose telephone befriending rather than face-to-face befriending<sup>ccxvi</sup>. Indeed, the low cost of telephone befriending was cited by a number of studies including Cattam, Kime and Bagnall's evaluation of a telephone befriending service for older adults (2011)<sup>ccxvii</sup>. Overall, Charlesworth *et al.*'s cost-effectiveness analysis did not suggest any benefits of access to a befriending facilitator over the control group in relation to their psychological wellbeing or in terms of cost-effectiveness. Despite this, a limitation of the study was that access to a befriending facilitator was the intervention used rather than actual befriending support. Only half of the intervention group chose to use befriending and those who did reported improved HADS scores at levels approaching statistical significance<sup>ccxviii</sup>. The researchers also conducted cost-effectiveness analysis of those individuals who were being cared for by the participants and these results did suggest that access to a befriending facilitator was cost-effective for these individuals in terms of improvements of quality of life. Given the impact this could in turn have on their carers, the authors argue that further research into befriending for carers should include more thorough analyses of those the participants care for in order to substantiate the findings<sup>ccxix</sup>.

Knapp, Bauer, Perkins and Snell (2010) conducted research into the social- and cost-effectiveness of community support and care services, including befriending, in order to explore the benefits of investing in communities given the current economic climate in the UK<sup>ccxx</sup>. The authors used a method called "decision modelling" to simulate the effectiveness of a given service, through modelling expected financial costs, behaviours and wellbeing of individuals and communities as a result of each

service. The models were based on financial costing, knowledge from previous studies and local expertise<sup>ccxxi</sup>. Knapp, Bauer, Perkins and Snell hypothesised that improving community-led support services could result not only in healthcare and social support financial savings, but also reductions in antisocial behaviour and crime, increased social engagement, increased citizen participation and more support for individuals who want to move into employment. In order to assess befriending, the authors used the case example of the Brighter Futures Group project which established multiple befriending services for older adults in Kent as well as existing evidence from previous research on befriending and the impact of loneliness<sup>ccxxii</sup>. They found that the actual cost of befriending was approximately £80 per older adult per year, compared to a *monetary value* of approximately £300 per year. While savings in the first year of a befriending service was £30 in terms of reduced need for medical treatment and social support, the estimated benefit in terms of overall wellbeing and mental health improvements was found to be substantially higher. The authors further state that these calculations are “conservative” in that they were only able to attach “a monetary value to a subset of the potential benefits”<sup>ccxxiii</sup>.

#### **Potential Problems or Limitations of Befriending:**

While the researchers of the studies outlined above unanimously considered befriending to be a positive intervention for the participants, potential or actual problems with befriending were also raised. Many participants in the studies were concerned about when the befriending relationship would end and some were unclear about when this would occur. Mitchell and Pistrang (2011), for example, describe how the fact that the befriending relationship would end brought uncertainty for the participants in their study of adults with mental health problems, and some befrienders were concerned about how dependent their befriendees had become on the relationship<sup>ccxxiv</sup>. Similarly, the older befriendees involved in the telephone befriending service in Cattam, Kime and Bagnall’s (2011) study were concerned about the end of their befriending relationships: “When asked what the impact would be if the telephone befriending service were to stop, many of the participants were visibly alarmed and had to be reassured that this was a hypothetical question”<sup>ccxxv</sup>. In the study outlined above which assessed a befriending service for children with cystic fibrosis, Macdonald and Greggins (2010) reported that when befriending relationships had ended “without warning” the children “sometimes were sad, angry, felt a lack of control or felt to blame”<sup>ccxxvi</sup>. The participants, including the parents and befrienders themselves, were also reported to be unclear about the expected length of the relationship. A further challenge of befriending found in this study was reported by the befrienders, who often felt ignorant or anxious

about the children's conditions and felt that the children and their parents "used a different language" to discuss cystic fibrosis. The befriendeds and their parents reported that they "expected their befrienders to have a degree of knowledge about CF [cystic fibrosis]" which clearly was not always fulfilled<sup>ccxxvii</sup>.

### **Challenges of Research:**

The varying and limited results outlined in the above section reflect a lack of research into befriending. The studies discussed predominantly used small samples and many could not ethically or practically make use of control groups to understand the effect of befriending in comparison to no intervention. Phillip and Spratt (2007) further explain how befriending services are often part of larger schemes, which makes their individual impact difficult to evaluate<sup>ccxxviii</sup>. Both Charlesworth *et al.* (2008) and Knapp, Bauer, Perkins and Snell (2010), in their studies exploring the cost-effectiveness of befriending, explain how there is a marked lack of evidence relating specifically to the financial costs and benefits of befriending. Knapp, Bauer, Perkins and Snell argue that while community projects aiming to increase social support are broadly agreed to have the potential to improve individuals' and communities' wellbeing, the absence of proof, specifically of their economic benefits, means that are likely not to be taken seriously<sup>ccxxix</sup>.

Jopling (2014) conducted a study specifically on how services which attempt to mitigate the effects of loneliness evaluate their impact, and found a number of problems with assessment<sup>ccxxx</sup>. The author compiled 23 responses from individual services, including befriending services, through desk-based research and telephone interviews, and conducted discussions with funders and commissioners of services. They found that services were usually unaware of more established measures of loneliness and therefore often created their own means of conducting evaluation. Among services who *were* aware of recognised measures, there was a concern "that these may not be appropriately tailored to the service delivery context"<sup>ccxxxi</sup>. Issues were also reported with regard to establishing a baseline measurement of service users prior to the intervention; new clients could be unwilling to take part in a survey or could be hard to identify and contact. However, baselines measurement is essential in evaluating the impact of a service. There were also concerns that service users may be unwilling to be honest about loneliness due to sensitivity surrounding the issue. Furthermore, it was reported that clients would be reluctant to respond negatively about the service's impact if they were reliant on it or

wanted to be helpful or polite to the service providers<sup>ccxxxii</sup>. Ultimately, the participants – particularly the commissioning bodies – reported that demonstrating the cost-effectiveness of their service was often more highly prioritised or required by funders than the impact on loneliness itself<sup>ccxxxiii</sup>.

A number of studies identified for this review cite lack of evidence as the reason they cannot make recommendations or conclusions about befriending or similar interventions. Cattan, White, Bond and Learmouth (2005) conducted a literature review of health promotion interventions to tackle social isolation and loneliness but struggled to make recommendations due to a lack of relevant research<sup>ccxxxiv</sup>. They found only 11 studies which assessed the effectiveness of one-to-one interventions and described the results as “unclear” due to their small sample sizes and inconsistent results<sup>ccxxxv</sup>. Similarly, Findlay (2003) conducted a review of studies published 1982-2002, which assessed interventions designed to reduce social isolation among older adults and found only 17 studies in total<sup>ccxxxvi</sup>. They concluded that “very little can be deduced about the effectiveness of interventions when so few evaluations of each type of intervention have been conducted” and recommended that further research with robust methodologies be conducted into social interventions to reduce social isolation<sup>ccxxxvii</sup>. Smith and Greenwood (2013) conducted a systematic review of studies outlining the impact of volunteer mentoring schemes on carers of people with dementia but found only four studies to review<sup>ccxxxviii</sup>. The authors describe how their research highlights the need for further research into the benefits of both mentoring and befriending, and a need for longitudinal studies to assess more long-term benefits of each intervention<sup>ccxxxix</sup>.

### **Summary of Befriending and its Potential to Alleviate Loneliness and Social Isolation:**

This section has outlined the available literature on befriending which has revealed unique ways in which it could help to prevent or alleviate the effects of loneliness and social isolation. The qualitative literature revealed that the fact that befrienders are volunteers is significant for befriendees. This made the befriending relationship more reciprocal and like a “real” friendship as opposed to professional care and assistance. Similarly, the fact that some befriending relationships in the literature were described as friendships is also significant. Both findings suggest that befriending could help reduce loneliness by providing the opportunity for satisfaction with the *quality* of an individual’s social relationships as opposed to impersonal social contact. The evidence also suggests that befriending could alleviate social isolation. A number of studies reported that their participants had increased self-confidence and were

more willing to participate in local social activities as a result of their befriending relationships. As well as providing quality of social contacts, therefore, befriending could also increase befriendees' social networks through helping them to participate in social activities within their communities. These findings are supported through reported improvements in health as a result of reduced isolation and loneliness in several of the studies, which include self-reported improvements in depressive symptoms and improvements in health as described by a befriender's doctor. The research also provides evidence to suggest that befriending could help to improve mental wellbeing or alleviate mental health conditions as evidenced by quantitative data. Mead *et al.*'s (2010) systematic review suggests that befriending could result in a moderate improvement in depression for befriendees.

The section on different client groups demonstrated the specific benefits of befriending for a variety of individuals. Befriending was reported as being helpful through offering opportunities to reengage with society for groups at higher risk of social isolation and loneliness including: minority ethnic groups, those with mental health issues and mothers of young children. Befriending relationships also offer the opportunity for meaningful companionship for older adults who choose not to engage in local activities for their demographic group, or who are unable to participate due to physical restrictions. Befriending can offer respite for carers who are at higher risk of social isolation given their caring demands and for those with long-term and complex health problems given the demands of treatment and challenges as a result of their conditions. Research on the benefits of befriending for other client groups would be beneficial.

Different forms of befriending were also explored. Telephone befriending was found to deliver many of the benefits that face-to-face befriending offered, as demonstrated throughout the "benefits and limitations of befriending" section. However, there are also unique aspects of this form of befriending, including the opportunity for anonymity and a level of control over the contact for befriendees. Despite this, one study suggested that telephone befriending resulted in shorter and less intimate contact than face-to-face befriending, which may explain why in another study the participants reported that they did eventually want to meet their befriender and that this would expand their social network. This suggests that telephone befriending may be less beneficial in terms of reducing social isolation than face-to-face contact where the befriender can accompany the befriender when they participate in community activities. No studies were found which specifically evaluated the impact of group or distance befriending.

Benefits for the volunteer befrienders were identified in several studies, which demonstrates how befriending can be beneficial to both members of the befriending relationship. The befrienders reported valuing the opportunity to contribute to society, their increased awareness of different cultures and social circumstances, and felt more empathetic and sensitive to the needs of others. Studies also reported health benefits of volunteering including better self-reported health, fewer depressive symptoms and improved psychological wellbeing. Two of the studies outlined suggest that volunteering may be particularly beneficial for the health of individuals who are otherwise less socially integrated, including older adults. There is also some indication that befriending could be a cost-effective intervention but evidence is limited and the fact that the studies above arrived at different conclusions suggests the need for further research into this subject. Charlesworth *et al.*'s and Cattan, Kime and Bagnall's studies also suggest that telephone befriending can be a more cost-effective intervention, particularly for those living in geographically isolated areas.

Studies demonstrate aspects of the befriending relationship which can be problematic. Participants in several studies were either anxious about the end of the befriending relationship or had found the end of a befriending relationship challenging in the past. This demonstrates a need for clarity for both the befriender and the befriended on the length of the relationship and for its end to be well handled so as to minimise the negative impact for the befriended. Clear communication is also needed in terms of befrienders' expected and actual knowledge. This was demonstrated in the study of a befriending service for children with cystic fibrosis which found that the children and their parents expected the befrienders to have an understanding of their condition which was not always met.

More research is clearly needed on befriending services' impact as demonstrated by the reviews which found limited numbers of studies to evaluate. These should employ an agreed-upon definition of befriending, should make use of longitudinal data for larger numbers of participants and use control groups where possible. This would allow more substantiated and reliable quantitative and review data from which to make recommendations. More support should also be given to befriending services in order allow appropriate and practical measures by which to evaluate their own services.

## **CONCLUSION**

It has been demonstrated that loneliness and social isolation pose a serious problem in the UK. While both affect certain demographic groups in higher proportions (older adults and those living alone, for example) they can be experienced by, and affect, a range of individuals. Loneliness has been shown to worsen, cause, or be associated with a wide range of health conditions including risk of premature death, high blood pressure, heart problems, increased difficulty performing everyday tasks, unhealthy behaviours, declining cognitive function, depressive symptoms, deliberate self-harm and overall self-reported health. Social isolation was found to affect premature mortality risk, high blood pressure, heart problems, unhealthy behaviours and self-reported health. These effects cumulate to pose a serious public health concern in terms of individual distress, pressure on the healthcare system and loss of economic activity of those who are unable to work due to illness. There is an evident need to research social interventions which could help to tackle loneliness and social isolation and thus prevent or alleviate these health problems, as well as feelings of individual distress. Befriending has been presented in this review as one intervention which could form part of a broader solution. While the cost-effectiveness studies outlined above were contradictory and therefore inconclusive, befriending is community-led, staffed by volunteers and is able to offer support to a wide range of isolated individuals, which suggests it has potential to be economical. A number of studies attest to the fact that befriending relationships offer alleviation to loneliness and social isolation through meaningful and reciprocal friendship-like support and opportunities to engage in community and social activities. This was found to be especially important for groups of people who were at higher risk of isolation including older adults, those with mental health problems or long-term health conditions, mothers with young children, carers and minority ethnic groups. The literature further suggests that befriending could help to alleviate mental health conditions including anxiety and depressive symptoms. The studies identified the need for the befriending relationship to be well handled by staff in order to minimise stress or uncertainty at the end of the relationship. However, no prohibitive problems were identified which would suggest that befriending is a detrimental intervention.

Despite these largely positive findings, there is a marked lack of research which has been evident throughout all sections of the review. In order to address and seek to prevent loneliness and social isolation in the UK more research is needed on: loneliness and social isolation rates among children and young people, social isolation rates among young and middle-aged adults, and the health

effects of loneliness and social isolation among children and young people. In terms of the effects of befriending, more research is also needed on evaluating befriending services including cost-effectiveness analyses and research on different forms and client groups of befriending services. There is a need for studies to use clearly defined terms and established means of measurement, and to use more robust methodologies including larger samples of participants. Such research is scarce and may help to substantiate the research outlined throughout the review, as well as to make more definitive recommendations about which types of befriending would be most beneficial for specific client groups. In their *New Horizons* report in 2009, the Department of Health specifically recommended voluntary, community services which “can foster people’s sense of purpose and promote community cohesion” as a means of promoting good health in this financial climate<sup>ccxi</sup>. Befriending is one such service which has significant potential to alleviate the suffering of lonely and socially isolated individuals in the UK and in turn to benefit wider society.

- <sup>i</sup> Victor, Christina, Scambler, Sasha and Bond, John (2009) *The Social World of Older People: Understanding Loneliness and Social Isolation in Later Life* Open University Press: Maidenhead pp. 13-14
- <sup>ii</sup> Lester, Helen, Mead, Nicki, Graham, Carolyn Chew, Gask, Linda and Reilly, Siobhan (2012) 'An Exploration of the Value and Mechanisms of Befriending for Older Adults in England' *Ageing and Society* 32 pp. 308
- <sup>iii</sup> De Jong Gierveld and Van Tilburg (2006) 'A 6-Item Scale for Overall, Emotional, and Social Loneliness' *Research on Aging* 28 (5) pp. 582-598; Victor, Scambler and Bond (2009) (as above)
- <sup>iv</sup> De Jong Gierveld and Van Tilburg (2006) (as above)
- <sup>v</sup> De Jong Gierveld and Van Tilburg (2006) (as above) p. 583
- <sup>vi</sup> De Jong Gierveld and Van Tilburg (2006) (as above) p. 584
- <sup>vii</sup> Victor, Christina, Bowling, Ann, Bond, John and Scambler, Sasha (2003) 'Loneliness, Social Isolation and Living Alone in Later Life' Research Findings: 17 from the Growing Older Programme
- <sup>viii</sup> Zavaleta, Diego, Samuel, Kim and Mills, China (2014) 'Social Isolation: A Conceptual and Measurement Proposal' Oxford Poverty and Human Development Initiative working paper no. 67: Oxford University [accessed 25/02/14] Available online at: <http://www.ophi.org.uk/wp-content/uploads/ophi-wp-67.pdf>
- <sup>ix</sup> Victor, Scambler and Bond (2009) (as above) p. 55
- <sup>x</sup> Victor, Scambler and Bond (2009) (as above) p. 57
- <sup>xi</sup> Russell, Daniel (1996) 'UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure' *Journal of Personality Assessment* 66 (1) pp. 20-40
- <sup>xii</sup> Russell (1996) (as above)
- <sup>xiii</sup> De Jong Gierveld and Van Tilburg (2006) (as above) p. 584
- <sup>xiv</sup> De Jong Gierveld and Van Tilburg (2006) (as above) p. 586
- <sup>xv</sup> Victor, Scambler and Bond (2009) (as above) p. 20
- <sup>xvi</sup> Lubben, James, Blozic, Eva, Gillmann, Gerhard, Iliffe, Steve, von Renteln Kruse, Wolfgang, Beck, John and Stuck, Andreas (2006) 'Performance of an Abbreviated Version of the Lubben Social Network Scale Among Three European Community-Dwelling Older Adult Populations' *The Gerontologist* 46 (4) pp.503-513
- <sup>xvii</sup> Lubben *et al.* (2006) (as above) p. 504
- <sup>xviii</sup> Victor, Christina, Scambler, Sasha, Bowling, Ann and Bond, John (2005) 'The Prevalence of, and Risk Factors for, Loneliness in Later Life: A Survey of Older People in Great Britain' *Ageing and Society* 25 (3) p. 364
- <sup>xix</sup> Victor, Christina & Yang, Keming (2012) 'The Prevalence of Loneliness Among Adults: A Case Study of the United Kingdom' *The Journal of Psychology: Interdisciplinary and Applied* 146 (1-2) p. 93
- <sup>xx</sup> Office for National Statistics (2012) Chris Randall 'Measuring National Well-Being – Our Relationships, 2012' Available online at: <http://www.ons.gov.uk/ons/rel/social-trends-rd/social-trends/social-trends-41/index.html>
- <sup>xxi</sup> ChildLine (2010) 'Children Talking to ChildLine about Loneliness' Casenotes Report [accessed 07/02/14] Available online at: [http://www.nspcc.org.uk/Inform/publications/casenotes/clcasenotes\\_loneliness\\_wdf74260.pdf](http://www.nspcc.org.uk/Inform/publications/casenotes/clcasenotes_loneliness_wdf74260.pdf)
- <sup>xxii</sup> ChildLine (2010) (as above)
- <sup>xxiii</sup> Victor, Scambler and Bond (2009) (as above) pp. 145-146
- <sup>xxiv</sup> Griffin (2010) (as above)
- <sup>xxv</sup> Victor and Yang (2012) (as above) p. 93
- <sup>xxvi</sup> Social Care Institute for Excellence (2011) research briefing 'Preventing Loneliness and Social Isolation: Interventions and Outcomes' [accessed 07/01/14] Available at: <http://www.scie.org.uk/publications/briefings/files/briefing39.pdf>
- <sup>xxvii</sup> Office for National Statistics (2011) Jen Beaumont (ed.) 'Population: Social Trends 41' Available online at: <http://www.ons.gov.uk/ons/rel/social-trends-rd/social-trends/social-trends-41/index.html>
- <sup>xxviii</sup> Beaumont, Jen (2013) 'Measuring National Well-Being – Older People and Loneliness' *Office for National Statistics Report* [accessed 28/01/14] Available at: <http://www.statistics.gov.uk/hub/index.html> p.1
- <sup>xxix</sup> Beaumont (2013) (as above)
- <sup>xxx</sup> Victor, Christina, Scambler, Sasha, Bowling, Ann and Bond, John (2005) 'The Prevalence of, and Risk Factors for, Loneliness in Later Life: A Survey of Older People in Great Britain' *Ageing and Society* 25 (3) pp. 370-371
- <sup>xxxi</sup> Griffin (2010); Victor and Yang (2012); Beaumont (2013) (all as above)
- <sup>xxxii</sup> Victor and Yang (2012) (as above) p.93
- <sup>xxxiii</sup> Beaumont (2013) (as above)
- <sup>xxxiv</sup> Office for National Statistics (2012) Chris Randall 'Measuring National Well-Being – Our Relationships, 2012' Available online at: <http://www.ons.gov.uk/ons/rel/social-trends-rd/social-trends/social-trends-41/index.html>
- <sup>xxxv</sup> Beal, Claudia (2006) 'Loneliness in Older Women: A Review of the Literature' *Issues in Mental Health Nursing* 27 (7) p. 810
- <sup>xxxvi</sup> Victor, Bowling, Bond and Scambler (2003) (as above) p. 3
- <sup>xxxvii</sup> Office for National Statistics (2011) Jen Beaumont (ed.) 'Households and Families: Social Trends 41' Available online at: <http://www.ons.gov.uk/ons/rel/social-trends-rd/social-trends/social-trends-41/index.html>
- <sup>xxxviii</sup> Victor, Christina, Bowling, Ann, Bond, John and Scambler, Sasha (2003) 'Loneliness, Social Isolation and Living Alone in Later Life' Research Findings: 17 from the Growing Older Programme pp.2-3
- <sup>xxxix</sup> Banks, Laura, Haynes, Philip and Hill, Michael (2009) 'Living in Single Person Households and the Risk of Isolation in Later Life' *International Journal of Ageing and Later Life* 4 (1) p. 56
- <sup>xl</sup> Banks, Haynes and Hill (2009) (as above)

- <sup>xli</sup> Lubben, James, Blozic, Eva, Gillmann, Gerhard, Iliffe, Steve, von Renteln Kruse, Wolfgang, Beck, John and Stuck, Andreas (2006) 'Performance of an Abbreviated Version of the Lubben Social Network Scale Among Three European Community-Dwelling Older Adult Populations' *The Gerontologist* 46 (4) pp.503-513
- <sup>xlii</sup> Victor, Scambler and Bond (2009) (as above) p. 181
- <sup>xliiii</sup> Victor, Scambler and Bond (2009) (as above) p. 181
- <sup>xliv</sup> Office for National Statistics (2011) Carla Seddon (ed.) 'Lifestyles & Social Participation: Social Trends 41' Available online at: <http://www.ons.gov.uk/ons/rel/social-trends-rd/social-trends/social-trends-41/index.html>
- <sup>xlv</sup> Office for National Statistics (2011) Randall (as above)
- <sup>xlvi</sup> Barnes, Matt, Blom, Annelies, Cox, Kate, Lessof, Carli and Walker, Alan (2006) 'The Social Exclusion of Older People: Evidence from the First Wave of the English Longitudinal Study of Ageing (ELSA): Final Report' *Social Exclusion Unit, Office of the Deputy Prime Minister: London*
- <sup>xlvii</sup> Jivraj, Stephen, Nazroo, James and Barnes, Matt (2012) 'Change in Social Detachment in Older Age in England' in Banks, James, Nazroo, James and Steptoe, Andrew (2012) *'The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-2010'* The Institute for Fiscal Studies: London p. 48
- <sup>xlviii</sup> Banks, Haynes and Hill (2009) (as above) p. 73
- <sup>xlix</sup> Iliffe, Steve, Kharicha, Kalpa, Harari, Danielle, Swift, Cameron, Gillman, Gerhard and Stuck, Andreas (2007) 'Health Risk Appraisal in Older People 2: The Implications for Clinicians and Commissioners of Social Isolation Risk in Older People' *British Journal of General Practice* 57 (537) pp. 277
- <sup>l</sup> Banks, Haynes and Hill (2009) (as above) p.75
- <sup>li</sup> Jivraj, Nazroo and Barnes (2012) (as above) p.48
- <sup>lii</sup> Banks, Haynes and Hill (2009) (as above) p.75
- <sup>liii</sup> Banks, Nazroo and Steptoe (2012) (as above) p.4
- <sup>liv</sup> Perissinotto, Carla, Cenzer, Irena Stijacic and Covinsky, Kenneth (2012) 'Loneliness in Older Persons: A Predictor of Functional Decline and Death' *Archives of Internal Medicine* 172 (14) pp. 1078-1083
- <sup>lv</sup> Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081
- <sup>lvi</sup> Berkman, Lisa, Melchior, Maria, Chastang, Jean-François, Niedhammer, Isabelle, Lecierc, Annette and Goldberg, Marcel (2004) 'Social Integration and Mortality: A Prospective Study of French Employees of Electricity of France - Gas of France' *American Journal of Epidemiology* 159 (2) pp. 167-174
- <sup>lvii</sup> Berkman *et al.* (2004) (as above) p. 168
- <sup>lviii</sup> Berkman *et al.* (2004) (as above) p. 170
- <sup>lix</sup> Pantell, Matthew, Rehkopf, David, Jutte, Douglas, Syme, Leonard, Balmes, John and Adler, Nancy (2013) 'Social Isolation: A Predictor of Mortality Comparable to Traditional Clinical Risk Factors' *American Journal of Public Health* 103 (11) pp. 2056-2062
- <sup>lx</sup> Pantell *et al.* (2013) (as above) p. 2058
- <sup>lxi</sup> Holt-Lunstad, Julianne, Smith, Timothy and Layton, Bradley (2010) 'Social Relationships and Mortality Risk: A Meta-Analytic Review' *PLoS Medicine* 7 (7) pp. 1-19
- <sup>lxii</sup> Holt-Lunstad, Smith and Layton (2010) (as above) p. 4
- <sup>lxiii</sup> Holt-Lunstad, Smith and Layton (2010) (as above) pp. 8-9
- <sup>lxiv</sup> Holt-Lunstad, Smith and Layton (2010) (as above) p. 9
- <sup>lxv</sup> Holt-Lunstad, Smith and Layton (2010) (as above) p. 9
- <sup>lxvi</sup> Caspi, Avshalom, Harrington, HonaLee, Moffitt, Terrie, Milne, Barry and Poulton, Richie (2006) 'Socially Isolated Children 20 Years Later' *Archives of Pediatric and Adolescent Medicine* 160 pp. 805-811
- <sup>lxvii</sup> Caspi *et al.* (2006) (as above) p. 805
- <sup>lxviii</sup> Caspi *et al.* (2006) (as above) p. 805
- <sup>lxix</sup> Caspi *et al.* (2006) (as above) p. 810
- <sup>lxx</sup> Rodríguez-Artalejo, Fernando, Guallar-Castillón, Pilar, Conde Herrera, Manuel, Montoto Otero, Carmen, Olcoz Chiva, Maite, Carreño Ochoa, Concepción, Banegas, José and Rodríguez Pascual, Carlos (2006) 'Social Network as a Predictor of Hospital Readmission and Mortality Among Older Patients with Heart Failure' *Journal of Cardiac Failure* 12 (8) pp. 621-627
- <sup>lxxi</sup> Rodríguez-Artalejo *et al.* (2006) (as above) p. 621
- <sup>lxxii</sup> Rodríguez-Artalejo *et al.* (2006) (as above) p. 623
- <sup>lxxiii</sup> Hawkey, Louise, Thisted, Ronald, Masi, Christopher and Cacioppo, John (2010) 'Loneliness Predicts Increased Blood Pressure: 5-Year Cross-Lagged Analyses in Middle-Aged and Older Adults' *Psychology and Ageing* 25 (1) pp. 132-141
- <sup>lxxiv</sup> Hawkey *et al.* (2010) (as above) p. 137
- <sup>lxxv</sup> Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081
- <sup>lxxvi</sup> Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1079
- <sup>lxxvii</sup> Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081
- <sup>lxxviii</sup> Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081
- <sup>lxxix</sup> McLaughlin, Deirdre, Leung, Janni, Pachana, Nancy, Flicker, Leon, Hankey, Graeme and Dobson, Annette (2012) 'Social Support and Subsequent Disability: It is Not the Size of Your Network That Counts' *Age and Ageing* 0 pp. 1-4
- <sup>lxxx</sup> McLaughlin *et al.* (2012) (as above) p. 2
- <sup>lxxxi</sup> McLaughlin *et al.* (2012) (as above) pp. 2-3
- <sup>lxxxii</sup> Lauder, William, Mummery, Kerry, Jones, Martyn and Caperchione, Cristina (2006) 'A Comparison of Health Behaviours in Lonely and Non-Lonely Populations' *Psychology, Health and Medicine* 11 (2) pp. 233-245
- <sup>lxxxiii</sup> Lauder, Mummery, Jones and Caperchione (2006) (as above) pp. 235-236
- <sup>lxxxiv</sup> Lauder, Mummery, Jones and Caperchione (2006) (as above) p. 238
- <sup>lxxxv</sup> Lauder, Mummery, Jones and Caperchione (2006) (as above) p. 239

- lxxxvi Lauder, Mummery, Jones and Caperchione (2006) (as above) p. 241
- lxxxvii Nieminen *et al.* (2013) (as above) p. 3
- lxxxviii Nieminen *et al.* (2013) (as above) p. 3
- lxxxix Berkman *et al.* (2004) (as above) p. 169
- xc Cacioppo, John, Hughes, Mary, Waite, Linda, Hawkley, Louise and Thisted, Ronald (2006) 'Loneliness as a Specific Risk Factor for Depressive Symptoms: Cross Sectional and Longitudinal Analyses' *Psychology and Aging* 21 (1) pp. 140-151
- xc1 Cacioppo *et al.* (2006) (as above) p. 143
- xc2 Cacioppo *et al.* (2006) (as above) p. 143
- xc3 Cacioppo *et al.* (2006) (as above) p. 148
- xc4 Cacioppo, John, Hawkley, Louise and Thisted, Ronald (2010) 'Perceived Loneliness Makes Me Sad: 5-Year Cross-Lagged Analyses of Loneliness and Depressive Symptomatology in the Chicago Health, Aging, and Social Relations Study' *Psychology and Aging* 25 (2) pp. 453-463
- xcv Cacioppo, Hawkley and Thisted (2010) (as above) p. 458
- xcvi Teo, Alan, Choi, Hwalung and Valenstein, Marcia (2013) 'Social Relationships and Depression: Ten-Year Follow-Up from a Nationally Representative Study' *PLoS ONE* 8 (4) pp. 1-8
- xcvii Teo, Choi and Valenstein (2013) (as above) p. 2
- xcviii Teo, Choi and Valenstein (2013) (as above) p. 2
- xcix Teo, Choi and Valenstein (2013) (as above) p. 6
- c Rönka, Anna Reetta, Taanila, Anja, Koironen, Markku, Sunnari, Vappu and Rautio, Arja (2013) 'Associations of Deliberate Self-Harm with Loneliness, Self-Rated Health and Life Satisfaction in Adolescence: Northern Finland Birth Cohort 1986 Study' *International Journal of Circumpolar Health* 72 (21085) pp. 1-7
- ci Rönka *et al.* (2013) (as above) p. 1
- cii Glymour, Maria, Weuve, Jennifer, Fay, Martha, Glass, Thomas and Berkman, Lisa (2008) 'Social Ties and Cognitive Recovery after Stroke: Does Social Integration Promote Cognitive Resilience?' *Neuroepidemiology* 31 pp. 10-20
- ciii Glymour *et al.* (2008) (as above) p. 12
- civ Glymour *et al.* (2008) (as above) p. 17
- cv Holwerda, Tjalling Jan, Deeg, Dorly, Beekman, Aartjan, van Tilburg, Theo, Stek, Max, Jonker, Cees and Schoevers, Robert (2012) 'Feelings of Loneliness, but not Social Isolation, Predict Dementia Onset: Results from the Amsterdam Study of the Elderly (AMSTEL)' *Journal of Neurology, Neurosurgery and Psychiatry* 0 pp. 1-8
- cvi Holwerda *et al.* (2012) (as above) p. 3
- cvi Wilson, Robert, Krueger, Kristin, Arnold, Steven, Schneider, Julie, Kelly, Jeremiah, Barnes, Lisa, Tang, Yuxiao and Bennett, David (2007) 'Loneliness and Risk of Alzheimer Disease' *Archive of General Psychiatry* 64 (2) pp. 234-240
- cvi Wilson *et al.* (2007) (as above) p. 236
- cix Hawton, Annie, Green, Colin, Dickens, Andy, Richards, Suzanne, Taylor, Rod, Edwards, Rachel, Greaves, Colin and Campbell, John (2011) 'The Impact of Social Isolation on the Health Status and Health-Related Quality of Life of Older People' *Quality of Life Research* 20 pp. 57-67
- cx Hawton *et al.* (2011) (as above) pp. 58-59
- cx1 Hawton *et al.* (2011) (as above) p. 60
- cx2 Hawton *et al.* (2011) (as above) p. 59
- cx3 Tomaka, Joe, Thomson, Sharon and Palacios, Rebecca (2006) 'The Relation of Social Isolation, Loneliness, and Social Support to Disease Outcomes Among the Elderly' *Journal of Aging and Health* 18 (3) pp. 359-384
- cx4 Tomaka, Thomson and Palacios (2006) (as above) p. 364
- cx5 Tomaka, Thomson and Palacios (2006) (as above) p. 371
- cx6 Hawkley *et al.* (2010) (as above) p. 138
- cx7 Schinka *et al.* (2011) (as above) p. 106
- cx8 Cacioppo *et al.* (2006) (as above) p. 140
- cx9 Department of Health (2009) 'New Horizons: Towards a Shared Vision for Mental Health' [accessed 21/01/14] Available at: [www.dh.gov.uk/publications](http://www.dh.gov.uk/publications) p. 14
- cx10 Ellaway, Anne, Wood, Stuart and Macintyre, Sally (1999) 'Someone to Talk to? The Role of Loneliness as a Factor in the Frequency of GP Consultations' *British Journal of General Practice* 49 pp. 363-367
- cx11 Ellaway, Wood and Macintyre (1999) (as above) p. 363
- cx12 Ellaway, Wood and Macintyre (1999) (as above) p. 365
- cx13 Ellaway, Wood and Macintyre (1999) (as above) p. 365
- cx14 Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1082
- cx15 Teo, Choi and Valenstein (2013) (as above) p. 1
- cx16 Charlesworth, G., Shepstone, L., Wilson, E., Thalanany, M., Mugford, M. and Poland, F. (2008) 'Does Befriending by Trained Lay Workers Improve Psychological Well-Being and Quality of Life for Carers of People with Dementia, and at What Cost? A Randomised Controlled Trial' *Health Technology Assessment* 12 (4) p. 13
- cx17 McGowan, Bill, Saintas, Patrick and Gill, Karamjit (2009) 'On Mentoring, Social Mentoring and Befriending' *AI and Soc* 23 pp. 623
- cx18 McGowan, Saintas and Gill (2009) (as above) p. 624
- cx19 Taggart, Angela, Short, Stephanie and Barclay, Lesley (2000) 'She has Made Me Feel Human Again': An Evaluation of a Volunteer Home-Based Visiting Project for Mothers' *Health and Social Care in the Community* 8 (1) p. 5
- cx20 Andrews, Gavin, Noel, Begley, Sheila and Brodie, David (2003) 'Assisting Friendships, Combating Loneliness: Users' Views on a 'Befriending' Scheme' *Ageing and Society* 23 (3) pp. 249-362
- cx21 Andrews *et al.* (2003) (as above) p. 356

- cxxxii Cattan, Mima, Kime, Nicola and Bagnall, Anne-Marie (2011) 'The Use of Telephone Befriending in Low Level Support for Socially Isolated Older People' *Health and Social Care in the Community* 19 (2) pp. 198-206
- cxxxiii Cattan, Kime and Bagnall (2011) (as above) p. 203
- cxxxiv Cattan, Kime and Bagnall (2011) (as above) p. 203
- cxxxv Taggart, Short and Barclay (2000) (as above) p. 5
- cxxxvi Taggart, Short and Barclay (2000) (as above) p. 6
- cxxxvii Taggart, Short and Barclay (2000) (as above) p. 4
- cxxxviii Cattan, Kime and Bagnall (2011) p. 201
- cxxxix Andrews *et al.* (2003) p. 357
- cxl Mitchell, Gemma and Pistrang, Nancy (2011) 'Befriending for Mental Health Problems: Processes of Helping' *Psychology and Psychotherapy: Theory, Research and Practice* 84 pp. 151-169
- cxli Mitchell and Pistrang (2011) (as above) p. 151
- cxlii Mitchell and Pistrang (2011) (as above) p.163
- cxliiii Bradshaw, Tim and Haddock, Gillian (1998) 'Is Befriending by Trained Volunteers of Value to People Suffering from Long-Term Mental Illness?' *Journal of Advanced Nursing* 27 (4) pp. 713-720
- cxliv Bradshaw and Haddock (1998) (as above) p. 717
- cxlv Cattan, Kime and Bagnall (2011) (as above) p. 202
- cxlvi Cattan, Kime and Bagnall (2011) (as above) p. 202
- cxlvii Mitchell and Pistrang (2011) (as above) p.165
- cxlviii MacDonald, Kath and Greggans, Alison (2010) 'Cool Friends': An Evaluation of a Community Befriending Programme for Young People with Cystic Fibrosis' *Journal of Clinical Nursing* 19 pp. 2406-2414
- cxlix MacDonald and Greggans (2010) (as above) p. 2411
- cl Macdonald and Greggans (2010) (as above) p. 2411
- cli Mitchell and Pistrang (2011) (as above) p.163
- clii Cattan, Kime and Bagnall (2011) (as above) p. 202
- cliiii Cattan, Kime and Bagnall (2011) (as above) p. 201
- cliv Cattan, Kime and Bagnall (2011) (as above) p. 202
- clv Bullock, Janis and Osborne, Sandra (1999) 'Seniors', Volunteers', and Families' Perspectives of an Intergenerational Program in a Rural Community' *Educational Gerontology* 25 (3) p. 244
- clvi Bullock and Osborne (1999) (as above) p. 244
- clvii Bullock and Osborne (1999) (as above) p. 244
- clviii Coe and Barlow (2013) p. 24
- clix Harris, Tirril, Brown, George and Robinson, Ruth (1999) 'Befriending as an Intervention for Chronic Depression Among Women in an Inner City' *British Journal of Psychiatry* 174 pp. 219-224
- clx Harris, Brown and Robinson (1999) pp. 219-221
- clxi Harris, Brown and Robinson (1999) pp. 221-222
- clxii Harris, Brown and Robinson (1999) p.224
- clxiii Mead, Nicola, Lester, Helen, Chew-Graham, Carolyn, Gask, Linda and Bower, Peter (2010) 'Effects of Befriending on Depressive Symptoms and Distress: Systematic Review and Meta-Analysis' *The British Journal of Psychiatry* 196 (2) pp. 96-101
- clxiv Mead *et al.* (2010) p. 97
- clxv Mead *et al.* (2010) p. 96
- clxvi Mead *et al.* (2010) p. 98
- clxvii Mead *et al.* (2010) p. 99
- clxviii Andrews *et al.* (2003) (as above) pp. 360-361
- clxix Andrews *et al.* (2003) (as above) p. 356
- clxx Andrews *et al.* (2003) (as above) p. 360
- clxxi Lester *et al.* (2012) (as above) p. 317
- clxxii Bradshaw and Haddock (1998) (as above) p. 717
- clxxiii Mitchell and Pistrang (2011) (as above) p.163
- clxxiv McVittie, Goodall and Barr (2009) (as above)
- clxxv Cant, Bob and Taket, Ann (2005) 'Promoting Social Support and Social Networks Among Irish Pensioners in South London, UK' *Diversity in Health and Social Care* 2 (4) pp. 263-270
- clxxvi Cant and Taket (2005) (as above) p. 264
- clxxvii Cant and Taket (2005) (as above) p. 269
- clxxviii Charlesworth *et al.* (2008) p. 1
- clxxix Cant and Taket (2005) p. 267
- clxxx Smith and Greenwood (2013) (as above) p. 1
- clxxxi Charlesworth *et al.* (2008) (as above) p. 1
- clxxxii Coe, Chris and Barlow, Jane (2013) 'Supporting Women with Perinatal Mental Health Problems: The Role of the Voluntary Sector' *Community Practitioner* 86 (2) pp. 23-27
- clxxxiii Coe and Barlow (2013) (as above) p. 23
- clxxxiv Coe and Barlow (2013) (as above) pp. 23-24
- clxxxv Coe and Barlow (2013) (as above) p. 25
- clxxxvi Taggart, Short and Barclay (2000) (as above) p. 24

- clxxxvii Macdonald and Greggans (2010) (as above) pp. 2406-2407
- clxxxviii Macdonald and Greggans (2010) (as above) p. 2411
- clxxxix Cattan, Kime and Bagnall, 2011:204
- cxc Lester *et al.* (2012) (as above) p. 317
- cxci Cant and Taket (2005) (as above) p. 267
- cxcii Lester *et al.* (2012) (as above) p. 317
- cxciiii Cattan, Kime and Bagnall (2011) (as above) pp. 203-204
- cxciiv Coe and Barlow (2013) (as above) p. 26
- cxciiv McVittie, Chris, Goodall, Karen and Barr, Yvette (2009) "I've Learned So Much": Befrienders' Experiences of Befriending Minority Ethnic Young People' *Journal of Intercultural Communication* [online] Available at: <http://www.immi.se/intercultural/nr21/mcvittie.htm> [accessed 15/04/14]
- cxcivi McVittie, Goodall and Barr (2009) (as above)
- cxciivii Mitchell and Pistrang (2011) (as above) p.162
- cxciiviii Taggart, Short and Barclay (2000) (as above) p. 4
- cxciix Bullock, Janis and Osborne, Sandra (1999) 'Seniors', Volunteers', and Families' Perspectives of an Intergenerational Program in a Rural Community' *Educational Gerontology* 25 (3) pp. 237-251
- ccc Bullock and Osborne (1999) (as above) p. 244
- ccci Parkinson, Lynne, Warburton, Jeni, Sibbritt, David and Byles, Julie (2010) 'Volunteering and Older Women: Psychosocial and Health Predictors of Participation' *Aging and Mental Health* 14 (8) pp. 917-927
- ccciii Parkinson, Warburton, Sibbritt and Byles (2010) (as above) p. 919
- ccciiii Parkinson, Warburton, Sibbritt and Byles (2010) p. 920
- ccciiv Parkinson, Warburton, Sibbritt and Byles (2010) p. 920
- cccv Piliavin, Jane Allyn and Siegl, Erica (2007) 'Health Benefits of Volunteering in the Wisconsin Longitudinal Study' *Journal of Health and Social Behaviour* 48 pp. 450-464
- ccvii Piliavin and Siegl (2007) pp. 453-454
- ccviii Piliavin and Siegl (2007) (as above) p. 457
- ccviii Piliavin and Siegl (2007) (as above) p. 461
- ccix Li, Yunqing and Ferraro, Kenneth (2006) 'Volunteering in Middle and Later Life: Is Health a Benefit, Barrier or Both?' *Social Forces* 85 (1) pp.497-519
- ccx Li and Ferraro (2006) (as above) pp. 502-503
- ccxi Li and Ferraro (2006) (as above) p. 508
- ccxii Li and Ferraro (2006) (as above) p. 508
- ccxiii Mead *et al.* (2010) (as above) p. 98
- ccxiv Charlesworth, G., Shepstone, L., Wilson, E., Thalanany, M., Mugford, M. and Poland, F. (2008) 'Does Befriending by Trained Lay Workers Improve Psychological Well-Being and Quality of Life for Carers of People with Dementia, and at What Cost? A Randomised Controlled Trial' *Health Technology Assessment* 12 (4) pp. 1-42
- ccxv Charlesworth *et al.* (2008) (as above) pp. 8-11
- ccxvi Charlesworth *et al.* (2008) p. 38
- ccxvii Cattan, Kime and Bagnall (2011) (as above) p. 198
- ccxviii Charlesworth *et al.* (2008) p. 42
- ccxix Charlesworth *et al.* (2008) p. 37
- ccxx Knapp, Martin, Bauer, Annette, Perkins, Margaret and Snell, Tom (2010) 'Building Community Capacity: Making an Economic Case' *PSSRU Discussion Paper* [accessed 10/01/14] Available online at: <http://www.pssru.ac.uk/pdf/dp2772.pdf>
- ccxxi Knapp, Bauer, Perkins and Snell (2010) (as above) p. 2
- ccxxii Knapp, Bauer, Perkins and Snell (2010) (as above) p. 7
- ccxxiii Department of Health (2009) (as above) p. 9
- ccxxiv Mitchell and Pistrang (2011) (as above) p.160
- ccxxv Cattan, Kime and Bagnall (2011) p. 202
- ccxxvi Macdonald and Greggans (2010) (as above) p. 2411
- ccxxvii Macdonald and Greggans (2010) (as above) p. 2412
- ccxxviii Philip and Spratt (2007) (as above) pp. 4-5
- ccxxix Knapp, Bauer, Perkins and Snell (2010) (as above) p. 9
- ccxxx Jopling, Kate (2014) Campaign to End Loneliness 'Measuring the Impact of Services on Loneliness: A Scoping Study' [Accessed 16/05/14] Available online at: [file:///C:/Users/Mary/Desktop/Measuring-the-impact-of-services-on-loneliness-January-2014%20\(2\).pdf](file:///C:/Users/Mary/Desktop/Measuring-the-impact-of-services-on-loneliness-January-2014%20(2).pdf)
- ccxxxi Jopling (2014) (as above) p. 10
- ccxxxii Jopling (2014) (as above) pp. 10-18
- ccxxxiii Jopling (2014) (as above) p. 22
- ccxxxiv Cattan, Mima, White, Martin, Bond, John and Learmouth, Alison (2005) 'Preventing Social Isolation and Loneliness Among Older People: A Systematic Review of Health Promotion Interventions' *Ageing and Society* 25 pp. 41-67
- ccxxxv Cattan, White, Bond and Learmouth (2005) p. 61
- ccxxxvi Findlay, Robyn (2003) 'Interventions to Reduce Social Isolation Amongst Older People: Where is the Evidence?' *Ageing and Society* 23 pp. 647-658
- ccxxxvii Findlay (2003) (as above) p. 650

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<sup>ccxxxviii</sup> Smith, Raymond and Greenwood, Nan (2013) 'The Impact of Volunteer Mentoring Schemes on Carers of People with Dementia and Volunteer Mentors: A Systematic Review' *American Journal of Alzheimer's Disease and Other Dementia* 00 (0) pp. 1-10

<sup>ccxxxix</sup> Smith and Greenwood (2013) (as above) p. 8

<sup>ccxl</sup> Department of Health (2009) (as above) p. 99