

A Summary of Recent Research Evidence

About loneliness and social
isolation, their health effects and
the potential role of befriending

Mary Roberts, August 2014



Befriending
Networks



This document comprises part of the 2014 Befriending Resource Pack, which is available on the Befriending Networks website. The complete pack contains the following:

1. Good Practice in Befriending-a comprehensive guide to befriending practice in the UK*
2. Befriending Map of Gaps : a look at befriending service provision across Scotland
3. Square 1: Developing new befriending services*
4. A summary of recent research evidence
5. The Quality in Befriending award
6. Befriending in Scotland-an overview of current practice.

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info@befriending.co.uk

www.befriending.co.uk

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Abstract:

Changing family and social structures may be contributing to an increase in loneliness and social isolation 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 number and frequency of social contacts. While definitions of both concepts are contested and their measurement is difficult, 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 demonstrates how loneliness and social isolation can lead to 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 for reengaging with their local community. Although research evidence is scarce, befriending would appear to have a positive effect on the health of both voluntary befrienders and befriendees, and has the potential to be a cost-effective intervention which can be of benefit to 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 for human health and wellbeing is often agreed upon but not fully understood. While there are no data on trends in prevalence of loneliness and social isolation over time, a number of social changes have occurred which are consistent with a decline in social connectedness. For example, intergenerational living has declined in the UK and more people live alone than ever before¹. Meanwhile, the availability of informal social support is falling due to changes such as higher levels of dual-career families and declining birth rates². 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 merit investment. This review aims to draw together available research on befriending, how it could help to prevent or ameliorate loneliness and/or social isolation and their health effects, and finally to offer recommendations for future research.

The review begins with a methodological section. Section one defines the concepts of loneliness and social isolation and how they can be measured. It also explores the prevalence of loneliness and social isolation in the UK in different demographic groups. The second section reviews 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 explores the ways in which befriending can mitigate the health effects of loneliness and social isolation. Befriending is first defined and then considered as an intervention to loneliness and social isolation using the available literature. The section also discusses the benefits of volunteering for the befriender, and finally outlines the lack of research into befriending and the methodological challenges it poses as a subject of investigation. The review concludes that loneliness and social isolation pose a severe health risk in the UK; and that befriending is one solution which has the potential to ameliorate or prevent these effects through several unique benefits.

Methodology

Studies were selected for inclusion in this review through electronic searches of academic journal databases. Search terms were based on words relating to loneliness and social isolation, including: loneliness, lonely, alone, social isolation, social exclusion and isolation. These terms were 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 have been found to be associated with 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 (ONS) and National Centre for Social Research (NatCen) 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 included in the relevant sections only if they corresponded to the definitions of each term given in the review.

Studies were included without restriction of the age group 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; however, these are also specifically noted when used. Research designs of included studies are both cross-sectional and longitudinal. In the case of the former design, causality can be difficult to establish as effects are studied at only one time point (as opposed to multiple points for longitudinal studies). It should also be noted that quantitative research studies are vulnerable to model misspecification in which causality may be falsely attributed to one variable if another potential causal variable has been overlooked. In studies in which there has been an attempt to establish causality, 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 endnotes for further information.

Loneliness and social isolation in the UK

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 these concepts have been used interchangeably in some of the literature, it is increasingly being recognised that loneliness and social isolation are distinct concepts³. Individuals may experience both simultaneously; however, they are also capable of feeling lonely in the midst of 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 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 negative feelings which occur as a result of the gap between desired and actual quality of relationships or social contacts⁴. Loneliness can be short-lived or long-term and chronic. According to De Jong Gierveld and Van Tilburg (2006), 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 relationships⁵. 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 contacts⁶.

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 community⁷. 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 elements⁸. 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 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 complexity⁹: loneliness may mean different things to various individuals and across cultural contexts. Furthermore, a social stigma exists relating to feeling lonely. Asking a participant directly about loneliness may therefore result in a different response than if questions were asked indirectly. Statistical limitations of 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 measure¹⁰.

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”¹¹. The UCLA Loneliness Scale has been tested on different populations and refined to ensure its accessibility and reliability for a range of demographic groups, and across different methods of application, including telephone interviewing¹². 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 to varying degrees, including: “There are plenty of people I can rely on when I have problems” and “I often feel rejected”¹³. 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 adults¹⁴.

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. 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”¹⁵. 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 quantity be measured as well as its quality?

Several scales have been developed to measure elements of social isolation. The Lubben Social Network Scale, for example, measures 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 relationships¹⁶. 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?'¹⁷. 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 to 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"¹⁸. 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"¹⁹. The Office for National Statistics (ONS) similarly found that in 2011 5% of adults reported feeling "completely lonely" in their daily lives²⁰. 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, according to data provided by ChildLine, in 2010, 9,924 children were counselled about loneliness as their "main or additional problem" by the helpline, representing 6% of all children counselled in that year²¹. ChildLine reports that, while some reports of loneliness were transient and considered "just part of growing up", other children were described as "desperately lonely"²².

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 ONS 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 increased and 9% felt their loneliness had decreased over time²³. 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"²⁴.

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 adults²⁵. While there is a lack of recent research into the prevalence of loneliness 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 lifecourse effects, such as loss of physical mobility, reduced income and bereavement²⁶. 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%²⁷. 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 population²⁸ (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 example²⁹. Despite these prevailing perspectives, Victor et al. (2005) found an opposing trend. Using a sample derived from the ONS Omnibus Survey of 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)³⁰. This suggests that loneliness may not be inherent to ageing but could 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 men³¹. 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 men³². 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 loneliness³³. 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 partner³⁴. 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 itself³⁵.

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)³⁶. 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 adults³⁷. 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 that 17% of their participants had less than weekly direct contact and 11% less than monthly direct contact³⁸. 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 organisations³⁹. 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 USA, New Zealand and Canada) and found the UK to have the highest rates of social isolation⁴⁰. 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 Scale⁴¹. 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%⁴². They also found that 6% of their participants had only 0-4 contacts per week, representing more severe social isolation⁴³.

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 at least once a month, while 46% had not volunteered in the last year⁴⁴. 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 survey⁴⁵. These figures do not necessarily correspond with rates of social isolation; rather, they reflect the numbers of people who are not engaged with their local community in these forms, which may make them more at risk of social isolation. 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 correspond to community-level social isolation⁴⁶. Using 2002-2003 survey data they found that 11% of their sample was culturally excluded and 12% was 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

As for 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) suggest 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 old⁴⁷. 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 (in terms of frequency of contact with friends and family) compared to 23% of those aged 65-79 years⁴⁸. Similarly, Iliffe et al. (2007) found that social isolation increases with older age. Using the Lubben Social Network Scale for participants over 65 years in the UK, 12% of the age group 65-74 years were found to be socially isolated compared to a third (32%) of those in the 85 years and over age group⁴⁹. 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), using data from the International 2001-2002 Social Survey Programme, 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 age⁵⁰. 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 educated⁵¹. 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 surveyed⁵². 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 married⁵³. It is important to note that these data exclude younger people who have never been married.

Loneliness and social isolation in the UK: a summary

Overall rates of loneliness among adults in the UK vary between different surveys. Based on available data, it is estimated that approximately 5%-6% of adults are severely lonely in the UK, while approximately 21%-31% feel lonely occasionally. These figures suggest that a significant minority of the population experiences 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 increase or decrease 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, it is estimated that 6%-17% of older adults in the UK 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. There is a significant lack of recent data relating to children's and younger adults' 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, widowed or have never been married.

Health effects of loneliness and social isolation

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 interact. 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 is described individually and the section concludes with a discussion of the wider societal and economic impact of loneliness, and 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**⁵⁴. 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” participants⁵⁵. 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)⁵⁶. A large public company was chosen as the demographic characteristics are “close” to representative of the French population but results would not reflect the influence 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 asked about marital status or cohabitation, contacts with close friends and family, and affiliation with voluntary organisations⁵⁷. **The authors found that social isolation was significantly associated with male mortality risk: 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 integration⁵⁸. Similar trends were also found for women in the study but the results were not statistically significant; this was probably 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, since the study excludes individuals who are not in employment and therefore likely to be more socially isolated, these estimates may be conservative.

Pantell et al. (2013) measured the effects of social isolation on health among a nationally representative USA 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 Index⁵⁹. 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 females⁶⁰. 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 adults⁶¹. 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 scores, social network size, living alone and marital status). The average age of participants across all studies was 64 years. Just over half (51%) of the participants were North American, 37% European, 11% Asian and 1% Australian⁶². 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 individual⁶³. 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 ways⁶⁴. The authors conclude that the association between social relationships and mortality can be generalised since results were unchanged after controlling for various other potential

causal factors, including cause of death, initial health status and demographic factors (e.g. age and sex). They argue that the meta-analysis also “provides evidence to support the directional influence of social relationships on mortality” as initial health status did not moderate the association⁶⁵. Despite this, causality remains difficult to establish. Overall, the authors recommend social relationship-based interventions as a “major opportunity” to improve both wellbeing 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 problems⁶⁶. 1,037 participants were assessed at different intervals from birth to 26 years old, when 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 networks⁶⁷. 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 after 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)⁶⁸. 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 after controlling for other potential risk factors⁶⁹.

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 followed up until first emergency hospital rehospitalisation, as well as patient mortality⁷⁰. 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 present⁷¹. 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 readmission⁷². 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 pressure⁷³. 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, and were also more likely to have elevated blood pressure at baseline measurement⁷⁴. This association was found to be cumulative and remained significant after controlling for social network size, health-damaging 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 (2012), using longitudinal data for 1,604 adults in the U.S.A. aged over 60 years (methodology outlined in section 2.1.1 above), found that **loneliness was associated with measures of functional decline**⁷⁵. 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 climbing⁷⁶. Loneliness was measured using the three-item UCLA Loneliness Scale. The authors found that **loneliness** at baseline was associated with all measures of functional decline after adjusting for socioeconomic status, demographic variables, depression and other baseline functional and health measures⁷⁷. 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 participants⁷⁸.

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 adults⁷⁹. 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)⁸⁰. 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 were 1.5 times more likely to have difficulties performing activities of daily living⁸¹. 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.

Health-damaging 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), using data on 1,278 randomly sampled participants in Australia aged 18 years and over, compared the health behaviours of lonely and non-lonely populations⁸². Data were 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 measured⁸³. **The authors found an association between loneliness and health-damaging behaviours.** After controlling for other variables, including gender, employment, age and annual income, a higher proportion of lonely people (61.8%) was overweight (defined by body mass index) than non-lonely people (53.8%)⁸⁴. 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%)⁸⁵. 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 risk⁸⁶.

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 duration⁸⁷. Social isolation was measured in respect of social support, social participation and networks, and trust and reciprocity. For the purposes of this review and our definition of social isolation, however, 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 isolation⁸⁸. This association was positive and 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 section 2.1.1) 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 group⁸⁹.

Mental health effects

Depression and depressive symptoms

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

Cacioppo et al. (2006) used two longitudinal studies of middle-aged and older adults to examine the association between loneliness and depression⁹⁰. 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?”⁹¹. 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 Scale⁹². 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**⁹³. Loneliness at baseline measurement was also found to predict depressive symptoms, after 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 symptoms⁹⁴. 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**⁹⁵. 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), using a USA national longitudinal cohort study of adults aged 25-75 years, explored the relationship between loneliness, social isolation and depression⁹⁶. Data from 4,642 participants were 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?”⁹⁷. 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 neighbours⁹⁸. **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**⁹⁹. However, social isolation did not predict future depression.

Deliberate self-harm

Loneliness was found to be associated with deliberate self-harm or ideation among adolescents in a study by Rönka et al. (2013)¹⁰⁰. Data from 7,014 participants aged 15-16 year olds from the Northern Finland Birth Cohort 1986 were used. Responses were collected through a postal questionnaire administered in 2001-2002. Deliberate self-harm/ideation was rated as present if the participant responded ‘somewhat/sometimes true’ or ‘very true/often true’ to the statement: “I harm or I would like to harm myself on purpose “¹⁰¹. Significantly, Rönka et al. discuss how deliberate self-harm/ideation, 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, **girls who described themselves as “very” or “often” lonely were 4.1 times more likely to report deliberate self-harm/ideation and boys were 3.2 more likely, compared to non-lonely participants**. The authors found no association between the number of close friends and the deliberate self-harm/ideation.

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 USA 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 stroke¹⁰². 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?”¹⁰³. 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 after controlling for 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”¹⁰⁴. 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 adults¹⁰⁵. 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%) lonely participants had developed dementia over the follow-up period compared to 5.7% of non-lonely participants¹⁰⁶. 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 disease¹⁰⁷. 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**¹⁰⁸. 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 which measure the overall health effects of social isolation and loneliness were also identified. One study considers both mental and physical health impacts of social isolation, while the second assesses 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 life¹⁰⁹. A sample 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?"¹¹⁰. 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**¹¹¹. 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" group¹¹². 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**. 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 stroke¹¹³. 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 groups¹¹⁴. 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 emphysema¹¹⁵.

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”¹¹⁶. 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”¹¹⁷. 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”¹¹⁸. 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”¹¹⁹. 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 status¹²⁰. 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?”¹²¹. 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 times¹²². 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 adults¹²³. 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, Cenzer 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 isolation¹²⁴.

Summary of the health effects of loneliness and social isolation

Overall, the studies reviewed in this section demonstrate clear links between loneliness and/or social isolation and several physical and mental health problems. Loneliness was associated with all physical health conditions considered above, whereas measures of social isolation were found to be associated with mortality risk, cardiovascular risk factors, unhealthy behaviours and overall summary health scores. Mental health conditions considered 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.

There is strong evidence to suggest that both loneliness and social isolation affect mortality risk among adults. Four studies used multi-item measures of loneliness and/or social isolation, which (as Holt-Lunstad, Smith and Layton argue) improve their predictive capabilities. Similarly, three longitudinal studies relating to blood pressure and heart problems demonstrated the link between both loneliness and social isolation and risks of cardiovascular problems through the use of multi-measures. Two longitudinal studies showed the effect loneliness on physical functioning. Both studies found that older adults have increased difficulty performing basic activities including bathing, eating and stair climbing if they are lonelier at baseline measurement. Three studies revealed associations between unhealthy behaviours among adults 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 cancer¹²⁵, 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/ideation. This reveals the damaging effects of loneliness for a range of age groups of individuals. Three longitudinal studies 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.

Befriending and its potential benefits

Befriending and its potential benefits

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 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”¹²⁶. 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 paid staff who recruit and train volunteer befrienders, and coordinate and support the befriending matches¹²⁷. Befriending services often (but not always) provide befriending support for a specific group of potentially socially isolated or lonely individuals, including (but not limited to): 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, and carers. Befriending is usually offered on a one-to-one, face-to-face basis between befriender and befriendees but is also increasingly offered on a group basis, by telephone, or through letter- or email-writing. Befrienders usually visit or contact their befriendees 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 befriendees 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, such as improving an individual’s employability, whereas befriending aims to provide companionship but offers no other instrumental function¹²⁸.

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)*¹²⁹.

Several studies investigating the benefit of befriending highlight 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 2001¹³⁰. 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 assistance¹³¹. Andrews et al. 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, conducting 40 in-depth interviews in 2007-2008 with befriendees and volunteers of a telephone befriending service offered throughout England and Scotland¹³². Again, they found that befriendees appreciated the fact that the befriending relationship was offered not from financial obligation but was a deliberate choice on the part of the befriender. The authors describe how the respondents felt that their benders spent “quality time with them unlike other services, for example paid carers, who were said to be in and out”¹³³. 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”¹³⁴.

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 benders and found that the befriendees valued the volunteers as distinct from paid professionals¹³⁵. 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 benders. 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” and being worried that they would be judged unfit to look after their children¹³⁶. Conversely, the benders 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)¹³⁷.

While befriending relationships differ from ‘natural’ friendships, a number of research 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” friendship¹³⁸. Similarly, Andrews et al. (2003), in their study of a befriending service for older adults (outlined above), reports that 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 them¹³⁹. The study also found that reciprocity was a crucial element of the befriending relationship and that both befrienders and befriendees experienced benefit.

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 problems¹⁴⁰. 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 time¹⁴¹. However, the unique nature of the befriending relationship created specific benefits. For example, some 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)¹⁴².

Several studies report that befriending helped befriendees to re-engage 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 psychosis¹⁴³. 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 there had been an improvement in their interest in, and energy for, going out¹⁴⁴. All nine participants were unemployed and befriending had increased their 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: befriendees were described as “more inclined to be physically and socially active” as a result of the befriending scheme¹⁴⁵. They also found that some befriendees had decided to become volunteer befrienders themselves and consequently felt less of a “burden” through having the opportunity to contribute to society¹⁴⁶. Participants in Mitchell and Pistrang’s (2011) study (outlined above) similarly re-engaged with their local community through participating in social activities with their befriender. These interactions were described as particularly important for adults with long-term mental health conditions in terms of learning how to manage social situations and gain new social skills¹⁴⁷.

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 reported benefits in terms of increased social activity¹⁴⁸. They conducted interviews with 17 participants, including the befriended, volunteer befrienders and the parents of the befriended. Befriended 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 befrienders¹⁴⁹. These perceptions were also reflected by the befrienders, who are said to have viewed their roles as “widening young people’s horizons ... [and providing] new experiences for the young people, which they might not otherwise have”¹⁵⁰.

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)¹⁵¹.

Participants in a number of studies described befriending as having transformed their wellbeing, and explicitly mention improvements in terms of reduced loneliness or social isolation. Cattan, Kime and Bagnall (2011) describe how their older participants reported feeling “less lonely as well as less anxious since joining the telephone befriending service”¹⁵². The befriended also 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”¹⁵³. 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 described their physical health as having improved as a result of their befriending relationships¹⁵⁴. 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 loneliness¹⁵⁵. One older adult befriended was reported as saying: “My visit with the volunteer breaks up the loneliness – otherwise it is just me and the cat”¹⁵⁶. Other befriended 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”¹⁵⁷.

Coe and Barlow (2013) conducted a quantitative analysis of a befriending intervention for mothers with perinatal mental health problems, in addition to the qualitative analysis of interviews outlined above. They measured anxiety and depression at baseline in 2010 and post-intervention in 2012 for 42 befriended using the Hospital Depression Anxiety Scale (HADS), which produces a score between 0 and 21 for both anxiety and depression (higher scores signify higher levels of mental ill-health). They found significant decreases post-

intervention in both anxiety (mean score was 11.8 at baseline in 2010 and 8.4 after the befriending intervention) and depression (mean score was 10.1 in 2010 and 6.1 in 2012)¹⁵⁸. 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 health¹⁵⁹. They conducted a randomised trial in which 86 women in inner London aged over 25 years who had chronic depression (defined as clinical depression experienced for more than one year) were randomly allocated to either the intervention group who received befriending support or to the control group who did not receive befriending support. 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 intervention¹⁶⁰. 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 and including both "recovery" – the participant being symptom-free – and "improvement", whereby the participant's symptoms partially improved) occurred in 65% (28/43 participants) of the befriended group and 39% (17/45 participants) of the control group¹⁶¹. 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 intervention¹⁶².

Mead et al. (2010) conducted a systematic review into the clinical effectiveness of befriending as a social intervention, particularly focusing on befriendees who were experiencing depressive symptoms or emotional distress¹⁶³. Twenty-four studies were included in the review, all of which used individual randomisation and covered a range of client groups. Sixteen studies provided face-to-face befriending with some telephone contact, and eight studies used only telephone befriending¹⁶⁴. 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 analysis¹⁶⁵. Using five studies which provided appropriate data, befriending was found to be either less effective, or similar to, more active treatments, including cognitive behavioural therapy¹⁶⁶. 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 problems¹⁶⁷.

Benefits for specific client groups

Befriending services can offer befriending for particular groups of people. Several studies provided evidence of the benefits of befriending to specific groups of isolated individuals.

Older adults: Participants in the study by Andrews et al. (2003) were usually confined to their homes as a result of their older age and health or mobility problems, which in turn increased their social isolation and affected how their lives were structured and their level of interest in the external world¹⁶⁸. 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 re-engage socially¹⁶⁹. 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 re-engage 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”¹⁷⁰. Similarly, several participants in Lester et al.’s (2012) 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 they were and could offer preferred social interaction¹⁷¹.

Individuals with long-term mental health problems: Bradshaw and Haddock (1998) and Mitchell and Pistrang (2011) note that individuals with long-term mental health problems 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 community¹⁷². 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]”¹⁷³. While this individual was able to make friends in hospital, they were isolated from social activities and individuals in their local community; 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 (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”¹⁷⁴. 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 providing support and social activities for older Irish adults, including telephone befriending¹⁷⁵. The authors argue that Irish people, although not usually considered to be a minority ethnic group, have a need for increased social support. For example, the suicide rate for Irish people is higher than for any other minority ethnic group in England and Wales¹⁷⁶. Cant and Taket conducted interviews with users of the services, who were found to value befriending because it was culturally specific in terms of understanding unique problems or concerns that the befriendees were experiencing¹⁷⁷.

Carers: Cant and Taket (2005), Charlesworth et al. (2008) and Smith and Greenwood (2013) describe how carers are prone to loneliness and social isolation. According to Charlesworth et al., carers typically report "less social interaction and fewer friendships" due to the time and emotional effort spent on their caring responsibilities¹⁷⁸. Similarly, in their study of befriending for Irish older adults, Cant and Taket report that the "needs of carers emerged as far greater than anticipated" due to their relative social isolation. Befriending was found to be important in allowing the carer a break for short periods and the opportunity to relax¹⁷⁹. Both Smith and Greenwood's and Charlesworth et al.'s studies focus specifically on carers of people with dementia due to unique difficulties faced by this group. Smith and Greenwood note that 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 lonely¹⁸⁰. 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 required¹⁸¹. Both sets of authors suggest that befriending could help alleviate the loneliness faced by carers of people with dementia, but argue that more research on the benefits for this client group is needed.

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 children¹⁸². According to the authors, 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"¹⁸³. The befriending service the authors appraise is the Perinatal Support Project, established in 2010, which 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 old¹⁸⁴. 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”¹⁸⁵. 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 found that women who are already socially isolated experienced even more isolation when they became mothers. They report that the befrienders “became a lifeline for many isolated mothers” who otherwise would struggle to find the time or opportunity to socialise¹⁸⁶.

Individuals with long-term health conditions: Macdonald and Greggans’ (2010) study of a befriending service for children with cystic fibrosis suggests how befriending can help children with long-term and complex health conditions. The authors report that treatment for the children’s conditions were time-consuming, involving regular visits to hospitals and resulting absences from school, which could contribute to, and exacerbate, social isolation¹⁸⁷. Befriending was valued as an opportunity to get away from the hospital and to experience new social activities and friendships to which they might not otherwise have access. 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”¹⁸⁸. In this respect, befriending was also beneficial in alleviating some of the pressure and stress felt by children’s parents.

Types of befriending

Several studies investigated telephone befriending services and provide evidence of unique benefits and limitations of this form of befriending. Cattan, 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 in an anonymous (and therefore less intimidating) format¹⁸⁹. 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 conversation¹⁹⁰. 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” in preventing feelings of loneliness when the face-to-face centre was closed 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”¹⁹¹. 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”¹⁹². 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 conclusion: 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 contact¹⁹³.

No studies were found which evaluated group or distance (letter and email) befriending schemes, which suggests that 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)¹⁹⁴

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 for minority ethnic children in Glasgow¹⁹⁵. 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.”¹⁹⁶. 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 stigma¹⁹⁷. 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”¹⁹⁸. Findings from an intergenerational befriending service in the U.S.A. reveal similar benefits for the volunteer specifically as a result of the intergenerational aspect of the relationship¹⁹⁹. 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 older adults. One participant commented: “I am a more compassionate, empathetic person toward the needs of the elderly”²⁰⁰. Other participants reported that befriending helped them to put their own lives into perspective, made them better listeners and improved their relationships with their own families.

Several 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 Australia²⁰¹. Data from 7,088 participants aged 70-75 years in the Australian Longitudinal Study on Women’s Health were collected at baseline in 1996 and subsequently in 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 weight, alcohol use, mobility, sight, ability to perform activities of daily living (including bathing, dressing and eating) and whether they had any conditions which required medicine²⁰². 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 medicine²⁰³. 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 experienced a significant decline between 1999 and 2002, which was similar to levels among participants who had never volunteered by 2005²⁰⁴. 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 Study²⁰⁵. Telephone and mail survey data were collected at baseline in 1964 (at which point the average age of the participants was 24 years) and subsequently in 1975, 1992 and 2004 (at which point the average age of the participants was 64 years). 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 and visits with friends²⁰⁶. 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 effects²⁰⁷. Significantly, the authors reported that those individuals who were least socially integrated benefited most from the impact of volunteering in terms of improved psychological wellbeing²⁰⁸.

Li and Ferraro (2006) explored the relationship between volunteering and health at different stages of adulthood using data from the Americans’ Changing Lives (ACL) study²⁰⁹. They used data for 683 participants aged 40-59 years and for 889 participants aged over 60 years and assessed 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 year²¹⁰. 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

volunteering²¹¹. 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 1994²¹². 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 conclusions. 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, while the other two studies did not report significant benefits²¹³.

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. 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. Data were collected via personal interview. 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 family²¹⁵. The mean cost of befriending per carer was £1,138 for 15 months. However, this estimate was skewed by substantial travel costs for individuals in rural areas, which compelled some befriendees to choose telephone befriending rather than face-to-face befriending²¹⁶. Indeed, the low cost of telephone befriending was discussed in a number of studies, including Cattan, Kime and Bagnall’s evaluation of a telephone befriending service for older adults (2011)²¹⁷. 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. However, a limitation of the study was that access to a befriender 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 significance²¹⁸. 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 in order to substantiate the findings²¹⁹.

Knapp, Bauer, Perkins and Snell (2010) conducted research into the cost-effectiveness of community support and care services, including befriending, in order to explore the benefits of investing in communities in the current economic climate in the UK²²⁰. 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 expertise²²¹. 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 the value of befriending, the authors used the case example of the Brighter Futures Group project, which established multiple befriending services for older adults in Kent. They also used existing evidence from previous research on befriending and the impact of loneliness²²². 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 state that these calculations are “conservative” in that they were only able to attach “a monetary value to a subset of the potential benefits”²²³.

Potential problems or limitations of befriending

While the authors of the studies outlined above consider befriending to be an overwhelmingly positive intervention, potential or actual problems with befriending have also been raised. Many study participants have been shown to be worried about the end of the befriending relationship and some are unclear about when this would occur. Mitchell and Pistrang (2011), for example, described how the fact that the befriending relationship would ultimately end caused uncertainty among their participants (adults with mental health problems), and noted that some befrienders are concerned about their befriendees’ dependence on the relationship²²⁴. Similarly, the older befriendees involved in the telephone befriending service in Cattam, Kime and Bagnall’s (2011) study were apprehensive 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.”²²⁵ In their assessment of 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”²²⁶. 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 fulfilled²²⁷.

Challenges of research

The varying and limited results outlined in the above section reflect the paucity of evaluative research on 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 specific impact difficult to evaluate²²⁸. Both Charlesworth et al. (2008) and Knapp, Bauer, Perkins and Snell (2010), in their studies exploring the cost-effectiveness of befriending, note the 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 they are likely not to be taken seriously²²⁹.

Jopling (2014) explored how services which attempt to mitigate the effects of loneliness evaluate their impact, and found a number of problems with assessment²³⁰. 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 developed their own questions or scales. In services where there was awareness of recognised measures, there was a concern "that these may not be appropriately tailored to the service delivery context"²³¹. 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 hard to identify and contact. However, baselines measurement is essential in evaluating the impact of a service. There were also concerns that service users might be unwilling to be honest about loneliness due to sensitivity or stigma surrounding the issue. Furthermore, it was reported that clients would be reluctant to respond negatively about the service's impact if they were either reliant on it, or wanted to be helpful or polite to the service providers²³². 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 itself²³³.

Several 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 research²³⁴. They found only 11 studies which assessed the effectiveness of one-to-one interventions and described the results as “unclear” due to small sample sizes and inconsistent results²³⁵. Similarly, Findlay (2003) conducted a review of studies, published during 1982-2002, which assessed interventions designed to reduce social isolation among older adults. Finding only 17 studies in total²³⁶, 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 isolation²³⁷. 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 relevant four studies²³⁸. The authors argue that further research into the benefits of both mentoring and befriending is needed, especially longitudinal studies to assess longer-term benefits of each intervention²³⁹.

Summary of befriending and its potential benefits

This section has reviewed the available literature on befriending in order to establish its potential to prevent or alleviate the effects of loneliness and social isolation. The qualitative literature revealed that befriended value highly the voluntary status of their befrienders, because the befriending relationship thereby becomes more reciprocal and similar to a “real” friendship (as opposed to a professional care and assistance relationship). Similarly, the fact that some befriending relationships in the literature were described as friendships is also significant. Both findings suggest that befriending might help reduce loneliness by providing the opportunity for a satisfactory quality of social relationship (as opposed to impersonal social contact). Befriending might also alleviate social isolation. Several 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 might also increase befriendeds’ social networks by facilitating participation 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. The findings from quantitative studies also provide evidence that befriending could help to improve mental wellbeing or alleviate mental health conditions. Mead et al.’s (2010) systematic review concludes that befriending could result in a moderate improvement in depression for befriendeds. Specific benefits of befriending were demonstrated for different client groups. Befriending offered opportunities to re-engage with society to members of groups at higher risk of social isolation and loneliness, including: minority ethnic groups, people with mental health issues and mothers of young children. Befriending relationships also provide meaningful

companionship for older adults who choose not to engage in local activities appropriate to 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 linked to their health 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 offered by face-to-face befriending, while at the same time offering unique benefits, including anonymity and greater control over aspects of contact. 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 participating in community activities. No studies were found which specifically evaluated the impact of group or distance befriending.

Benefits for volunteer benders were identified in several studies, including: the opportunity to contribute to society, increased awareness of different cultures and social circumstances, and enhanced empathy and sensitivity to the needs of others. Health benefits of volunteering included: better self-reported health, fewer depressive symptoms and improved psychological wellbeing. Findings from two studies 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 contradictory. Clearly further research into this aspect of befriending is needed. Charlesworth et al.'s and Cattan, Kime and Bagnall's studies suggest that telephone befriending might be a more cost-effective intervention, particularly for those living in geographically isolated areas.

There is evidence that aspects of the befriending relationship 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 befriender and befriender about the likely duration of the relationship and sensitive handling of its termination, in order to minimise the negative impact for the befriender. Clear communication is also needed in terms of benders' 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 had expectations of benders' understanding of the condition which were not always met.

Conclusion and footnotes

Conclusion

Loneliness and social isolation pose a serious threat to public health in the UK, resulting in widespread psychosocial distress to individuals and communities, pressure on the healthcare system and reduced economic activity. While both differentially impact upon certain demographic groups (older adults and those living alone, for example, are more affected), they are experienced in all sectors of society. 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 increases premature mortality risk, high blood pressure, heart problems, unhealthy behaviours and self-reported health. There is an evident need to develop and evaluate social interventions which could help to reduce loneliness and social isolation and thus prevent or alleviate the associated health problems, as well as feelings of individual distress. Befriending is one intervention which could form part of a broader solution. Befriending is community-led, staffed by volunteers and is able to offer support to a wide range of isolated individuals, which suggests it has the potential to be cost-effective (even though findings from cost-effectiveness studies were contradictory and therefore inconclusive). There is research evidence that befriending relationships help to alleviate loneliness and social isolation through meaningful and reciprocal friendship-like support and opportunities to engage in community and social activities. This impact is especially notable among groups of people who are 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 evidence was uncovered that befriending is a harmful intervention.

Despite these largely positive findings, the amount of research on befriending is relatively small; considerable investment in the evidence base is required. More descriptive (observational) 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. Greater emphasis needs to be given to the evaluation of befriending services, including cost-effectiveness analyses and research on different types of befriending services and different client groups. Studies should use a standardised definition of befriending, adopt a longitudinal research design, recruit larger samples of participants, and use control groups, where possible. These study features would result in more reliable quantitative and review data from which to make recommendations. Befriending services should be helped and

encouraged to (self-) evaluate their own services using appropriate measures and research designs.

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 climate²⁴⁰.

Befriending is one such service which has the significant potential to alleviate the suffering of lonely and socially isolated individuals in the UK and in turn to benefit the wider society.

Endnotes

¹ 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

² 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 p. 308

³ 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)

⁴ De Jong Gierveld and Van Tilburg (2006) (as above)

⁵ De Jong Gierveld and Van Tilburg (2006) (as above) p. 583

⁶ De Jong Gierveld and Van Tilburg (2006) (as above) p. 584

⁷ 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*

⁸ 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>

⁹ Victor, Scambler and Bond (2009) (as above) p. 55

¹⁰ Victor, Scambler and Bond (2009) (as above) p. 57

¹¹ Russell, Daniel (1996) ‘UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure’ *Journal of Personality Assessment* 66 (1) pp. 20-40

¹² Russell (1996) (as above)

¹³ De Jong Gierveld and Van Tilburg (2006) (as above) p. 584

¹⁴ De Jong Gierveld and Van Tilburg (2006) (as above) p. 586

¹⁵ Victor, Scambler and Bond (2009) (as above) p. 20

¹⁶ 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

¹⁷ Lubben et al. (2006) (as above) p. 504

- ¹⁸Victor, 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
- ¹⁹Victor, 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
- ²⁰Office 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>
- ²¹ChildLine (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
- ²²ChildLine (2010) (as above)
- ²³Victor, Scambler and Bond (2009) (as above) pp. 145-146
- ²⁴Griffin, Jo (2010) 'The Lonely Society?' Mental Health Foundation report [accessed 10/01/14] Available online at: http://www.mentalhealth.org.uk/content/assets/PDF/publications/the_lonely_society_report.pdf
- ²⁵Victor and Yang (2012) (as above) p. 93
- ²⁶Social 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>
- ²⁷Office for National Statistics (2011) Beaumont, Jen (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>
- ²⁸Beaumont, 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>
- ²⁹Beaumont (2013) (as above)
- ³⁰Victor, 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
- ³¹Griffin (2010); Victor and Yang (2012); Beaumont (2013) (all as above)
- ³²Victor and Yang (2012) (as above) p.93
- ³³Beaumont (2013) (as above)
- ³⁴Office for National Statistics (2012) Randall, Chris '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>
- ³⁵Beal, Claudia (2006) 'Loneliness in Older Women: A Review of the Literature' *Issues in Mental Health Nursing* 27 (7) p. 810
- ³⁶Victor, Bowling, Bond and Scambler (2003) (as above) p. 3

- ³⁷Office 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>
- ³⁸Victor, 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
- ³⁹Banks, 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
- ⁴⁰Banks, Haynes and Hill (2009) (as above)
- ⁴¹Lubben, 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
- ⁴²Victor, Scambler and Bond (2009) (as above) p. 181
- ⁴³Victor, Scambler and Bond (2009) (as above) p. 181
- ⁴⁴Office 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>
- ⁴⁵Office for National Statistics (2011) Randall (as above)
- ⁴⁶Barnes, 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
- ⁴⁷Jivraj, 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
- ⁴⁸Banks, Haynes and Hill (2009) (as above) p. 73
- ⁴⁹Iliffe, 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) p. 277
- ⁵⁰Banks, Haynes and Hill (2009) (as above) p.75
- ⁵¹Jivraj, Nazroo and Barnes (2012) (as above) p.48
- ⁵²Banks, Haynes and Hill (2009) (as above) p.75
- ⁵³Banks, Nazroo and Steptoe (2012) (as above) p.4
- ⁵⁴Perissinotto, Carla, Cenzer, Irena Stijacic and Covinsky, Kenneth (2012) 'Loneliness in Older Persons: A Predictor of Functional Decline and Death' Archive of Internal Medicine 172 (14) pp. 1078-1083
- ⁵⁵Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081
- ⁵⁶Berkman, Lisa, Melchior, Maria, Chastang, Jean-François, Niedhammer, Isabelle, Lecienc, 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

⁵⁷Berkman et al. (2004) (as above) p. 168

⁵⁸Berkman et al. (2004) (as above) p. 170

⁵⁹Pantell, 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

⁶⁰Pantell et al. (2013) (as above) p. 2058

⁶¹Holt-Lunstad, Julianne, Smith, Timothy and Layton, Bradley (2010) 'Social Relationships and Mortality Risk: A Meta-Analytic Review' *PLoS Medicine* 7 (7) p. 1-19

⁶²Holt-Lunstad, Smith and Layton (2010) (as above) p. 4

⁶³Holt-Lunstad, Smith and Layton (2010) (as above) pp. 8-9

⁶⁴Holt-Lunstad, Smith and Layton (2010) (as above) p. 9

⁶⁵Holt-Lunstad, Smith and Layton (2010) (as above) p. 9

⁶⁶Caspi, Avshalom, Harrington, HonaLee, Moffitt, Terrie, Milne, Barry and Poulton, Richie (2006) 'Socially Isolated Children 20 Years Later' *Archive of Pediatric and Adolescent Medicine* 160 pp. 805-811

⁶⁷Caspi et al. (2006) (as above) p. 805

⁶⁸Caspi et al. (2006) (as above) p. 805

⁶⁹Caspi et al. (2006) (as above) p. 810

⁷⁰Rodríguez-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

⁷¹Rodríguez-Artalejo et al. (2006) (as above) p. 621

⁷²Rodríguez-Artalejo et al. (2006) (as above) p. 623

⁷³Hawkley, 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

⁷⁴Hawkley et al. (2010) (as above) p. 137

⁷⁵Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081

⁷⁶Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1079

⁷⁷Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081

⁷⁸Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1081

⁷⁹McLaughlin, 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

⁸⁰McLaughlin et al. (2012) (as above) p. 2

⁸¹McLaughlin et al. (2012) (as above) pp. 2-3

- ⁸²Lauder, 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
- ⁸³Lauder, Mummery, Jones and Caperchione (2006) (as above) pp. 235-236
- ⁸⁴Lauder, Mummery, Jones and Caperchione (2006) (as above) p. 238
- ⁸⁵Lauder, Mummery, Jones and Caperchione (2006) (as above) p. 239
- ⁸⁶Lauder, Mummery, Jones and Caperchione (2006) (as above) p. 241
- ⁸⁷Nieminen et al. (2013) (as above) p. 3
- ⁸⁸Nieminen et al. (2013) (as above) p. 3
- ⁸⁹Berkman et al. (2004) (as above) p. 169
- ⁹⁰Cacioppo, 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
- ⁹¹Cacioppo et al.(2006) (as above) p. 143
- ⁹²Cacioppo et al.(2006) (as above) p. 143
- ⁹³Cacioppo et al.(2006) (as above) p. 148
- ⁹⁴Cacioppo, John, Hawkley, Louise and Thisted, Ronald (2010) 'Perceived Loneliness Makes Me Sad: 5-Year Cross-Lagged Analyses of Loneliness and Depressive Symptomology in the Chicago Health, Aging, and Social Relations Study' *Psychology and Aging* 25 (2) pp. 453-463
- ⁹⁵Cacioppo, Hawkley and Thisted (2010) (as above) p. 458
- ⁹⁶Teo, Alan, Choi, HwaJung and Valenstein, Marcia (2013) 'Social Relationships and Depression: Ten-Year Follow-Up from a Nationally Representative Study' *PLoS ONE* 8 (4) pp. 1-8
- ⁹⁷Teo, Choi and Valenstein (2013) (as above) p. 2
- ⁹⁸Teo, Choi and Valenstein (2013) (as above) p. 2
- ⁹⁹Teo, Choi and Valenstein (2013) (as above) p. 6
- ¹⁰⁰Rönka, Anna Reetta, Taanila, Anja, Koiranen, 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
- ¹⁰¹Rönka et al. (2013) (as above) p. 1
- ¹⁰²Glymour, 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
- ¹⁰³Glymour et al. (2008) (as above) p. 12
- ¹⁰⁴Glymour et al. (2008) (as above) p. 17
- ¹⁰⁵Holwerda, 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
- ¹⁰⁶Holwerda et al. (2012) (as above) p. 3

- ¹⁰⁷Wilson, 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
- ¹⁰⁸Wilson et al. (2007) (as above) p. 236
- ¹⁰⁹Hawton, 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
- ¹¹⁰Hawton et al. (2011) (as above) pp. 58-59
- ¹¹¹Hawton et al. (2011) (as above) p. 60
- ¹¹²Hawton et al. (2011) (as above) p. 59
- ¹¹³Tomaka, 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
- ¹¹⁴Tomaka, Thomson and Palacios (2006) (as above) p. 364
- ¹¹⁵Tomaka, Thomson and Palacios (2006) (as above) p. 371
- ¹¹⁶Hawkley et al. (2010) (as above) p. 138
- ¹¹⁷Schinka et al. (2011) (as above) p. 106
- ¹¹⁸Cacioppo et al. (2006) (as above) p. 140
- ¹¹⁹Department of Health (2009) 'New Horizons: Towards a Shared Vision for Mental Health' [accessed 21/01/14] Available at: [www.dh.gov.uk/publications p. 14](http://www.dh.gov.uk/publications_p.14)
- ¹²⁰Ellaway, 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
- ¹²¹Ellaway, Wood and Macintyre (1999) (as above) p. 363
- ¹²²Ellaway, Wood and Macintyre (1999) (as above) p. 365
- ¹²²Ellaway, Wood and Macintyre (1999) (as above) p. 365
- ¹²⁴Perissinotto, Cenzer and Covinsky (2012) (as above) p. 1082
- ¹²⁵Teo, Choi and Valenstein (2013) (as above) p. 1
- ¹²⁶Charlesworth, 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
- ¹²⁷McGowan, Bill, Saintas, Patrick and Gill, Karamjit (2009) 'On Mentoring, Social Mentoring and Befriending' *AI and Soc* 23 pp. 623
- ¹²⁸McGowan, Saintas and Gill (2009) (as above) p. 624
- ¹²⁹Taggart, 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
- ¹³⁰Andrews, Gavin, 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

- ¹³¹ Andrews et al. (2003) (as above) p. 356
- ¹³² 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
- ¹³³ Cattan, Kime and Bagnall (2011) (as above) p. 203
- ¹³⁴ Cattan, Kime and Bagnall (2011) (as above) p. 203
- ¹³⁵ Taggart, Short and Barclay (2000) (as above) p. 5
- ¹³⁶ Taggart, Short and Barclay (2000) (as above) p. 6
- ¹³⁷ Taggart, Short and Barclay (2000) (as above) p. 4
- ¹³⁸ Cattan, Kime and Bagnall (2011) p. 201
- ¹³⁹ Andrews et al. (2003) p. 357
- ¹⁴⁰ 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
- ¹⁴¹ Mitchell and Pistrang (2011) (as above) p. 151
- ¹⁴² Mitchell and Pistrang (2011) (as above) p.163
- ¹⁴³ 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
- ¹⁴⁴ Bradshaw and Haddock (1998) (as above) p. 717
- ¹⁴⁵ Cattan, Kime and Bagnall (2011) (as above) p. 202
- ¹⁴⁶ Cattan, Kime and Bagnall (2011) (as above) p. 202
- ¹⁴⁷ Mitchell and Pistrang (2011) (as above) p.165
- ¹⁴⁸ 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
- ¹⁴⁹ MacDonald and Greggans (2010) (as above) p. 2411
- ¹⁵⁰ Macdonald and Greggans (2010) (as above) p. 2411
- ¹⁵¹ Mitchell and Pistrang (2011) (as above) p.163
- ¹⁵² Cattan, Kime and Bagnall (2011) (as above) p. 202
- ¹⁵³ Cattan, Kime and Bagnall (2011) (as above) p. 201
- ¹⁵⁴ Cattan, Kime and Bagnall (2011) (as above) p. 202
- ¹⁵⁵ 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
- ¹⁵⁶ Bullock and Osborne (1999) (as above) p. 244
- ¹⁵⁷ Bullock and Osborne (1999) (as above) p. 244
- ¹⁵⁸ Coe and Barlow (2013) p. 24
- ¹⁵⁹ 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
- ¹⁶⁰ Harris, Brown and Robinson (1999) pp. 219-221

- ¹⁶¹Harris, Brown and Robinson (1999) pp. 221-222
- ¹⁶²Harris, Brown and Robinson (1999) p.224
- ¹⁶³Mead, 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
- ¹⁶⁴Mead et al. (2010) p. 97
- ¹⁶⁵Mead et al. (2010) p. 96
- ¹⁶⁶Mead et al. (2010) p. 98
- ¹⁶⁷ Mead et al. (2010) p. 99
- ¹⁶⁸ Andrews et al. (2003) (as above) pp. 360-361
- ¹⁶⁹ Andrews et al. (2003) (as above) p. 356
- ¹⁷⁰ Andrews et al. (2003) (as above) p. 360
- ¹⁷¹ Lester et al. (2012) (as above) p. 317
- ¹⁷² Bradshaw and Haddock (1998) (as above) p. 717
- ¹⁷³ Mitchell and Pistrang (2011) (as above) p.163
- ¹⁷⁴ 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* [accessed online 15/04/14] Available at: <http://www.immi.se/intercultural/nr21/mcvittie.htm>
- ¹⁷⁵ 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
- ¹⁷⁶ Cant and Taket (2005) (as above) p. 264
- ¹⁷⁷ Cant and Taket (2005) (as above) p. 269
- ¹⁷⁸ Charlesworth et al. (2008) p. 1
- ¹⁷⁹ Cant and Taket (2005) p. 267
- ¹⁸⁰ Smith and Greenwood (2013) (as above) p. 1
- ¹⁸¹ Charlesworth et al. (2008) (as above) p. 1
- ¹⁸² 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
- ¹⁸³ Coe and Barlow (2013) (as above) p. 23
- ¹⁸⁴ Coe and Barlow (2013) (as above) pp. 23-24
- ¹⁸⁵ Coe and Barlow (2013) (as above) p. 25
- ¹⁸⁶ Taggart, Short and Barclay (2000) (as above) p. 24
- ¹⁸⁷ Macdonald and Greggans (2010) (as above) pp. 2406-2407
- ¹⁸⁸ Macdonald and Greggans (2010) (as above) p. 2411
- ¹⁸⁹ Cattan, Kime and Bagnall (2011) (as above) p. 204
- ¹⁹⁰ Lester et al. (2012) (as above) p. 317
- ¹⁹¹ Cant and Taket (2005) (as above) p. 267
- ¹⁹² Lester et al. (2012) (as above) p. 317
- ¹⁹³ Cattan, Kime and Bagnall (2011) (as above) pp. 203-204
- ¹⁹⁴ Coe and Barlow (2013) (as above) p. 26
- ¹⁹⁵ McVittie, Goodall and Barr (2009) (as above)

- ¹⁹⁶McVittie, Goodall and Barr (2009) (as above)
- ¹⁹⁷Mitchell and Pistrang (2011) (as above) p.162
- ¹⁹⁸Taggart, Short and Barclay (2000) (as above) p. 4
- ¹⁹⁹Bullock, 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
- ²⁰⁰Bullock and Osborne (1999) (as above) p. 244
- ²⁰¹Parkinson, 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
- ²⁰²Parkinson, Warburton, Sibbritt and Byles (2010) (as above) p. 919
- ²⁰³Parkinson, Warburton, Sibbritt and Byles (2010) (as above) p. 920
- ²⁰⁴Parkinson, Warburton, Sibbritt and Byles (2010) (as above) p. 920
- ²⁰⁵Piliavin, 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
- ²⁰⁶Piliavin and Siegl (2007) (as above) pp. 453-454
- ²⁰⁷ Piliavin and Siegl (2007) (as above) p. 457
- ²⁰⁸Piliavin and Siegl (2007) (as above) p. 461
- ²⁰⁹Li, 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
- ²¹⁰Li and Ferraro (2006) (as above) pp. 502-503
- ²¹¹Li and Ferraro (2006) (as above) p. 508
- ²¹²Li and Ferraro (2006) (as above) p. 508
- ²¹³Mead et al. (2010) (as above) p. 98
- ²¹⁴Charlesworth, 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
- ²¹⁵Charlesworth et al. (2008) (as above) pp. 8-11
- ²¹⁶Charlesworth et al. (2008) (as above) p. 38
- ²¹⁷Cattan, Kime and Bagnall (2011) (as above) p. 198
- ²¹⁸Charlesworth et al. (2008) (as above) p. 42
- ²¹⁹Charlesworth et al. (2008) (as above) p. 37
- ²²⁰Knapp, 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>
- ²²¹Knapp, Bauer, Perkins and Snell (2010) (as above) p. 2
- ²²²Knapp, Bauer, Perkins and Snell (2010) (as above) p. 7
- ²²³Department of Health (2009) (as above) p. 9
- ²²⁴Mitchell and Pistrang (2011) (as above) p.160
- ²²⁵Cattan, Kime and Bagnall (2011) (as above) p. 202
- ²²⁶Macdonald and Greggans (2010) (as above) p. 2411

- ²²⁷Macdonald and Greggans (2010) (as above) p. 2412
- ²²⁸Philip and Spratt (2007) (as above) pp. 4-5
- ²²⁹Knapp, Bauer, Perkins and Snell (2010) (as above) p. 9
- ²³⁰Jopling, 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)
- ²³¹Jopling (2014) (as above) p. 10
- ²³²Jopling (2014) (as above) pp. 10-18
- ²³³Jopling (2014) (as above) p. 22
- ²³⁴Cattan, 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
- ²³⁵Cattan, White, Bond and Learmouth (2005) (as above) p. 61
- ²³⁶Findlay, Robyn (2003) 'Interventions to Reduce Social Isolation Amongst Older People: Where is the Evidence?' Ageing and Society 23 pp. 647-658
- ²³⁷Findlay (2003) (as above) p. 650
- ²³⁸Smith, 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
- ²³⁹Smith and Greenwood (2013) (as above) p. 8
- ²⁴⁰Department of Health (2009) (as above) p. 99



63–65 Shandwick Place
Edinburgh EH2 4SD

Tel: 0131 261 8799
info@befriending.co.uk
www.befriending.co.uk

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